

Minutes
Inland Waterways Users Board Meeting No. 88
Luther F. Carson Four Rivers Center, Myre River Room
100 Kentucky Avenue
Paducah, Kentucky 42003
August 28, 2018

[Note: The following minutes of the Inland Waterways Users Board meeting No. 88 were approved and adopted as final at Inland Waterways Users Board meeting No. 89 held on November 29, 2018 at the Embassy Suites by Hilton Hotel located at Two Convention Center Plaza, St. Charles, Missouri 63303.]

The following proceedings are of the 88th Meeting of the Inland Waterways Users Board held on August 28, 2018, commencing at 1:00 p.m. at the Luther F. Carson Four Rivers Center, located at 100 Kentucky Avenue, Paducah, Kentucky 42003, 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. DAVID A. EARL, Marathon Petroleum Company

MR. MIKE FEWELL, Dow Chemical Company

MR. DAVID KONZ, Tidewater Barge Lines

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

MR. DANIEL P. MECKLENBORG, Ingram Barge Company

MR. MICHAEL J. MONAHAN, Campbell Transportation Company

MR. CHARLES M. "MATT" RICKETTS, Crouse Corporation

MR. WILLIAM M. WOODRUFF, Kirby Corporation

Board Members MR. ROBERT J. INNIS, representing LafargeHolcim, Inc. and MR. TIMOTHY M. PARKER, III, representing the Parker Towing Company, were unable to attend the meeting and did not send a substitute to attend the meeting on their behalf.

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:

MS. LAUREN K. BRAND, Associate Administrator for Ports and Waterways, Maritime Administration (MARAD), U.S. Department of Transportation, Washington, D.C.

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

There was no representative of the Office of Coast Survey, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, Silver Spring, MD present at the meeting.

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 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 (MG) SCOTT A. SPELLMON, Deputy Commanding General for Civil and Emergency Operations, U.S. Army Corps of Engineers, Washington, D.C.

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, Virginia.

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.

MR. STEPHEN G. DURRETT, Regional Programs Director, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers, Cincinnati, OH.

LIEUTENANT COLONEL CULLEN A. JONES, District Engineer and Commander, Nashville District, U.S. Army Corps of Engineers, Nashville, TN.

MAJOR GENERAL (MG) SCOTT A. SPELLMON, Deputy Commanding General for Civil and Emergency Operations, U.S. Army Corps of Engineers, Washington, D.C.

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

MR. RICK D. GRANADOS, Acting Chief, Navigation Branch, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

MR. JOSEPH W. ALDRIDGE, Program Manager, Program Integration Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

MS. FRANCHELLE E. CRAFT, Study Manager, Brazos River Floodgates and Colorado Locks Study, U.S. Army Corps of Engineers, Galveston District, Galveston, TX.

MR. MICHAEL F. PARK, Chief, Operations Division, U.S. Army Corps of Engineers, New Orleans District, New Orleans, LA.

MR. THOMAS D. HEINOLD, JR., Chief, Operations Division, U.S. Army Corps of Engineers, Rock Island District, Rock Island, IL.

MR. STEPHEN G. DURRETT, Regional Programs Director, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers, Cincinnati, OH.

MR. DEWEY W. RISSLER, Olmsted Locks and Dams Project Manager, U.S. Army Corps of Engineers, Louisville District, Louisville, KY.

MR. WAYLON D. HUMPHREY, Deputy Chief of Operations, Olmsted Locks and Dam Division, U.S. Army Corps of Engineers, Louisville District, Louisville, KY.

MR. STEPHEN R. FRITZ, Mega Projects Program Manager, U.S. Corps of Engineers, Pittsburgh District, Pittsburgh, PA.

MR. ADAM C. WALKER, Project Manager, Chickamauga Lock Project, U.S. Army Corps of Engineers, Nashville District, Nashville, TN.

MR. DON B. GETTY, Project Manager, Kentucky Lock Project, U.S. Army Corps of Engineers, Nashville District, Nashville, TN.

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

MR. JAMES STARK, President, Gulf Intracoastal Canal Association, New Orleans, LA.

There were no public comments offered during the public comment period of the meeting and two written public comments were submitted for the record prior to the meeting.

PROCEEDINGS

MR. MARK R. POINTON: Good afternoon ladies and gentlemen. Let us take our seats and we can begin this afternoon's meeting. My name is Mark Pointon. I am the current Designated Federal Officer (DFO) for the Inland Waterways Users Board.

I would like to welcome everyone to the 88th Meeting of the Inland Waterways Users Board held this afternoon in Paducah, Kentucky. We have been to Paducah a number of times before, most recently in July 2016 [Inland Waterways Users Board Meeting No. 79 was held in Paducah, Kentucky on July 1, 2016].

We had to change the date of the meeting to accommodate some other events also happening in the Paducah area [the dedication the new Olmsted Locks and Dam was held on August 30, 2018 in Olmsted, Illinois], and we typically hold these meetings in the morning, so it is a bit unusual to have one in the afternoon.

Before we start this afternoon's meeting, I am obliged to read for the record that the Inland Waterways Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. 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" meeting, and as such, it is open to the public. As you can tell by the great attendance for this afternoon's meeting, there is a great deal of interest in the issues that affect the inland waterways system and the activities of the Inland Waterways Users Board here in the Paducah area.

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

Currently, we have one individual who has requested time to make a public comment during the public comment period at the end of the meeting. Two written statements were submitted for the record, both regarding the Snake River, and copies of those statements were provided to the Board members before this meeting. If anyone else wishes to make a public comment, please see me at a break, and we will see if we can work you in during the public comment period. Right now I don't think that will be an issue.

These proceedings are being recorded, and a transcript will be available shortly after the meeting. I would remind everyone around the table to please identify yourself and speak into the microphone so that we can get a proper recording of the meeting.

With that, I would like to call on Mr. Stephen Durrett, Regional Business Director of the U.S. Army Corps of Engineers, Great Lakes and Ohio River Division, to provide us with some welcoming remarks for today's 88th Meeting of the Inland Waterways Users Board.

MR. STEPHEN G. DURRETT: Good afternoon everyone. I would like to welcome everyone to the Great Lakes and Ohio River AOR [area of responsibility]. This is actually the Louisville District's AOR, but the Nashville District is supporting this meeting since we have a lot of activities going on this week what with the Olmsted Locks and Dam ribbon cutting as well, so we greatly appreciate the efforts of the Nashville District in stepping up and organizing this

meeting and the site visit to Kentucky Lock. I hope everybody is going to enjoy the activities this week. Paducah is a nice, little town.

As I said it is going to be a busy few days coming up. We have some nice activities planned, the ribbon cutting at Olmsted Locks and Dam on Thursday. I hope everybody stays around for that as well as the site visit to Kentucky Lock tomorrow. There are some interesting things to see at the Kentucky Lock project.

With that, I will turn it over to Lieutenant Colonel Cullen Jones, and he will provide some welcoming remarks on behalf of the Nashville District. Thank you very much.

MR. POINTON: Thank you Mr. Durrett. Lieutenant Colonel Jones.

LIEUTENANT COLONEL CULLEN A. JONES: Thank you, Mr. Pointon. Good afternoon everybody, and thank you again for joining us today at the 88th Meeting of the Inland Waterways Users Board. On behalf of the Nashville District, it is our great opportunity and honor to the host the Inland Waterways Users Board. We last hosted the Users Board this past spring [Inland Waterways Users Board Meeting No. 86 was held on March 1, 2018 in Chattanooga, Tennessee] and we are really excited about this afternoon's meeting. Members of my team will talk about the progress of some of our great projects.

The other thing that I am personally really excited about is to get the members of the Users Board and other folks in attendance at the meeting out to the Kentucky Lock project site and see the amazing work our team out there is doing with our industry partners to deliver that project. I am sorry if I am going to start gushing about this, but, over the last couple of weeks we have been putting a significant amount of concrete in the ground and moving dirt on a substantial basis. We are looking at over 9.7 million pounds of tremie concrete placed at the project site just over two weeks ago. We just recently placed the first of ten 1.3 million pound concrete cofferdam shells that are going to enable us to build the downstream cofferdam construction to allow for the lock excavation to start. We are really excited to get you out to the project site.

In closing I want to thank you so much for coming to today's meeting of the Users Board and I also want to thank the Nashville District team that helped put this meeting and site visit together in such a rapid fashion. They did an outstanding job. Thank you very much.

MR. POINTON: Thank you, sir. I would now like to turn the microphone over to Major General Scott Spellmon for his opening remarks. This is his first Users Board meeting since coming to Headquarters this past June.

MAJOR GENERAL SCOTT A. SPELLMON: It is. Thank you Mr. Pointon. Good afternoon everyone. For those of you who I have not met, again, my name is Scott Spellmon. I am the Deputy Commanding General for Civil Works and Emergency Operations at the Corps Headquarters. I replaced Ed Jackson [Major General Donald E. Jackson], my predecessor, about 90 days ago. It is great to be here with you. First of all I want to apologize for missing the last meeting in late May. I had just completed the 3,000-mile drive from Portland, Oregon to Washington, D.C. The morning of the Users Board meeting, my moving truck showed up at our

new quarters at Fort Belvoir. I was unloading boxes while you were meeting in Pittsburgh. I know you understand.

I want to begin my remarks by thanking the Board members that are in attendance at today's meeting for your flexibility. I know we had some late-breaking changes to the schedule for this meeting and our tour of Kentucky Lock, all in regards to some last-minute additions to our RSVP list for the Olmsted Lock and Dam ribbon cutting ceremony later this week. I appreciate everyone's flexibility. Also, I want to thank Steve [Mr. Stephen G. Durrett] and Cullen [Lieutenant Colonel Cullen A. Jones] from the Great Lakes and Ohio River Division and Nashville District respectively for hosting this meeting today.

I look forward to getting out to the Kentucky Lock project site tomorrow and seeing more of this river basin. The folks that are here from the Corps know this, but for the Users Board members, I got a pretty good orientation on what we do with respect to the inland waterways system from my time in the Pacific Northwest, working navigation issues on the Columbia and Snake River systems. I had the opportunity to work with some great stakeholders on the in Pacific Northwest waterways and certainly our friends over at Tidewater [Tidewater Barge Lines of Vancouver, Washington]. I was just telling Mark [Mr. Mark Pointon], I have got some blind spots, and I am working very, very hard to get caught up on some of the issues and topics of discussion on our other river basins, so I look forward to today's discussions. I had an opportunity to review, cover to cover, the minutes from the last Users Board meeting. I have a general understanding of the issues at hand and certainly look forward to the discussion that we are going to have today.

Also want to say, I really appreciate all the work that has gone into today's presentations that we are going to see in a few minutes, and thanks for everyone for that work. I will leave it there. What I would like to do now is turn the microphone over to each of our federal observers to see if they have any opening comments for the Board. I will start with the Honorable Mr. R. D. James, our Assistant Secretary of the Army for Civil Works, sir. Thank you for being here with us.

MR. R.D. JAMES: Thank you General Spellmon. Thank you for the invitation here today. It is my pleasure to be here.

Some of you may have heard, when I was appointed to this position, that I was a flood control guy. You can bet your boots I am. But I am also a navigation guy. And those two things go hand in hand. In my opinion, after serving 36 years on the Mississippi River Commission, we could not have navigation without flood control structures and we could not have flood control without navigation structures.

I am here to support you in any way to it help get the infrastructure of this nation back on track and actually building things and moving dirt. And when I say "moving dirt," it is not just dirt. It is concrete and steel and everything that goes into infrastructure. I want to get out of the process. You have to go through some things because of the law, but I want to get out of the process and focused on process and focus again on construction so that we can all enjoy the

infrastructure of this country once again. Thank you again for inviting me today's meeting and I look forward to the discussion of these important issues.

MAJOR GENERAL SPELLMON: Thank you very much Secretary James. Now I would like to introduce Mr. Nick Marathon from the Department of Agriculture.

MR. NICHOLAS MARATHON: Thank you, General Spellmon. I would like to thank the Users Board for the opportunity to be here today. For the record, my name is Nick Marathon. I am representing the Transportation and Marketing Program of the Agricultural Marketing Service within the U.S. Department of Agriculture. I have a few brief opening remarks.

On July 25th and 26th, the USDA cosponsored the 2018 Agricultural Transportation Summit in Arlington, Virginia. This Transportation Summit was put on in cooperation with the National Grain and Feed Association and the Soybean Transportation Coalition. The theme of this year's summit "*Connecting Growing Supply with Growing Demand*," was reflected in the remarks of the many speakers from government and industry. An overarching takeaway from the Transportation Summit was the need to address critical funding projects now in order to make the connection between a growing supply and demand and to avoid missed opportunities.

The Summit featured keynote speeches from the Honorable Sonny Perdue, Secretary of Agriculture, as well as the Honorable R.D. James, Assistant Secretary of the Army for Civil Works. Secretary Perdue stressed the importance of trade to U.S. agriculture and how an efficient transportation network is vital to selling agricultural products both in export and domestic markets.

In addition to the message of the summit, our office is in the process of finalizing several reports that highlight the important role that waterways contribute to the U.S. agriculture industry. We will be releasing these reports before the end of the calendar year pending approval process.

I would like to conclude my remarks with a brief update on the status of farm production. U.S. farmers are expected to produce a record-high soybean crop this year. Soybean production is expected to be a record high 4.59 billion bushels. This is a four percent increase from 2017. Corn production is expected to decrease slightly from last year with a forecast production of 14.6 billion bushels.

That will conclude my opening remarks. Again, thank you for the opportunity to be at today's meeting and I look forward to the technical presentations and discussions. Thank you.

MAJOR GENERAL SPELLMON: Thank you very much Mr. Marathon. I would now like to introduce Ms. Lauren Brand from the Maritime Administration.

MS. LAUREN K. BRAND: Thank you very much, and welcome aboard, General Spellmon. Admiral Buzby [Rear Admiral (Ret.) Mark H. Buzby, Administrator of the U.S.

Maritime Administration] wanted be here this afternoon and sends his regards. He couldn't adjust his schedule. I thank you for welcoming me back to the group.

In my brief remarks I want to mention two things. Two years ago we recognized that the Maritime Administration had an increased commitment to the inland waterways system, the stakeholders, the ports and the marine highways and moving more freight on those marine highways and we undertook a two-year effort. We looked at a number of different inland waterways, and Paducah rose to the top. Therefore we have opened a new gateway office here in Paducah. It is our second Inland Waterway Gateway office. Our first Inland Waterway Gateway office is in St. Louis.

Mr. Chad Dorsey, who is joining me at today's meeting and who is in the back of the room, is the new Director of the Inland Waterways Gateway office located in Paducah. He comes to the Maritime Administration from the inland barge industry, and we are really proud to have him on board.

The second thing I wanted to mention is an update on the status of a project we have been working on for little over a year, maybe 18 months. We have been working on a GIS [geographic information system] mapping project, and we are mapping all of the ports in the United States. We are adding layers to this system and you will be able to push a button and ask, "Where are our major agricultural export ports?" And you will be able to see the results. It will be available to the public and available to Congress. We have pre-briefed Congress on this.

You will be able to ask, "Where are our steel ports in the country?" Push a button and they are going to pop up. We will have different details, and we will show how every port in the country is related to the intermodal system that we have, the roads and the railroads. We are basing this on Corps of Engineers data and working very closely with the Corps of Engineers on this project. I would like to offer to present an update on this project at a future meeting.

That concludes my remarks. Thank you again for allowing me the opportunity to provide some brief opening remarks and I look forward to the rest of this afternoon's meeting.

MAJOR GENERAL SPELLMON: Great. Thank you, Ms. Brand. Mr. Chairman, I would like to turn the microphone over to you for your opening remarks and any other members of the Users Board.

CHAIRMAN MARTIN T. HETTEL: Thank you General Spellmon. Welcome to your first Users Board meeting. We are very glad to have you join the Board. Good morning -- can you tell we are used to having these meetings in the morning? Good afternoon. Welcome to our Inland Waterways Users Board Meeting No. 88 here in in Paducah, Kentucky. The Users Board would like to welcome our new Executive Director of the Board, Major General Scott Spellmon in his new role as Deputy Commanding General for Civil Works and Emergency Operations. Sir, we wish you the best in your new assignment, and we look forward to working with you in the coming years. And of course, the Board would also like to welcome Assistant Secretary for the Army for Civil Works [ASA-CW], the Honorable R.D. James. We are truly thankful for your attendance today, Mr. Secretary, and we look forward to working with you and seeing the

Corps “moving dirt” and building inland waterway infrastructure during your tenure as ASA-CW.

While we swapped around the schedule for our meeting and site visit to Kentucky Lock, the Board would certainly like to thank the Louisville and Nashville Districts for all their logistical planning of our site visit to Kentucky Lock tomorrow, along with the Olmsted Locks and Dam ribbon cutting ceremony the following day.

Lastly, thanks to the Waterways Council (WCI) for sponsoring our coffee service for this afternoon's meeting. As we continue to hold our 2018 meetings in locations where we have ongoing Inland Waterways Trust Fund-supported construction projects, tomorrow we will visit Kentucky Lock, and the following day we will witness a momentous and historic occasion as the Olmsted Locks and Dam ribbon cutting ceremony takes place.

Our last meeting of calendar year 2018 will be held in the St. Louis area with a site visit to the LaGrange Lock [located at Illinois Waterway river mile 80.2 from its junction with the Mississippi River], the Users Board's number one Major Rehabilitation priority project.

We will look to hold this meeting, hopefully Mr. Pointon, somewhere in the first part of December, so mark that down.

Of course, also important to the Users Board is the fact that we need shippers and carriers to apply for the six or seven membership openings due to the expiration of several current members' terms on May 27, 2019. The deadline for applications to be received is September 15, 2018. Those of you in the audience and current Board members, if you know a shipper and/or carrier that would like to serve on the Users Board, please notify them of the opportunity as the deadline for applying to serve on the Board is rapidly approaching.

This will conclude my brief opening remarks as we have some very interesting presentations today, and I will look to other Board members for any possible opening comments. Hearing none, I will turn the microphone back to you, Mr. Pointon. Thank you.

MR. POINTON: Thank you, Mr. Chairman. Next on the program is the approval of the minutes from Users Board Meeting No. 87, which was held in Pittsburgh, Pennsylvania on May 25, 2018. Can I receive a motion from the Board to approve the minutes of Board Meeting No. 87?

MR. DAVID A. EARL: So moved.

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

MR. DANIEL P. MECKLENBORG: Second.

MR. POINTON: Mr. Earl's motion is seconded by Mr. Mecklenborg. Thank you. Can I have a vote on the motion to approve the minutes of Users Board Meeting No. 87, gentlemen? All in favor say aye.

BOARD MEMBERS: Aye. (Unanimous.)

MR. POINTON: Any nays? Hearing none. Great. The motion passes unanimously. Next on the agenda is Mr. Rick Granados. Mr. Granados is currently the Acting Chief of the Navigation Branch at USACE Headquarters and is also the Acting Navigation Business Line Manager at USACE Headquarters, vice of Jeff McKee who retired several months ago. Mr. Granados will give us a presentation on the Fiscal Year [FY] 2018 funding for navigation projects related to the inland waterways system. Rick, please proceed when you are ready. Thank you.

MR. RICK D. GRANADOS: Thank you, Mark. As Mr. Pointon indicated and as it says on the title slide, I am the Acting Chief of the Navigation Branch and the Acting Navigation Business Line Manager at USACE Headquarters.

It has certainly been a pleasure and a very worthwhile and valuable learning experience for me to be able to sit in that position for a short period of time. This is my first Users Board meeting in quite some time and it great to see so many colleagues and familiar, friendly faces, both within the Corps and from the private sector. In my previous life, I was the Operations Manager on the Illinois Waterway and the Navigation Business Line Manager for the Rock Island District.

I am a little rusty on some of these things, so bear with me and we will get through this. The next slide shows the budget time frames. We are juggling three different budgets at any given moment. Another way to look at this is I used to look at it in terms of an Operations Manager's perspective. I was always defending what I had and always trying to fight for what I needed to be able to hang onto. This illustrates that process in terms of operating through three different budget cycles and keeping those three balls in the air. You can see where we are at present day, August 2018 -- the vertical yellow line is where we are today and we will continue through the rest of the fiscal and calendar years.

Next slide. This slide is going to be a numbers exercise, showing the President's Budget request for FY 2019 as well as budget requests going back to FY 2011. Navigation has been running somewhere around 40 percent in terms of the overall Civil Works budget, and that continues. We do show in FY 2019 in terms of this particular group's interest, the inland waterways portion of the President's Budget request, about \$850 million for inland waterways, with the total budget request for the entire navigation program being \$1.930 billion. Again, that represents 40 percent of the entire Civil Works budget request.

Next slide. No presentation would be complete without a histogram showing the history of Presidential budget requests, this slide showing budget requests dating back to Fiscal Year 2001. The color coding represents the different categories, such as Investigations, Construction, Operation and Maintenance, in terms of what the budget cycles have been doing.

You can see the FY 2018 Work Plan is about a 13 percent increase over the FY 2017 Work Plan. The FY 2018 Work Plan, again, is about a 36 percent increase over the FY 2018

budget request. The FY 2019 budget request is approximately a four percent decrease below the FY 2018 President's Budget request.

Next slide. Drilling down a little bit further into the FY 2019 navigation budget request by account, we see the Investigations Account is down a little bit from FY 2018 at \$14 million. The Construction Account is a big chunk. The Construction Account is down about \$134 million to \$176 million from FY 2018 with Operation and Maintenance at \$1.712 billion. The Mississippi River and Tributaries Account budget request stands at \$28 million. Our total navigation budget request is \$1.930 billion.

Next slide. Drilling down a bit further into the details of the inland navigation portion of the FY 2019 budget request, we can see that the budget request for the inland portion of the navigation program is at \$850 million. Again, that is somewhat of a drop from the FY 2018 budget request. We are still waiting to see how the FY 2019 appropriations are going to come out, but hope that things will change a little bit.

Next slide. What we want to show here is the funding increases that we experienced in the FY 2018 appropriations. You can see a \$24.2 million increase in the Navigation O&M [Operation and Maintenance] line. Inland waterways saw an increase of \$30 million. Navigation Construction saw an increase of \$337.130 million. Funding for projects coming out of the Inland Waterways Trust Fund are \$112 million. You can see at the bottom of the slide, the total increase in appropriations for navigation related activities in the FY 2018 Consolidated Appropriations bill [Public Law 115-141, the "Consolidated Appropriations Act, 2018", signed into law March 23, 2018] is \$975,417,000.

CHAIRMAN HETTEL: Mr. Granados. The slide you are showing, doesn't just represent inland navigation activities? Is this inland and coastal related activities? Is that correct?

MR. POINTON: This slide shows additional appropriations for all navigation related activities. That is correct Mr. Chairman.

CHAIRMAN HETTEL: Pardon me?

MR. POINTON: It is the additional appropriations for all navigation related activities, both inland and coastal navigation.

CHAIRMAN HETTEL: Inland and coastal.

MR. GRANADOS: Yes sir. It is for both inland and coastal navigation.

CHAIRMAN HETTEL: Okay. So, is the next slide [titled "*Focus on Reducing Risk of Failure on High Commercial Use Waterways*"] a breakdown just for inland navigation? What I am trying to get at is, how much appropriated funds are being utilized for inland navigation versus coastal navigation, and what is the difference between the two?

MR. GRANADOS: I am sorry. I couldn't hear the question. Could you please repeat the question?

CHAIRMAN HETTEL: What I am trying to get at is the total inland navigation appropriations figure versus the total coastal navigation appropriations figure.

MR. GRANADOS: If I go back to --

CHAIRMAN HETTEL: I am not interested in seeing how much funds were included in the President's Budget request, but the appropriations that were passed by the Congress.

MR. GRANADOS: Is this what you are talking about?

CHAIRMAN HETTEL: Yes. Again, that is the entire coastal navigation and inland navigation budget request, is that correct? The \$1.93 billion figure?

MR. GRANADOS: Yes.

CHAIRMAN HETTEL: Correct.

MR. GRANADOS: Yes. That is the total navigation budget.

CHAIRMAN HETTEL: Could we see that broken out between inland navigation and coastal navigation? That is what I am asking.

MR. GRANADOS: Yes. This slide right here is the inland navigation portion of the budget request, Mr. Chairman.

CHAIRMAN HETTEL: Correct. Is that not the President's Budget request, not the appropriations from the Congress?

MR. POINTON: Yes sir.

MR. GRANADOS: Yes. It is the President's Budget.

CHAIRMAN HETTEL: What we would like to see, again, is the Congressional appropriations, the appropriations for inland navigation and the appropriations for coastal navigation, shown separately.

MR. GRANADOS: Okay. Well, I will have to get that for you, Mr. Chairman.

CHAIRMAN HETTEL: Very good. Thank you. Maybe for the next Users Board meeting, a takeaway, Mr. Pointon. Thank you.

MR. GRANADOS: Okay.

MR. POINTON: We have that information. It is just not articulated here.

CHAIRMAN HETTEL: I know you have it, but...

MR. GRANADOS: Next slide. Again, what we have been trying to do over the last number of years, has been to focus on increased reliability, but at the same time, now we are looking at decreasing risk. Similar comparisons, but in terms of buying down risk with the money that has been appropriated to us, we are trying to show that we are making some progress along those lines.

Again, if we can look at the individual lines, beginning at the top of the slide with the Operation and Maintenance activities directed towards the Mississippi River, the difference between the FY 2018 President's Budget request and the FY 2018 Work Plan, you can see an increase of \$16 million, from \$252 million in the FY 2018 President's Budget request to \$268 million in the FY 2018 Work Plan. Operation and Maintenance activities on the Ohio River goes from \$123 million in the President's Budget to \$138 million in the FY 2018 Work Plan, an increase of \$15 million. Operation and Maintenance activities on the Gulf Intracoastal Waterway (GIWW) goes from \$67 million to \$68 million. Funding of Operation and Maintenance activities on the Illinois Waterway remains the same between the President's Budget and the FY 2018 Work Plan at \$50 million. Similarly, funding of Operation and Maintenance activities on the Tennessee River remains the same at \$23 million and on the Black Warrior and Tombigbee Waterway at \$49 million. Operation and Maintenance activities on the other waterways see an increase of \$25 million from \$220 million in the President's Budget request to \$245 in the FY 2018 Work Plan.

At the bottom of the slide is information on the Mississippi River and Tributaries account. The construction portion of the Mississippi River and Tributaries account saw an increase between the FY 2018 budget request and the FY 2018 Work Plan, increasing from \$112 million to \$180 million, an increase of \$68 or 61 percent. And with respect to the Operation and Maintenance portion of the Mississippi River and Tributaries account, there was a significant increase in funding going from \$141 million in the President's Budget request to \$245 million in the FY 2018 Work Plan, an increase of \$104 million or 74 percent.

Next slide. Again, focusing on the highest priorities we have been experiencing over the last number of years, the Olmsted Locks and Dam project, of course, was included in the FY 2018 President's Budget request at \$175 million. Chickamauga Lock received \$76.5 million in the FY 2018 Work Plan. Kentucky Lock received \$39.5 million in the FY 2018 Work Plan. The Lower Monongahela River Locks and Dams 2, 3 and 4 project received \$98 million in the FY 2018 Work Plan. The LaGrange Lock and Dam major rehabilitation project received \$10 million in the FY 2018 Work Plan, which is an authorized new start, and with a continuing contract waiver that we will also hear a little bit more about later in the meeting.

With that, that is the extent of my presentation. If there are no further questions that concludes my presentation. All right. Thank you very much. I appreciate it.

MR. POINTON: Thank you, Mr. Granados.

MR. GRANADOS: Thank you.

MR. POINTON: Next up on the program is Mr. Joseph Aldridge who is going to give us an update on the status of the Inland Waterways Trust Fund, as he does for most meetings. Mr. Aldridge, please proceed when you are ready.

MR. JOSEPH W. ALDRIDGE: Good morning, Chairman Hettel, Assistant Secretary James, Major General Spellmon, Board members, guests. My name is Joseph Aldridge. I am the Inland Waterways Trust Fund account manager at USACE Headquarters, and it is good to be here today to give you an update on the Inland Waterways Trust Fund account.

First up is the status of the Inland Waterways Trust Fund. This is as of 31 July 2018. We started the fiscal year with a carryover. At the top of the slide you can see that it says the FY 2018 beginning balance was \$63,395,863. We have collected in total revenue year to date (October 1, 2017 to July 31, 2018) with the tax receipts and interest of \$93,457,138, for a total \$156,853,001, when you add together the beginning balance in the Trust Fund and the year to date tax receipts and interest. There has been \$11,443,281 transferred from the Inland Waterways Trust Fund from the U.S. Treasury to the Corps as of 31 July. That gives us a total available balance of \$145,049,720 as of July 31st.

Next slide. This slide shows the five-year revenue funding stream and revenue collection compared side by side. The FY 2018 revenue collected is represented by the red bars.

CHAIRMAN HETTEL: Mr. Aldridge. Just a comment on this slide. I believe for FY 2018 the IRS [Internal Revenue Service] had \$106 million estimated inflow to the Trust Fund.

MR. ALDRIDGE: I believe that is correct sir.

CHAIRMAN HETTEL: And here we are going to surpass our FY 2017 number of \$114 million. At least we are on a pace to do so, as of the end of July. I just want to make the comment for the public record, again, that the Users Board believes we should be using \$112 million on an annual basis for planning Inland Waterways Trust Fund supported construction projects.

MR. ALDRIDGE: Yes, sir.

CHAIRMAN HETTEL: I am not sure we are willing to step up to \$114 million or \$115 million, but there is no sense in leaving \$6 million or \$12 million when you match that with the General Treasury money with the match in the Trust Fund on the table. I just wanted to reiterate that again that our preference is the \$112 million figure for budgeting purposes. Thank you.

MR. ALDRIDGE: Yes, sir.

MR. POINTON: Just a point of clarification. That budgeting figure of \$106 million comes from the U.S. Department of Treasury, not from the IRS.

CHAIRMAN HETTEL: Thank you for the clarification Mr. Pointon.

MR. POINTON: The Treasury Department does the projections of what they think the estimated revenue will be for the Trust Fund.

CHAIRMAN HETTEL: And in the past we have requested at prior Users Board meetings to have someone from the Treasury Department come our meeting to explain to us how they make those assumptions.

MR. POINTON: Yes sir, we have. I will see if we can reinvigorate that request.

CHAIRMAN HETTEL: That would be great. Thank you.

MR. ALDRIDGE: Next slide. This is the same slide as you saw before, the only difference is that it covers only the last three months, May, June and July of each of the Fiscal Years 2014 to 2018. It is a close-up view to give you a better picture of the last five fiscal years compared side by side for that particular quarter.

As you can see, for FY 2018, as of May this year, Trust Fund revenue was \$4.5 million greater than the revenue collected in FY 2017 for the same period through May 2017. As of June this fiscal year, revenue was \$3.7 million higher than it was for the same period through June 2017. And for July of this fiscal year, revenue was \$3.5 million higher than it was for the same period through July 2017.

The next slide shows the seven projects that we are currently tracking.

Of these seven projects, five received funds. The Olmsted Locks and Dam project was the only project that was included in both the President's Budget requests for FYs 2018 and 2019. In the FY 2019 budget, the \$35 million budget request would fully-fund the Olmsted project to completion.

The five projects receiving allocations in the FY 2018 Work Plan are the Olmsted Locks and Dam project; the Lower Monongahela River Locks and Dams 2, 3 and 4 project; the Kentucky Lock project; the Chickamauga Lock project; and the new start LaGrange Lock and Dam major rehabilitation project.

That concludes the budget piece of my presentation.

Now I am going turn to an update on the status of projects within the Mississippi Valley Division. We are only tracking one project within the Mississippi Valley Division that being the Inner Harbor Navigation Canal Lock Replacement project on the Gulf Intracoastal Waterway (GIWW) in New Orleans.

There have been no changes to this project since the last Users Board meeting except for the item at the bottom, right-hand side of the slide in the box titled "Next Steps" the comment

reads, "Continue GRR [General Re-evaluation Report] for lock replacement; scheduled completion December 2019". The three month slip in the completion date is due to a delay in the receipt of funds this year and that is the cause of the schedule slip.

MR. MECKLENBORG: Mr. Aldridge, I have a question on your earlier slide titled "*IWTF Projects – President's Budget and Total Allocation.*" In your entry for the Olmsted Locks and Dam project, on the line "Total Allocation," in the column titled "FY 2017," you have a footnote, footnote No. 11. Yet you don't show a footnote No. 11 at the bottom of your table. What is that footnote referring to? The footnote is next to the \$250,000,000 that is shown on the second line of the table.

MR. ALDRIDGE: On the second line, slide number -- you said No. 10?

MR. POINTON: Under the Olmsted project, footnote No. 11, under FY 2017.

MR. ALDRIDGE: Oh, okay. That is the new start. There is one new start project and that was LaGrange Lock major rehabilitation project. LaGrange, it is a new start project, and the Congress required us to notify them and provide them with a "Notification of Project Affordability Analysis" in accordance with Congressional direction associated with the FY 2018 Energy and Water Development appropriations to ensure the Congress that we can, in fact, move forward with this project without detriment to other projects. That is in the process now.

MR. MECKLENBORG: But is there supposed to be an explanation at the bottom of the table to explain footnote 11?

MR. ALDRIDGE: Well, footnote No. 10 says "New start to be funded upon Congressional Notification of Project Affordability Analysis per FY 2018 E&WD [Energy and Water Development Appropriations]."

MR. POINTON: Joe, Mr. Mecklenborg is referring to footnote No. 11 next to the \$250,000,000 cost figure under the Olmsted project, and there is no footnote No. 11 shown at the bottom of the table.

MR. ALDRIDGE: Oh. I thought you were talking about footnote No. 10.

MR. POINTON: It is under Olmsted.

MR. ALDRIDGE: Oh. Under Olmsted?

MR. MECKLENBORG: FY 2017.

MR. ALDRIDGE: Oh.

MR. POINTON: Yeah.

MR. ALDRIDGE: I think that was leftover from the presentation given at the last Users Board meeting in Pittsburgh this past May.

MR. MECKLENBORG: Okay, thank you for the clarification.

MR. ALDRIDGE: I just failed to remove the footnote. I missed that in updating this slide. All of the notes are in red, because when we added LaGrange Lock and Dam we dropped some of the footnotes, I re-numbered them, and I apologize. I must have missed that one.

MR. MECKLENBORG: Okay. Thank you. I appreciate that.

MR. ALDRIDGE: Footnote No. 11, just for your information, that amount, the \$250,000,000 figure, was the amount that was included as an allocation provided through the FY 2017 Work Plan, so that is what that was. That footnote should have been taken off this slide. I apologize for that.

Okay. Getting back to the update on the Inner Harbor Navigation Canal Lock Replacement project on the Gulf Intracoastal Waterway in New Orleans. The other thing I wanted to point out on these slides is, you can see at the very top of the slide in the upper left hand corner of the slide, it says, "Total Project Cost (TPC)". And at the bottom of the table, in the middle of the slide, the second line from the bottom, it says, "Remaining TPC Balance." I added the TPC, Total Project Cost, because at the last Users Board meeting there was confusion between whether these were remaining funds on the project or the remaining project costs still to be funded. To make that clear, that \$1.263 billion is really what is remaining of the total project cost. That figure is not what has been allocated to the project but what is remaining on the project.

Next slide we move into the Great Lakes and Ohio River Division. Each of these projects will be covered by the project manager later today except for the Emsworth Locks and Dam project, and there are no changes to the Emsworth project. I am going to skip over these other projects [Olmsted Locks and Dam; Lower Monongahela River, Locks and Dams 2, 3 and 4; Kentucky Lock; and, Chickamauga Lock]. Turning to the Emsworth project, there is a lot of red, but all they did was outline as they consolidated -- it used to say "Allocation FY 2013." It is toward the bottom of the slide. They kind of rolled it up into the next row. They added FY 2014 into what used to be allocation FY 2013, and then added the FY 2019 budget line, so that is the change.

CHAIRMAN HETTEL: Joe, let me make sure I understand what you just told me on the Emsworth project. We had this discussion at the last Users Board meeting. There are \$3 million of Inland Waterways Trust Fund revenues and \$3 million General Treasury revenues that has not been allocated to Emsworth yet, is that correct? That is the difference in the total project cost, what was left over from --

MR. ALDRIDGE: That is correct, sir.

CHAIRMAN HETTEL: In other words, the Corps' estimate of the Total Project Cost was \$160 million. And the Corps completed the project for about \$154 million?

MR. ALDRIDGE: Yes sir, that is correct.

CHAIRMAN HETTEL: Okay, thank you.

MR. MICHAEL J. MONAHAN: I have a question on this project as well. I saw a lot of dialogue in the minutes from the last Users Board meeting held this past May in Pittsburgh. Unfortunately, I was not able to attend the last Users Board meeting. But I thought it was clarified that there was actually only \$600,000 remaining, not \$6 million?

CHAIRMAN HETTEL: I believe what it was, Mr. Monahan, was that the Corps had that \$600,000 remaining to do painting and stuff like that that they had to complete the project. What I was referring to was at the last Users Board meeting was the issue that the Corps had already withdrawn that \$3 million from the Trust Fund and that it was not available to be applied to other Trust Fund supported projects and it hasn't been withdrawn from the Trust Fund. Is that correct Mr. Aldridge?

MR. ALDRIDGE: That is correct sir.

MR. MONAHAN: I see, thank you for that clarification.

CHAIRMAN HETTEL: And that Corps has not done that. Is that correct Mr. Aldridge?

MR. ALDRIDGE: That is the correct, sir. Are there any other questions on the project updates?

CHAIRMAN HETTEL: Joe, are you going to provide an update on the Olmsted project?

MR. ALDRIDGE: No sir, I am not. That project update will be provided by the project manager, Mr. Rissler [Mr. Dewey W. Rissler].

CHAIRMAN HETTEL: Well, Joe while I have you up there I do have a question on Olmsted if you would go to your slide on the Olmsted project.

MR. ALDRIDGE: Yes sir. The Olmsted project update is going to be given by Mr. Rissler and Mr. Humphrey [Mr. Waylon D. Humphrey].

CHAIRMAN HETTEL: Did you not go by the Olmsted project slide earlier?

MR. ALDRIDGE: Yes sir, I did.

CHAIRMAN HETTEL: Would you bring that slide up on the screen for a moment?

MR. ALDRIDGE: You are not going to let me off, are you?

CHAIRMAN HETTEL: You know me better than that, Joe. And maybe somebody else has to define this, but I am looking at the bottom line, the line item that reads "Remaining Total Project Cost." You have included the \$35 million that was included in the FY 2019 President's Budget request.

MR. ALDRIDGE: That is correct sir.

CHAIRMAN HETTEL: Does that tell me that the Corps has almost \$116 million remaining to complete the project through 2022?

MR. ALDRIDGE: Sir, it tells you that there is \$115.7 million of that original \$2.856 billion that is left on the original estimated cost. We may not spend that whole \$115 million. It may just be \$35 million for remaining costs. I am not sure how much contingencies are left, but basically to reach that \$2.856 billion total project cost, we still have \$115.7 million.

CHAIRMAN HETTEL: So does the \$17 million need to be withdrawn from the Trust Fund, or has it already been withdrawn from the Trust Fund?

MR. ALDRIDGE: It will need to be withdrawn from the Trust Fund.

CHAIRMAN HETTEL: But yet the Corps says they need no more funding to finish the project?

MR. ALDRIDGE: That is correct. But when we say no more funding, we mean no more funding from Congress. Please, Mr. Rissler, correct me if I am wrong, but that \$115 million is comprised of \$98.4 million from the Construction account and \$17.3 from the Inland Waterways Trust Fund, and we still have the authority to draw on those funds and use them for that project.

CHAIRMAN HETTEL: Joe, I understand that, but I truly think, looking at these numbers, seeing how the Corps is not requesting any more funding beyond FY 2019, that that \$17.36 million has already been withdrawn from the Trust Fund.

MR. ALDRIDGE: Not yet sir.

CHAIRMAN HETTEL: How can that be if the Corps is not requesting any more funding going forward beyond FY 2019?

MR. ALDRIDGE: Because of that \$98 million we are saying is enough to complete the project under the total project cost estimate, right now we are only asking for \$35 million in FY 2019. We think that that \$29.750 million and the \$5.250 million, equaling \$35 million, is going to round out that project and we are going to be done with it.

Now, we already know -- and, Mr. Rissler, you can correct me again if I am wrong. There were some issues with one of the tainter gates or something that we may have to do -- so there may be additional costs.

CHAIRMAN HETTEL: Okay.

MR. ALDRIDGE: But basically we are saying we are going to be done, but there is that \$115.7 million from the original estimate that we have not spent.

CHAIRMAN HETTEL: Okay. Let me correct myself. It is not \$17.36 million because we would technically have to withdraw the \$5.25 million in FY 2019 because that is not withdrawn out of the Trust Fund yet, correct?

MR. ALDRIDGE: The \$5.25 million will be drawn this year.

CHAIRMAN HETTEL: Will be.

MR. ALDRIDGE: I am sorry.

CHAIRMAN HETTEL: Next year?

MR. ALDRIDGE: It is in FY 2019. Yes. It will be drawn next year out of the Trust Fund.

CHAIRMAN HETTEL: Okay. So, again, my question is – you are saying we need \$12 million more from the Trust Fund when the Corps says they don't need any more funding to finish the Olmsted project.

MR. ALDRIDGE: I don't think we said we don't need any more money from the Trust Fund. What we are saying is we don't need Congress to appropriate us additional funds above that \$35 million that fully funded the project to completion.

CHAIRMAN HETTEL: I am confused.

MR. WILLIAM M. WOODRUFF: I think maybe I can help. Trust Fund dollars still have to be appropriated by Congress. If it has to be appropriated, it would include Trust Fund dollars as well as dollars from other projects.

MR. ALDRIDGE: That \$35 million includes \$29.75 million Construction funds and \$5.25 million of Inland Waterways Trust Fund money that has been approved by Congress for FY 2019.

MR. WOODRUFF: Correct.

MR. ALDRIDGE: Or it is in the President's Budget for FY 2019.

MR. WOODRUFF: Correct.

CHAIRMAN HETTEL: So anything above that, you are correct. We are saying we don't need any more, but if there is an issue that happens and we need additional funds, we'd

probably have to go back and get it in the Work Plan because it is too late to budget it for FY 2020, but we could ask for additional Trust Fund moneys out of the Work Plan to get those dollars.

MR. WOODRUFF: I think what has Chairman Hettel confused is the TPC [Total Project Cost] balance. There is a remaining balance of a total of \$115.759 million, but what I think you are saying is while that balance is available, you do not, at this time, anticipate needing to spend it?

MR. ALDRIDGE: You took the words right out of my mouth. Thank you, sir. We are just saying that we think we're done with that \$2.7 billion figure, but anything can happen. There may be something, but right now you are correct. The remaining balance figure, that line across that \$115.759 million figure, we don't think we will need it.

CHAIRMAN HETTEL: Okay. I guess what I am asking – and the end result of all this questioning, Joe, is, how much money does the Corps have right now to complete the Olmsted project? Because they are not requesting any more funding beyond FY 2019, so they evidently have a pool of money to finish the removal of Locks and Dams 52 and 53 and site remediation.

MR. ALDRIDGE: I see we are done at \$2.7 billion, unless there are additional issues that pop up. For example, a flood comes along or a major catastrophe or something happens, there may be a requirement for additional funding, and that will probably be done out of the Work Plan rather than by budgeting because budgeting is going to be two years out.

CHAIRMAN HETTEL: I understand that. The whole point of my questioning was, we are funding the project upfront because the Corps is not requesting any more money beyond FY 2019 and it is going to take four more years to complete the project, three or four more years. What is that number that the Corps has that they are going to spend in FY 2020, FY 2021, and FY 2022? That is what the answer is that I am after.

MR. ALDRIDGE: Okay. I am going to leave that to Mr. Rissler to address during his presentation.

CHAIRMAN HETTEL: Maybe we can get that information for the next Users Board meeting, Mark [Mr. Pointon]. Thank you.

MR. ALDRIDGE: Because that will be contingent --

CHAIRMAN HETTEL: I didn't mean to confuse you, Joe, but that is what I was ultimately getting at.

MR. ALDRIDGE: Okay. Subject to your questions, that will conclude my briefing this afternoon. Hearing none, thank you for your attention.

MR. POINTON: Thank you Joe. We are going to switch pace a little bit here. I believe Vice Chairman Matt Woodruff requested this update at the last Users Board meeting. We are

going to have an update on the Brazos River Floodgates and Colorado River Locks Feasibility Study on the Gulf Intracoastal Waterway. We have Ms. Franchelle Craft from the Galveston District who will give the briefing this afternoon. Ms. Craft is the project manager for the study. Please proceed when you are ready, Ms. Craft.

MS. FRANCHELLE E. CRAFT: Thank you Mr. Pointon. Good afternoon, everyone. My name is Franchelle Craft, and I am the project manager for the Brazos River Floodgates and Colorado River Locks feasibility study. I work at the Galveston District. The purpose of this briefing is two-fold. First, I want to describe the study team's recommendation for the Tentatively Selected Plan – you will hear me refer to it as the "TSP" - and also layout our path forward to our final report.

The goal of the study is to improve navigation efficiency by selecting a plan that is economically justified and environmentally acceptable to maintain the Gulf Intracoastal Waterway [GIWW] a nationally significant waterway system while continuing to provide water and sediment management capability and navigation safety on the GIWW.

One of the primary functions of the Corps of Engineers is to maintain safe, reliable, and efficient waterway systems for the movement of commerce, national security, and recreation.

From a national security standpoint, there is a significant risk to these structures, not only because of the types of commodities that transit through them, but also due to the proximity of these structures to the Gulf of Mexico, which is significant for its production of petroleum and petroleum refining infrastructure, and in ensuring the continued movement of goods along the GIWW system.

As was evident by the recent Hurricane Harvey event, these vital pathways are critical in transporting oil and gas commodities from the Gulf Coast region to other parts of the U.S.

Both the Brazos River Floodgates and the Colorado River Lock structures were constructed to prevent excessive sedimentation in the GIWW, and minimizing sedimentation continues to be a primary objective for the facilities. Excessive sedimentation increases maintenance dredging needs and associated costs which result in delays for commercial navigation.

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 to only the Mississippi River.

Per the Section 216 authority, the study team will continue to investigate ways to manage sediment through the GIWW and assess alternatives that will improve the navigation efficiency along these structures.

As I said a few moments ago, our study authority is Section 216 of Public Law 91-611, the River and Harbor Act of 1970. This study is 100 percent Federally-funded. We have partnered with the Texas Department of Transportation, with their primary focus being the

Brazos River Floodgates portion of this study. The Texas Department of Transportation is contributing engineering expertise, hydraulic and hydrologic modeling capability, economic analysis updates and environmental analyses of the Brazos River Floodgates.

The Corps of Engineers will be conducting some technical oversight of their work and working hand in hand with them. Our primary focus are the Colorado River Locks.

There are several problems that the study team has identified at both structures. Each structure has two separate locks and/or a floodgate component that operates differently depending on the traffic that comes through and the river conditions that may be at that structure, which makes this a very unique system to assess.

I just want to note that a lot of people get it confused when you hear the term floodgates. Floodgates are used to control sediment load. They are not a flood control structure.

Some of the problems that we have identified as a team for the system is that modern barges and ships have to navigate through narrow, 75-foot wide alignments and outdated and narrow floodgates and locks that lead to frequent accidents that damage guidewalls and gates.

The outdated lock and floodgate construction at the sector gates leads to structural, electrical, and mechanical maintenance issues.

Shutdown of operations during periods of high water and to repair damage due to vessel strikes causes significant economic impacts to the navigation industry.

Lastly, any changes to the sediment disposition into the GIWW will be assessed and included as additional O&M costs to the study.

I want to take some time to walk you through our evaluation process. We started back in September of 2016. We had six alternatives that we carried through to our Alternative Milestone meeting. The team evaluated those alternatives based on economics, water flows and velocities, sedimentation patterns, environmental impacts, and consideration of the effects of Hurricane Harvey and the data that we received following that event.

We screened those six alternatives based on that evaluation criteria and we ended up with three alternatives. We held a meeting with representatives from industry where we received a lot of feedback, honest opinions. We got realistic views of the waterway system and we were able to come out of that meeting with a hybrid alternative.

Basically what industry-preferred and what the study team was thinking. We carried those two alternatives to our Tentatively Selected Plan, or “TSP”, which was in December of 2017.

Our TSP met our study objectives. They maximized net benefits. It resulted in fewer risks to system functions, and it was also acceptable to our navigation stakeholders.

Next slide. In the TSP for the Brazos River Floodgates, we recommend removing the existing 75-foot wide East and West Floodgates. We recommend constructing a new 125-foot wide East Floodgate and have an open channel on the west side. The new floodgates would be set back from the river to create a longer approach channel. We recommend constructing new wing walls and guidewalls for the East floodgates. And we recommend constructing a temporary bypass channel, and then we would backfill that bypass channel when construction is complete.

Next slide. In the TSP for the Colorado River Locks, we recommend converting both locks, which they are currently 75-feet wide to 125-feet wide gates. I want to note here that during our draft report, we still had the 75-foot width gates. However, logically, it does not make sense to have different sized gates because this is a system. If you have 125-foot wide gates, even though we don't have the economics right now for the 125-foot wide gates at the Colorado River, the study team is working really, really hard to find those benefits, because there are just not enough accidents at this site to increase our benefits. But logically, you can't have 75-foot wide gates at one structure when you have 99 percent of the traffic between both structures.

MR. MONAHAN: I have a question on your proposed bypass channel. When and if that happens and once the project is completed, would that be used moving forward as a secondary option, if there are issues at the chamber, or what happens to the bypass channel?

MS. CRAFT: We would fill the bypass channel back in once construction is completed. That is the team's proposed idea right now.

MR. MONAHAN: Thank you.

MS. CRAFT: You are welcome.

CHAIRMAN HETTEL: I understand your thought process of wanting to have 125-foot wide gates at Brazos, and why not at Colorado, when you flip back and look at Brazos and look at Colorado, it is a whole different way to transit.

MS. CRAFT: That is correct. The alignment, yes.

CHAIRMAN HETTEL: With the turn you have to make at Brazos versus Colorado. I don't know -- Mr. Woodruff and Mr. Fewell are more familiar with this project than I am, but I think all of our mariners' concerns are with the Brazos River Floodgates, and not so much the Colorado River Locks.

MR. WOODRUFF: The concern that has been expressed to me by the mariners is -- the impetus for all this study effort was the Brazos River Floodgates.

CHAIRMAN HETTEL: Correct.

MR. WOODRUFF: Brazos is a problem; Colorado is less of a problem. You can go back in the minutes of previous Board meetings for the last several years and see me saying, "Why are we looking at Colorado? Our problem is at Brazos."

But having decided to look at Colorado, then there does become an issue if you are going to make profound changes to Colorado, a lot of the time the biggest impediment to navigation through this area is wind and most of the barges along the Gulf Intracoastal Waterway as opposed to the traditional inland waterways where the barges are 200 foot or 195 foot by-35 foot versus 300 foot by 54 foot barges on the Intracoastal Waterway. When you are pushing two 300 foot by 54-foot barges, which is customary now, and it is windy, and especially when they are empty, you are going to want to double them up. Suddenly your total tow size is 108-feet wide. That is why a 75-foot wide gate doesn't work very well with a 108 foot wide tow. You need to be able to run through there doubled up. It is much safer in the wind.

If you fix Brazos to go to a 125-foot opening, then the only narrow opening on the Texas Gulf Coast will be at the Colorado. What I am told is this particular configuration that you see in front of you, which is the Colorado River TSP alternative 4b.1, essentially removes the riverside gate and turns it from a lock into a floodgate. What is not depicted there is the riverside gate. What I have been told by our mariners is if we can't have a 125-foot opening, then we are better off doing nothing at all at the Colorado and leaving it as a lock. Because what you don't want to have is a situation where you are pushing against a current into a 75-foot opening. If it is a lock, you are pushing through the first gate with the second gate closed, so you are not pushing against a current or a tail current. So, actually, what I have been told -- I think that is why they are working so hard to get us the 125-foot opening.

There are two things you get with a 125-foot opening instead of a 75-foot opening. It is not just a bigger hole to push toward, but a much lesser current. The wider opening will have less of a current than channeling the water into the 75-foot opening where you are coming across and you are having to potentially go against a flood or ebb tide. I think that the mariners have discussed this issue with the study team. I know the team is working hard on it. But I just wanted to make it clearer for those who -- and this maybe their first time looking at this -- why it is that the mariners have that concern.

Going back to Brazos, if I might, I know that after your first meeting with the industry concerning the TSP there were some concerns from stakeholders and the port at Freeport that there might be, with the single gate, siltation issues with the wider gate. I appreciate what has been done to address that, I know at one point they were talking about having two gates on the east side. Instead what you have done is agreed to reconfigure the channel so that the silt is more likely to go down to the Brazos River diversion canal and not likely to go into the Freeport harbor.

MS. CRAFT: That is correct. If you remember at the beginning, the open channel had the highest BCR [benefit to cost ratio], and then we got some feedback from industry, and we started looking at it more, and we knocked that out. Even though it did have the highest BCR, it just wasn't practical. If you looked at the big picture, it would be more O&M [operation and

maintenance]. It would be more O&M -- more dredging for even the ports. The team went back, and that is how we came up with this hybrid alternative.

MR. WOODRUFF: How are the stakeholders to the west of the San Bernard River community? Are they now comfortable with this design, or are they still wanting the floodgate on the west side to push water to the San Bernard?

MS. CRAFT: They are really not comfortable with this design, even though we took some time from the public comments and the concurrent reviews, and we went back and we did some additional hydraulic and hydrologic modeling. They have a permit right now in to have the San Bernard -- I guess the county -- Brazoria County's going to dredge the San Bernard, so it is going to be open. But we did find with hydraulic and hydrologic modeling that having the San Bernard open really affects our project more with the sedimentation. We are going to meet with them in the next couple of weeks to work through those issues.

MR. WOODRUFF: I know that you have put in your remarks something about the frequent accidents. Does this remain the most damaged piece of infrastructure in the entire Corps inventory? I know for a while this lock was damaged more often than any other lock in the country.

MS. CRAFT: Hopefully with this fix it wouldn't be.

MR. WOODRUFF: Correct. Well, it won't be with the fix. In its current state --

MS. CRAFT: It is. With the 75 foot wide gates --

MR. WOODRUFF: There are more accidents there than anywhere else?

MS. CRAFT: Correct. The 75-foot wide gates are just not working. And the nasty 60-degree turn is just compounding the problems there.

MR. MECKLENBORG: Do you have an overall estimated total cost for this project?

MS. CRAFT: I don't have it off the top of my head, but I can get it to you.

MR. MECKLENBORG: Do you know what the order of magnitude is? How many millions of dollars; do you recall?

MS. CRAFT: I don't. I'm sorry.

MR. MECKLENBORG: Okay.

MS. CRAFT: I can get that project cost figure for you.

MR. WOODRUFF: It would be a lot less than the other projects we are talking about here.

MR. MECKLENBORG: Okay. Thank you.

MS. CRAFT: And the project would have to undergo review, a phrase we use is “rack and stack” to see how it compares with the other projects.

CHAIRMAN HETTEL: I would like to make one last comment. And thank you to Vice Chairman Matt Woodruff's detailed knowledge of this geographic area and the way the mariners operate in that geographic region. That is why it is so important that we have representatives on this advisory board from all geographic areas of the waterways system, because I have learned a great deal today, Matt, from your explanation of how the navigation users of that waterways operate. I have not been on top of this, so I appreciate that. Thank you.

MR. WOODRUFF: Thank you Mr. Chairman. We also have in attendance at today's meeting Mr. Jim Stark. Mr. Stark, who is the President of the Gulf Intracoastal Canal Association (GICA), is in the audience this afternoon. I don't know if he has any comments he would like to make at this time with respect to this study – or if that would be out of order and would it be better if Mr. Stark offered comments during the public comment period of the meeting later on – or if he would like to correct anything that if I misstated, misrepresented or missed anything or failed to include anything in my comments.

MR. POINTON: Mr. Stark, if you would like to make a comment, can you please take the podium so we can get it on the record?

MR. JAMES STARK: Sure.

MS. CRAFT: Actually, we just met with Mr. Stark on Monday.

MR. STARK: Good afternoon. My name is Jim Stark. As Mr. Woodruff said I am the President of the Gulf Intracoastal Canal Association, representing about 200 members that operate on the GIWW from Brownsville, Texas to the panhandle of Florida and then up into the other parts of the inland waterways system. GICA has been working very closely, quite frankly, with the Corps of Engineers and the Texas Department of Transportation in the Galveston area.

As recently as yesterday, we were discussing refinements to the TSP at the Colorado River Locks to make it easier to navigate and to reduce the costs so that we could raise the benefit to cost ratio.

What I would say is that the Corps has been very proactive in reaching out to a number of members that operate in that area on practically a daily basis. We are looking closely at perhaps a realignment of this alternative [the Brazos River TSP Alternative 3a.1] and maybe I am speaking a little bit out of school here – or a little ahead of the wave. But the Corps is looking at actually bringing that alignment down to the south a bit, and that will ease the bend for us. It will open up the forebays and make it safer to navigate across that sharp angle turn that we have now, and will actually -- I think the modeling showed that we will dump the sediment itself elsewhere, and we won't have as much of it dredging problem in that area.

Similarly at the Colorado River Locks where you saw the bypass channel going across, they have come up a tentative plan to actually use that as the new channel. They would dig the bypass channel, the new channel at the same time, and then abandon the old floodgates in place.

What the beauty of that is, of course, you can operate the old gates as they are digging the new channel. Similar to this, it brings the channel down to the south a little bit and may, in fact, help with that sedimentation flow. It may result in less dredging costs downstream. What we are looking at closely is how to increase the benefits accrued to this new project, this new alignment, and it focuses mainly on the decreased currents, the decreased chance of allisions, and the decreased delays that are associated with the current gate alignment. Are there any questions?

MR. WOODRUFF: Basically everybody is working hard to cut the project costs and increase the benefits associated with the project to make things happen.

MR. MIKE FEWELL: Before we get past this, I would like to add a few more comments as a daily user of both the Brazos River Floodgates and the Colorado River Locks and also representing a shipper that has three major chemical production facilities in Freeport [Texas]. We do a lot of exports out of Freeport, and one of our concerns is some of the earlier reports said that the sedimentation would increase by up to 11 percent in the Freeport harbor.

We have already gone from previously dredging every four to five years to now every two to three years. If it is going to get even worse, what are we going to be doing? Dredge it every year? That is just not sustainable long-term.

If we look at Colorado, whether we have a floodgate or lock, it doesn't matter what structure is there, the only time we have a problem is during major flooding incidents. It doesn't matter what you have there; we are still going to have that problem during that incident. The history of Colorado was it started out as a floodgate. It was changed to a lock, and now we want to change it back to a floodgate, so I don't understand that logic there.

MS. CRAFT: It has to do with the head differential.

MR. FEWELL: The what?

MS. CRAFT: The head differential there.

MR. FEWELL: Right. Okay. We have to match up Brazos and Colorado, because right now if we are going from a 125 foot wide opening to a 75 foot wide opening, every tow going through is going to have to stop eight hours after Brazos to break apart to get through Colorado. That is a big piece of the puzzle that has to be fixed.

MS. CRAFT: And the study team has asked for an additional two months to try to capture those benefits before we release the final project report. We understand that it is

important that you -- it is a commonality of 99 percent traffic, and you have to have that 125-foot width gates at both structures.

MR. FEWELL: It is going to be common because there is nothing but 40 miles of cow pastures between the two structures. So it is going to be all common traffic.

MS. CRAFT: Next slide. These are some of the significant comments we received during the public comment review period, and we took some time to address these comments. The San Bernard River impact was one. We did some additional hydrologic and hydraulic modeling to address those, and we put out a white paper. Salinity changes from brackish/saline marsh to freshwater in the San Bernard came out of those comments.

The temporary bypass channel sedimentation input at Freeport harbor; the navigation impacts at Freeport Harbor and deepwater vessels due to velocity changes; navigation safety and safety performance of our ultimate recommended plan; gate width differences, 125 foot width at the Brazos River Flood gates and 75 foot width at the Colorado River Locks; increased dredging time and costs of the GIWW; and flood impacts to the community with gate removal on the west side of the Brazos River Flood gate.

As I said, these comments were significant enough that the team did go back and look at it, and we addressed those in our post-ADM [Agency Decision Milestone] tasks and in our final report.

Next slide. Turning to our post-ADM tasks which is our Agency Decision Milestone meeting, we held that two months ago, and it was successful.

Our post-ADM tasks for engineering for the Brazos River Floodgates, we are going to do some more analysis of our industry-preferred adjustments to our TSP at Brazos, which Mr. Stark talked about. We are going to investigate the elimination of the temporary bypass channel during construction by shifting the new gate to the south of the existing channel.

We are going to do some more feasibility level design of the 125-foot width gate structures at Brazos, and we are going to examine forgoing our rehab benefits for abandoning the west gate structure and the cost savings from leaving it in place.

For the Colorado River Locks, we are going to do some more analysis on our industry/operations - preferred adjustments to our TSP. We are going to do some analysis of the flow, the sedimentation and salinity of the 125-foot width floodgates.

We are going to further develop our civil design layout, and we are going to refine our cost estimate based on our feasibility design. For additional environmental assessments, we are going to update our NEPA [National Environmental Policy Act] assessment to reflect our larger footprint, because at first it was 75-feet wide at Colorado and now it is 125-foot wide.

For our economic analysis, we are going to do some additional model runs and update our benefits at the Colorado River Locks.

Next slide. As stated earlier, this is a three-by-three study. If you are not familiar with what a three-by-three study is, we have \$3 million and three years to complete the study. Our original completion date was July 2019, but during our ADM, our Agency Decision Milestone meeting, we asked for an extension of two months and an additional \$120,000. The study team felt they needed the extra time and funds to complete the study.

Our new proposed completion date for our Chiefs' report would be September 2019. We need to get the approval from the senior leaders to submit that to Headquarters.

Lastly, our recommendation, we want to complete the feasibility level design of our TSP incorporating our review comments. We want to do some additional economic modeling for our update. We want to update our NEPA assessment. Finally, the study team proposed to conduct a ShipSim analysis (a ship simulation model) during PED [Post-Engineering and Design phase of analysis].

Subject to your questions, that concludes my presentation.

CHAIRMAN HETTEL: Back to Mr. Mecklenborg's question, if you are looking to complete a Chiefs' report in July or September of 2019, depending on which study or which TSP you choose, you have to be pretty close in figuring out what the financial cost of the project is going to be. Can the project cost estimate be given to the Board members here?

MS. CRAFT: I can go back and look at my notes and see, but I'll have to --

CHAIRMAN HETTEL: Just give us some idea on what the cost is for this project.

MS. CRAFT: I can.

CHAIRMAN HETTEL: Thank you.

MR. POINTON: Mr. Chairman, I will work with Ms. Craft to get that information and we will get that information out following the meeting.

CHAIRMAN HETTEL: Great. Thank you.

MS. CRAFT: Are there any other questions? Thank you.

MR. POINTON: Are there any other questions for Ms. Craft? Hearing none, thank you very much Ms. Craft. Next on the agenda we have Mr. Mike Park, Chief of the Operations Division at the New Orleans District, who will be giving us an update on the traffic queue at the Calcasieu Lock and the work underway on the guidewall that they are replacing at the Calcasieu Lock.

MR. MICHAEL F. PARK: Good afternoon. Thank you for having me today. I believe this body did have a visit to the Calcasieu Lock at one of the recent Users Board meetings, and I think you have a little bit of an idea of the configuration of the Calcasieu Lock.

Next slide. This is an aerial photograph of the lock. On the left side is the Calcasieu River, and on the right side, that would be the Mermentau Basin. The purpose of the lock is to provide a saltwater guard against saltwater intrusion into the Mermentau Basin, to provide for an outlet for flood flows from excessive water in the Mermentau Basin and to facilitate navigation through that perimeter. It works in conjunction with five other structures – or five structures all total that regulate the water surface elevations and the salinity in the Mermentau Basin for navigation and for agriculture.

Next slide. The lock is 75 feet wide, 1,200 feet long, and has a 13-foot sill depth. It was completed in 1950. It is located near the intersection of the Calcasieu River and the Gulf Intracoastal Waterway, just south of Lake Charles, about ten miles south.

It is a very busy lock. It moves a lot of petrochemical cargoes in particular. In 2017, it handled 40.6 million tons of cargo and was ranked the 15th highest in the nation in terms of tonnage. We average about 1,100 tows per month. There is really no viable alternative route, inland route, around Calcasieu Lock when the lock is closed for repairs or any other contingencies.

Next slide. We are in the process of replacing the south chamber guidewall of the lock. Common to the New Orleans District are for the chamber guidewalls and our coastal locks and our approach guidewalls to be made of timber, rather than of a robust concrete and steel design. What we are doing here is we are replacing the timber guidewall with one that is going to have a steel-pile foundation and a concrete pre-cast cap installed on top. It should be vastly more robust, less prone to damage from impacts by barges and environmental damages. Our guidewalls, many of them would collapse, except for the term "the termites hold hands."

We awarded a contract in February of this year for \$11.8 million for that replacement. The demolition of the existing guidewall started in May and concluded in June of this year. With the contract, they are working ten hours a day, five days a week. They take off Saturday and Sunday and work 50 hours a week.

We were containing the vessel queues to reasonable levels, about less than 20 vessels after a night shift of operations and over the weekends catching up. That turned south on us when the construction began in the chamber with a template for aligning the pilings being situated in the chamber and causing kind of intimidating feature in the chamber, to say the least.

That work began in the June timeframe, the latter part of June and beginning of July. The vessel queues quickly shot up to where they were on the order of 100 or better, and we knew we had a really bad situation out there. The hourly delays or delays per tow were averaging about 80 hours.

Next slide. This is a picture of the template that is in the chamber. It is pretty much right on the edge of the 75-foot width of the lock chamber, so there is no room to spare. The rest of the guidewall is removed. It has got some pretty intimidating hard corners -- right here and on the other end, that really slowed down the efficiency of traffic going through the lock.

Next slide. You can see this is what happened to our average delays. They went from something that was reasonable, two or three hours, to up to 80 hours. Now, that has levelled off with some measures that we put in place. The latest statistic I have on that is about a 63-hour delay. It is not great, but it is not going through the roof anymore.

Next slide. Here is a list of some of things we have been doing in particular to manage traffic. We have had quite a bit of engagement with the GICA, the Coast Guard, navigation industry, the shore side industries, the petrochemical industries in the Lake Charles area, brainstorming solutions that we might put in place that can gain us any incremental increases in efficiency at the lock. We have made some gains, and we have had engagements on site at the lock.

We had an engagement with all the stakeholders at the GICA conference. Our District commander, Colonel Clancy [Colonel Michael N. Clancy], is having a weekly conference call with his counterparts at the Coast Guard in Port Arthur and the Marine Safety Unit over there. There was an overflight that was conducted just last weekend to get a common understanding of what is going on. We also have a tabletop exercise scheduled to take place on September 5th in preparation for contingencies for hurricanes. That will be done virtually.

Among the things that we have done out there to gain efficiencies is something we learned from a major repair project decades ago where we had port captains who were experienced tow boat captains and operators that would sit with our lock operators and assist us in managing traffic and we have been doing that. I don't know if that is continuing today, but it has been on-again, off-again, and I think we have gained quite a bit of experience in doing that.

We have had industry supplied assist vessels that have been stationed at the lock. I believe there are three that are stationed there 24 hours a day, or at least every operating shift, and that they can be available to assist the tows that are coming through the lock.

We installed guide piles to provide some measure for alignment and to buffer any potential impacts against the template or the completed pilings that have been put in place.

Next slide. We changed the construction schedule from five ten-hour days to four 12-hour days. We have a continuous period from Thursday afternoon at about 1700 until Monday morning at about 0700 where we are actually operating for traffic, and I think we have gained some efficiencies by doing that.

In response to the recommendation of the Marine Safety Office, we established staging areas on either side of the lock within which the tows that are next in line must be situated so that we compress that queue that is coming up next and reduce some of the approach times.

We have begun alternating lockages during the weekdays. We will do six hours to the east, followed by six hours to the west during those evening 12-hour shifts, and we think we are gaining some efficiencies by doing that. On the weekends, we are doing 12 hours east, alternating with 12 hours west.

We have also instituted some protocols. There was a Marine Information Safety Bulletin that was issued by the Coast Guard that established some protocols if a tow is not responsive when it is their turn to – how we are going to manage traffic around that and bypass those.

Lastly, there is a bridge [the Black Bayou Bridge] just to the east of the lock, and we have made some arrangements with the Coast Guard to have that bridge remain in an open position for navigation when we are operating when the other vehicular bridge over to the island is available.

Next slide. This is a general concept of what the new guidewall will look like. Of course, it won't look just like this. This is the guidewall, approach wall at the IHNC surge barrier [the Inner Harbor Navigation Canal – Lake Borgne Surge Barrier, located at the confluence of the GIWW and the Mississippi River Gulf Outlet, about 12 miles east of downtown New Orleans] – it will be a robust structure like this, but it will be configured with mooring bits and other features. This is what we are hoping to get to, something on this order.

Subject to your questions, that concludes my update on what is happening at Calcasieu Lock. Yes sir.

MR. WOODRUFF: I am curious if you have heard what the vessel operators call the structure that you pointed at.

MR. PARK: I have heard "can opener."

MR. WOODRUFF: That is what I have heard as well. A few of them have opened up their barges on them. I think the good news is you put some pilings in to help prevent that from happening, going forward.

MR. PARK: Yes sir.

MR. WOODRUFF: There are a few things that I wanted to mention with respect to this project: You pointed out it is the 15th most active in the system, but that is on the basis of tonnage, correct?

MR. PARK: That is correct sir.

MR. WOODRUFF: If you looked at it on a value basis, I suspect it would be a lot higher, because these are mainly high-value petrochemical cargoes as opposed to aggregates or other things.

MR. PARK: Yes sir.

MR. WOODRUFF: This has a huge economic impact, and it has a huge impact on the ability of our energy infrastructure of the nation to function, because being able to move feed stocks and products along the Gulf Coast is of vital importance to keeping all the chemical plants and refineries operating.

One of the big concerns that the operators have is the potential at this time of year for a hurricane. I know that Admiral Thomas [Rear Admiral Paul F. Thomas, Commander, Eighth Coast Guard District] from the Eighth Coast Guard District has expressed a great deal of concern and wants assurance that the industry can clear a queue in the event a storm pops up.

For those of you not familiar with the hurricanes that we often face in that part of the Gulf of Mexico, we have the risk of what we call "pop-up storms." Hurricane Alicia would be an example of a pop-up storm. To a certain extent, Hurricane Harvey was a pop-up storm because it wasn't much of anything until it came out of the Yucatan. We often only have a couple of days to get ready for a storm to come.

The size of the queue was of great concern to our operations folks and wanting to make sure that we get everything out there into a safe harbor, which this area around Calcasieu Lock is not a safe place to leave a tow when a hurricane comes in.

I know that Mr. Stark will address that in his comments later on. But anything we can do, especially during hurricane season, to get that queue down, I think would be very welcomed.

The other thing to bear in mind, and this is a little bit broader than the Calcasieu project, but it goes to something we have discussed around this table many times in the past over the last several years. That is the whole concept of coordinating projects.

We have this Calcasieu project going on. We have known about it for a long time and we have known that it is going to be, and it, in fact, has greatly impacted both our operations and that of our customers.

When you slow the system down, that means they need more barges, more inventory on the water to meet their needs for ratable deliveries of product to their end users.

Then when the work plan came out and suddenly the Corps found itself with funds, there was a decision made to shut down Bayou Sorrel Lock, which is one of the other nearby locks. That is going to cause a significant diversion of traffic and additional delays into the system, pushing traffic to Algiers and through New Orleans and up the Atchafalaya to the Old River Lock.

We and other carriers adapted to the announced closure at Bayou Sorrel. We brought extra boats on, started paying charter higher, and then we get a note, "Well, we are going to push it back a while back." That has a financial impact on us.

One of the things we have talked about is reliability. When you tell us you are going to do something and you don't do it when you say you're going to do it, it results in costs.

I know in our company, we have incurred costs bringing in charter boats that aren't going to be needed because of the delay in Bayou Sorrel.

Then on top of that, there has just been an announcement that we are going to do work at the Old River Lock. But where do you go when Bayou Sorrel is closed? You go to Old River. And now we are closing off that for part of the day.

We talked about the website. You may remember having a plan and the long-range look at where we are going in terms of maintenance, so the industry and the Corps can coordinate and say, "Hey, it doesn't make sense to work on this and this at the same time."

Or maybe it does make sense in some cases to work on multiple projects at the same time. But what we are doing now is we are going to be simultaneously working on three different projects in the same general area.

There is some other work going on in other places. There is good news in that, hey, we are finally getting some of this work done, and I know part of the reason that the Corps is doing all these things suddenly is because the Administration didn't properly budget, and therefore, Congress gave a lump sum appropriation, which then turned into a Work Plan

Then with Continued Resolutions and things of that sort, you are given your FY 2018 Appropriations late into the fiscal year.

There is a lot of blame to go around in terms of how this is no way to run a nation. We are not getting the money to the Corps in a timely manner. We are not deciding what we are going to do in a timely manner. We perennially have the Administration under budgeting the Corps of Engineers and expecting the Congress to plus it up.

It doesn't give the Corps the ability to really look out ahead as far as they should be able to do it, and that results in impacts downstream to our industry. It further impacts our customers who are the shippers of that cargo, and perhaps Mr. Fewell or others who are shippers can address that.

I think we have a lot of opportunities to do better, and one of the things that perhaps we can at this Board do is revisit that website. My guys who are on the operations side of things say we do have a website where we are listing the pending projects, but it is very cumbersome to operate. It is difficult for them to sort out. We worked on that issue, I guess what, two or three years ago.

CHAIRMAN HETTEL: Yes, the "Notice to Navigation Interests" website –

MR. WOODRUFF: That is correct.

CHAIRMAN HETTEL: Where everything is being inputted by the Corps. You are absolutely right, Mr. Woodruff. It is terribly cumbersome. If you are not looking at it on a daily

basis -- I mean, I don't know that our industry is concerned with a private boat dock being put on the Kanawha river when it is not going to obstruct navigation.

Some of these notices to mariners that are on the NTNI [Notices to Navigation Interests] website are upwards of 11 or 12 years old. We talked about this with Jeff McKee [Mr. Jeffrey A. McKee, former Chief of the Navigation Branch at USACE Headquarters, who is now retired] when he was in his position of getting this website somewhat manageable for us.

I haven't seen where it is manageable yet to the effect that I don't even look at it anymore.

MR. WOODRUFF: I told our Vice President of Operations, "Well, the Users Board took care of that. We got a website put up." And he replied, "Have you been to that website lately? I can't make heads or tails of it."

CHAIRMAN HETTEL: It is pretty useless. I agree.

MR. WOODRUFF: We have an opportunity. I don't know that this group can fix the President's Budget. I don't know that this group can get our appropriations bills passed on time, but I bet we can fix the website.

CHAIRMAN HETTEL: Or we could at least request that the Corps to fix the website.

MR. WOODRUFF: Yes.

CHAIRMAN HETTEL: I agree. Let me just talk a little bit. A couple of things I missed, Mike [Mr. Mike Park]. Hats off to you working with GICA and the industry representatives on where we have gotten to today with this project.

You are correct. It is a busy lock. As a matter of fact, I keep tabs on it every day. As of this morning, there were 3,145 tows that have transited Calcasieu since you started this work that averaged 43.8 hours of delay. By my estimation of about \$50 million in delay costs to shippers and carriers. This project is scheduled to take 18 months to complete.

We could be looking at, when it is all said and done with, a \$300 million cost to shippers and carriers. Again, where you have gotten to from where you started is good. I would just ask that you continue to look for ways to improve the transiting through Calcasieu while you are finishing this project.

The other topic I wanted to touch base with on Calcasieu, one of our authorized projects are the two sluice gates. When we had our Users Board meeting at Lake Charles [Inland Waterways Users Board Meeting No. 82 was held in Lake Charles, Louisiana on February 24, 2017], I believe the cost was about \$17 million that would then drain the Mermentau Basin quicker.

If the installation of those sluice gates move forward, will that cause a disruption to navigation?

MR. PARK: I am sorry. Could you repeat the question?

CHAIRMAN HETTEL: The installation of the two sluice gates that would drain the Mermentau Basin faster; that is an authorized project, correct?

MR. PARK: I do not believe that would interrupt navigation because it is going to be built on that south side generally parallel in the Black Bayou area, but I am not intimately familiar with the construction sequence there. It seems to me that it is going to be removed enough from the channel operations that it should not be a significant impediment.

CHAIRMAN HETTEL: Could you check on that and report back to us on that at our next Users Board meeting? If this project that you are currently involved with is going to go on for another 14 months, it is supposed to go through December of next year. To me that would be the prime time to put those two sluice gates in if it is going to cause a disruption to the navigation because we are already disrupted.

MR. PARK: Yes sir. Very well.

CHAIRMAN HETTEL: Thank you.

MR. PARK: Are there any other questions?

MR. FEWELL: I have a question specifically about Calcasieu Lock. The fall shipping season is going to be upon us pretty soon, roughly December through March. It is very typical for two or three days at a time, sometimes four days at a time, we are shut down in that area from about midnight to noon. If we are shut down and we can't transit through there, are you still willing to work during daylight hours?

MR. PARK: We will assess the conditions as they evolve. I fully appreciate we cannot have these queues of upwards of 100 tows standing by for the Calcasieu Lock. I don't want to commit to a solution before I know what the problem is, and I know it is a looming issue that we are going to have to deal with.

There is a contractual construction schedule and there is a contractor's construction schedule. Our contractor is projecting being finished driving the pilings in the October timeframe, and then would move into the installation of the pre-casts, what they are calling bathtubs on top of those piles. Sequentially working their way through that. Their schedule is more optimistic in terms of completing all of the work than what is in the contract schedule.

We will see how that progresses. The measures that we have taken so far have shown some incremental improvements. Instead of having upwards in the vicinity of 130 tows standing by, by the time we shut down on a Friday afternoon, we are still seeing maybe up to in the neighborhood of 80 tows, but we have been able to get that back down to on the order of 30 tows by Monday morning when we go back to work.

This coming weekend, we have the holiday, so the contractor is going to be shut down, not for three days, but for a fourth day, and, hopefully, we can get a little bit ahead of the backlog with the extra day over this long holiday weekend.

MR. FEWELL: Finally, just a couple of general comments. All of our logistics models are built upon frequent, ratable, and just-in-time deliveries. In order to manage that through the Calcasieu Lock, we have already increased our fleet sizes by seven to eight percent. We are shipping more barges with less product just to keep our customers whole.

You would think that is doing the carriers a favor, too, but it is really not because they are having to also, like Mr. Woodruff said earlier, that they are leasing boats and other equipment to help us out, but then the boats just sit and sit and sit.

Like we have all been saying, we have got to get those delays down.

MR. PARK: Yes sir, understood.

MR. FEWELL: You mentioned there is no practical land-based transportation alternative that can help us. We cannot run a major cracker facility with anything but pipelines and barges. That is completely out of the question there.

MR. PARK: Yes sir.

MR. WOODRUFF: You said that the pile driving would be finished in the October timeframe?

MR. PARK: Our contractor's schedule is projecting that they be finished with the driving of the piles in the October timeframe.

MR. WOODRUFF: Will that change the closure hours, or will it still be 12 hours of working and 12 hours of --

MR. PARK: What will likely change is the closures hours with the number of hours of daylight. With less hours of daylight, we will likely be compelled to go back to five ten hour days. The template will go out of the chamber, and I think that is going to make a big difference in the confidence of the tow boat operators to navigate through the lock chamber.

MR. WOODRUFF: What does concern us is what Mr. Fewell said earlier. During daylight hours, we cannot transit through Calcasieu because of construction. During nighttime hours, we cannot transit Calcasieu because of the evening fog. That means we are never getting through Calcasieu.

MR. PARK: We will address those issues as they evolve. I am sure that we are going to have to make some hard choices that are going to be costly in order to manage that seasonal condition.

MR. WOODRUFF: All right. Thank you.

MR. PARK: All right. Are there any other questions?

MR. POINTON: Are there any other questions for Mr. Park?

MR. PARK: Thank you for your attention and interest.

MR. POINTON: Hearing no other questions or comments for Mr. Park, thank you Mike. Greatly appreciate your presentation. Next up on the agenda is Mr. Tom Heinold who will be giving us an update on the LaGrange Lock and Dam major rehabilitation project on the Illinois Waterway. Mr. Heinold is the Chief of Operations for the Rock Island District. Please proceed when you are ready Mr. Heinold.

MR. THOMAS D. HEINOLD: Thank you, Mr. Pointon. The Honorable Mr. James, General Spellmon, Mr. Hettel, and the other members of the Users Board, thank you for having me here today. As Mr. Pointon said my name is Tom Heinold. I am the Chief of the Operations Division within the Rock Island District, where we are preparing to move some dirt.

I am here to tell you about the LaGrange Lock and Dam major rehabilitation project and the other construction activities that we have scheduled for the Illinois Waterway in the short-term.

We are in the middle of the nation's bread basket, and that basically supplies the world with grain. The LaGrange Lock is about a dozen years or more overdue for a major rehabilitation. It was last rehabilitated in the late 1980s, which should have bought us another 25 years or so of reliable service life at this lock.

The rehabilitation evaluation report for this lock was finished in 2005. We have been anticipating for the last few years that the project would finally receive Construction funding to start the major rehabilitation project.

Here you can see a couple of pictures on the right-hand side of this slide. This past spring we had a 20-foot section of the lockwall fall into the water, along with its wall armor, and we had to fish that out of the lock chamber so it would not act like a can opener and open up a barge on its way while transiting through the lock chamber.

The chance of an unreliable or unscheduled closure of this lock is rapidly rising. It needs to be rehabilitated and maintained to increase its service life yet again.

The major components of the major rehabilitation project are the horizontal and vertical concrete sections and the imbedded steel that goes with that.

Along with that project, major maintenance activities are also scheduled. It will be under a single contract with separate line items so we can keep track of what is funded through O&M

[Operation and Maintenance] versus what is funded through CG [Construction General] and IWTF [Inland Waterways Trust Fund] cost shared.

The mechanical systems and the electrical systems will primarily be major maintenance items.

Next slide. We have completed some work at LaGrange Lock. We have spent Operation and Maintenance funding to install bulkhead slots. They were a little bit costlier than at most locks because of the deteriorated concrete there, and we had to go deeper than what we would have normally liked to ensure that those could be used for a lock dewatering, which is necessary for the closure and dewatering to rehabilitate the lock.

We also had miter gates fabricated for this lock. They are slightly heavier than the original gates, but they are hanging on original anchorages right now, and they cannot do that forever. They will soon reach a fatigue life if they continue to do so. However, the major rehabilitation is scheduled before those anchorages reach their fatigue life.

Between the major rehabilitation work and the major maintenance work, the major rehabilitation portion of this project is about a \$61.7 million effort. The major maintenance portion of the work, which is Operation and Maintenance funded, is about a \$30 million effort.

This year we received a construction new start and construction funding in the FY 2018 Work Plan to start this project, and you can see the dollar figures on this slide. In the out years, we will need about \$40.75 million in Federal, general Treasury appropriations. That is a combination of operations and maintenance and construction dollars. That is Federal dollars portion, and \$25.85 million in Inland Waterways Trust Fund cost-shared dollars to complete the project.

Next slide. Where have we been and what are we doing? We have been anticipating this project for the last several years. I mentioned before we awarded the miter gate contract, and we were able to install those. The bulkheads are ready to go. The recesses are ready to go. We have bulkheads on hand. The delivery of the miter gates happened. We continued design and completed that design earlier this fiscal year. We anticipate an award by the end of the year for the major maintenance and major rehabilitation construction contract.

In FY 2019, we will start the fabrication of some long lead time items, like the miter gate machinery. This lock is subject to flooding on the Illinois Waterway. The original miter gate machinery that has been in service since the 1930s very desperately needs replacement. That is a long lead time item. It takes us about 18 months to get all the machinery ready to prepare for some significant closures on the waterway in 2020.

Also, in FY 2019, we will mobilize our contractor and start some work on the intermediate wall, commonly known as the I-wall, which will not interrupt navigation. That is to prepare for the major dewatering and rehabilitation which will take place in the summer of 2020. Unlike the locks on the Upper Mississippi River that close due to ice where we have winter

work, these locks operate 24 hours per day, 7 days a week for 365 days a year and summer work is a more efficient way to do it.

This lock, again, is subject to flooding. We will wait until July 1st because our hydrographs show that the lock will be at a decreased chance of flooding the contractor's cofferdams after that point. Up to 120-day closure would put us open in time, hopefully, for the navigation season to ramp-up during the harvest.

CHAIRMAN HETTEL: Tom.

MR. HEINOLD: Yes, sir.

CHAIRMAN HETTEL: Let me clarify something on that slide. You show a project completion date in FY 2021. That is not involving a closure, is that correct? Your only complete closure is during the summer of 2020.

MR. HEINOLD: The only closure that will impact navigation is expected to be in 2020. Yes sir, that is correct.

CHAIRMAN HETTEL: Okay. Here we are end of August. You are talking about closing in July, August, September, and October. October is a pretty heavy harvest season up on the Illinois River.

MR. HEINOLD: I understand that sir. Our engineers are telling us that we need somewhere between 90 and 120 days to complete the work. Up to 120 days is what we have been preparing for. You mentioned that construction period. A lot depends on that, including Mother Nature.

CHAIRMAN HETTEL: Understood.

MR. HEINOLD: We will do our utmost to keep it toward the 90-day mark and not at the 120-day mark, however, we need a Goldilocks condition, hopefully, of water.

This is a wicket dam, much like what we will see on Thursday, where if we have the right amount of water in the channel, the wickets can be down, and there can be a navigable pass around construction work. However, if the water is too high, we will end up flooding our contractor's cofferdams. They will have to demobilize from the site, and that could result in a delay when the contractor remobilizes.

We might buy some transit time during the middle of the contract with the wickets down. However, when water drops and the contractor gets back on to the project site, if the wickets are still up in late November, then our contractor might suffer delay.

We have done our utmost to schedule that closure during the period of the year when we have the best chance of success and the shortest closure possible.

CHAIRMAN HETTEL: I understand that. Is the 90 to 120 day schedule, that 30-day variable, is that based on whether or not Mother Nature isn't good to us and it may flood out the lock chamber and put the contractor out of work?

MR. HEINOLD: It is actually more --

CHAIRMAN HETTEL: -- that the 30-day variable?

MR. HEINOLD: It actually more depends on the ability to mobilize resources to the site to get the right amount of floating and land-based plant equipment to the project site and how the contractor proposes to prosecute the work.

CHAIRMAN HETTEL: The last question I have on this, and I will let you go through your timeline. This Board and several people, some who are in the audience today, worked hard with Congress to get the funding for this project, to prepare this major rehabilitation project when you are doing the major maintenance work in 2020 in order to avoid two total river shutdowns on the Illinois River. Originally, we were really worried you would not get the major rehabilitation funding. It looks like we are going down that path. Are you pretty confident you will get the operation and maintenance funding to cover the major maintenance portion of this project?

MR. HEINOLD: Yes sir, I am. Obviously, we got funded in the FY 2018 Work Plan; the FY Work Plan being developed now. We have these activities as a high priority. They will rack and stack and compete very well based on the fact that we need to line up closures on the Illinois Waterway to decrease any possible negative impact to the extent possible.

CHAIRMAN HETTEL: Great. Thank you.

MR. CHARLES M. "MATT" RICKETTS: I have a couple of questions? On a slide in the earlier part of your presentation, and I think maybe a similar note here, that mentioned a continuing contract waiver or a continuing contract, I think, you have approved.

MR. HEINOLD: Yes sir.

MR. RICKETTS: Can you educate me and maybe the other members of the Board, on what exactly a continuing contract is, and why you need a waiver, and how it compares to, I think, what I have always heard the term a "base plus options" type of contract for these sort of projects?

MR. HEINOLD: Yes sir. The question was: What is the difference between a "continuing contract" and a "base plus option" contract, and why did we seek a "continuing contract" for the LaGrange major rehabilitation project? The "base plus options" approach to contracting can be done when you have a need for a core of a contract that results in a usable project, and you may have additional funding coming at a future date to award an option that would either enhance or do something to that project that is a separable deliverable, a usable element of the project, separate from what might be in the base contract, which should also stand

alone as a usable element should the options not be funded. A “base plus option” contract gets you a usable project.

The “continuing contract” can be awarded without full funding in hand and it depends on future-year appropriations. There is some risk to doing that. However, we have separated all of the standalone elements that we could out of the major rehabilitation project and the major maintenance project at LaGrange, such as bulkhead slots. We did that separately already with operation and maintenance funds.

Miter gates, by all rights, should have been done as part of this contract. Those were done in advance with operation and maintenance funds as well. We are in a situation now where the only thing left to do has to work together.

For instance, the new machinery that is being installed cannot be installed on the old concrete and infrastructure because it isn't configured correctly.

If we were to replace the old infrastructure, we would have to work around existing machinery, which would not work with the new gates and the new electrical systems that are being designed.

Therefore the “base plus options” was not appropriate because if we were to award an option for one thing, we wouldn't have a complete and usable system.

MR. RICKETTS: With the “continuing contract”, if am I thinking about it the right way, in that it is the same as doing a base contract with no options? I mean, when you go to award this contract, are you awarding it for the full \$61.7 million that you need to do the full major rehabilitation project?

MR. HEINOLD: Yes sir. I have to be careful how I word this because there are contracting technicalities that I am not really good at. We award the contract for the full amount, as I understand it, so there will be a firm, fixed-price contract for a set amount of dollars with some contingency, of course, for mobilization and demobilization if we should flood, for instance. However, we will be awarding it with a fixed-dollar amount available that is less than that full amount, which basically amounts to about the \$25 million mark. It is the \$10 million on the Inland Waterways Trust Fund and Construction General side that we have, plus the \$15 million or so portion of operation and maintenance funds.

That will be made available immediately to the contractor so that he can mobilize and get going on his safety plans, his project scheduling, his long lead time fabrication items, and actually start work in FY 2019. Then the FY 2019 appropriations will be required to fund the remainder of the contract and prepare for the closure in 2020.

MR. RICKETTS: Then in the scenario where -- with the way the “continuing contract” works, where going forward you don't -- and hopefully this is not the case, but in the scenario where you don't get funding -- in a “base plus options”, obviously, you can't execute your options -- with a continuing contract, do you have off ramps?

What happens in that scenario between or within your contract, with the contractor? Can you get out of it?

MR. HEINOLD: The risk of not receiving funding in the future? That is a very low risk, as I see it.

However, the outs are a contract modification, awarding a delay to the contract so that we can extend that time. Again to Chairman Hettel's point, that time would not be spent with the lock closed. That is one way, is to modify the contract to compensate the contractor for any delay.

We could terminate for convenience -- "T for C," as it is known in the contracting community, and award a new contract if we need to pick up the work later. But there is some risk with that; however, I believe it is a very low risk.

If we don't award the full contract, we are left with something short of a usable project anyway.

MR. RICKETTS: Will the contract that you award capture both the major rehabilitation project and the major maintenance project?

MR. HEINOLD: Yes sir, it will. There will be different line items in that contract, but it will be the whole kit and caboodle. It will be both for the major rehabilitation project and the major maintenance project, yes.

MR. RICKETTS: Okay. I think it mentioned in one of these notes you had to get a waiver for this kind of contract?

MR. HEINOLD: Yes sir. Continuing contracts used to be a very routine thing until about 15 or so years ago. We, very often in the Corps of Engineers, could count on future fiscal year appropriations. We would award contracts with \$1 available to the contractor as a matter of course. It used to happen all the time. With a congressional mandate and the absence of earmarks over the last, say, ten years or so, continuing contracts have been frowned upon, if you will, and so an exception or waiver has to be applied for clearance by the PARC [the Principal Assistant Responsible for Contracting], to the contracting officer for the Army to get such a waiver.

MR. RICKETTS: Okay, thank you.

MR. MECKLENBORG: I have a question. The 2007 WRDA [Water Resources Development Act] authorized a new 1,200 foot lock chamber at LaGrange Lock. [Title VIII of the Water Resources Development Act of 2007, Public Law 110-114, signed into law on November 8, 2007, authorized the construction of a 1,200 foot lock at LaGrange as well as one other site on the Illinois Waterway and five sites on the Mississippi River].

I think that this major rehabilitation and major maintenance project shows the situation we are in and illustrates the results that can flow from failing to move forward with authorized projects and fund them efficiently and in good order.

This would not have happened had we started construction of the new lock. It has been languishing now for 11 years. It is a situation that contained both environmental benefits and ecosystem restoration work for the Upper Mississippi River and the Illinois Waterway, but also then about an equal amount for navigation investment.

The country really has, I think, been harmed by not moving forward to that. I am mentioning that so the NESP program, the Navigation and Ecosystem Sustainability Program, is what this would have been part of. It was at the time, projected to cost several billions of dollars, in excess of, I know, on navigation investment.

It is something that we are still waiting to start. In the process, we are going to rehabilitate the lock and have a closure where perhaps that could have been avoided.

MR. HEINOLD: Sir, you make an excellent point. The NESP authority that is being referred to here, if it had been funded immediately after it was authorized, the ideal situation would have been to build a 1,200-foot lock next to the existing 600-foot lock chamber while that 600-foot chamber was still in service.

Then when we had a need to rehabilitate the existing 600-foot chamber, we would have a lock adjacent to it, and we would still be able to pass traffic without interrupting navigation at all. That is an excellent point. Thank you, sir.

MR. MECKLENBORG: Thank you.

MR. HEINOLD: Okay. Next slide. I mentioned that LaGrange was going to be basically down for the count for up to 120 days in the summer of 2020. We have other locks on the Illinois Waterway that also are in desperate need of maintenance.

Since we do not have a detour on this river, we have only single-lock chambers. There are no adjacent lock chambers on the Illinois Waterway. As long as the river is closed at one point, you pretty much block it at most other points as well.

During the summer of 2020, the navigation industry, the Coast Guard, and other stakeholders have asked us to get as much maintenance as we can done during that same 120-day window. The lock immediately upstream of LaGrange therefore, Peoria Lock, which is located at Illinois Waterway mile 157.7 from the junction with the Mississippi River, will be dewatered for about a 30-to 60-day closure for routine repairs, much like what we have done on the Mississippi over one lock or two locks a piece on the Upper Mississippi, where we have impounded the river a little bit at a time for the last decade or so.

At the next two locks upstream from Peoria Lock, those being Starved Rock, located at Illinois Waterway mile 231.0 and Marseilles, located at Illinois Waterway mile 244.6, they will

be dewatered and undergo some significant sill and anchorage modifications so that they can receive brand new vertically-framed miter gates that meet a current design standard of safety and reliability.

And during that same period, also in 2020, the next two locks up from Marseilles, those being Dresden Island located at Illinois Waterway mile 271.5 and Brandon Road located at Illinois Waterway 286.0, will be closed, hopefully, for a much shorter period of time while they have bulkhead recesses installed.

By the way, also this fiscal year, we have awarded a construction contract to install bulkhead recesses at Starved Rock and Marseilles locks.

There will be width restrictions while they do the slot on one side, a width restriction similar while they finish the slot on the other side. In FY 2019, they will be closed for about a two-week timeframe while they finish the sill across the bottom of the river, the bottom of the chamber for those bulkhead recesses. That would prepare those two locks for the major work in 2020.

In 2023, the navigation industry has asked us, after that large closure in 2020, to give them a couple years of reprieve to recover from that closure that they have been planning.

Therefore the bulkhead work at Dresden Island and Brandon Road in 2020 will prepare those two locks for similar work that will happen at Marseilles and Starved Rock in 2020. We will do the same thing.

We will dewater Brandon Road and Dresden Island in 2023 and perform some significant sill and anchorage modifications, and provide new up-to-standard miter gates for those two sites.

As I conclude my presentation this afternoon, I will also make mention the Brandon Road GLMRIS [Great Lakes and Mississippi River Interbasin Study, <http://glmr.is.anl.gov/>] study, otherwise known as the aquatic nuisance species or Asian carp study that is going on, with a feasibility study due out next fiscal year.

If Congress authorizes physical work at Brandon Road Lock, we will do our utmost to make it line up with the 2023 major maintenance closures that are already scheduled.

If we expect that that work will not be authorized and funded until 2024, we will definitely consider delaying those 2023 maintenance closures to 2024 so that they will necessarily line up and cause the least adverse effect to the navigation industry possible. That is a bridge we will have to cross when we get a little further down on the Brandon Road GLMRIS study.

With that, that concludes my prepared remarks this afternoon and I will be glad to entertain any questions you may have.

MR. POINTON: Are there any other questions or comments for Tom? Hearing none, thank you very much, Tom. Greatly appreciate you presentation.

MR. HEINOLD: Thank you Mr. Pointon and thank you ladies and gentlemen for your attention and interest.

MR. POINTON: We have reached a point in the program where we take a little break. We are a little behind schedule, so can we take a 15-minute break? And please let Ms. Joanne Mann, who is outside at the registration desk know if you plan on going on the Kentucky Lock tour tomorrow so we can get a head count and figure out all those logistics. Thank you.

I have 3:00 PM on the nose, so let's be back at 3:15 so that we can reconvene the meeting. Thank you.

(At which point a 25 minute break in the meeting was held.)

OFF THE RECORD

MR. POINTON: Everyone please take your seats. We are going to reconvene the meeting now. Next on the program is Mr. Steve Durrett from the Great Lakes and Ohio River Division. Mr. Durrett is going to talk about how cost contingencies are handled on Inland Waterways Trust Fund projects. This presentation is based on some discussion on this topic at the last Users Board meeting we held in Pittsburgh this past May. Mr. Durrett, please proceed when you are ready.

MR. DURRETT: Thank you very much Mr. Pointon. Once again, my name is Stephen Durrett. I am the new Programs Director at the Great Lakes and Ohio River Division. I am replacing Mr. David Dale. You may have known David over the years working closely with the members of the Users Board.

Our task at our last Users Board meeting was to try to explain how the Corps of Engineers accounts for contingencies as we do our project budgeting.

The first thing I want to do is talk about is how do we do it? The first slide goes over how we actually budget for contingencies and how we access the budget. Our guidance says we should budget for what we believe -- and this is really applied to the three projects that we currently have going on, the Lower Monongahela River Locks and Dams 2, 3, and 4 project; the Chickamauga Lock project and the Kentucky Lock project.

This is how we budget and how we tend to a request for Work Plan budgeting in the Corps. One of our requirements is we should add whatever we think the contract is going to cost us, plus full contingencies, plus any S&A [supervision and administration], and/or engineering services we believe are necessary to complete that portion of work.

For example, if you are going to award option one on a contract, a base contract, in FY 2019 – let us say the example is that contract is \$100 million. I am an engineer and I like nice,

round numbers, so that is why I picked \$100 million. Let us say the contract it is going to last about two years to actually do that option -- what we believe the duration would be on that particular option. We also believe that 20 percent contingencies are necessary, so we put down \$20 million. Then the S&A and engineering oversight cost would be another \$5 million.

Our budget request for that given year, FY 2019, would be for \$125 million. That is how we do budgeting for work plans right now for the three projects I referred to a minute ago.

As part of that process, though, each year at the end of the year, before we submit the next request for Work Plan funding, we would look at that request, and what they are funding. We said we needed \$20 million in contingencies. We are now halfway through the contract.

Did we need what we said we would need? We only think we need another \$5 million for the next year in contingencies and we only used \$5 million. Therefore, I have \$10 million in contingencies that I have not used and don't think that I will need.

What we do is take that \$10 million, and if I need another \$100 million next year, we only ask for \$90 million. I am constantly rolling that contingency forward. If I don't think I need it anymore, we move that contingency forward and make a request for funding of less money in the next fiscal year.

If you are getting near your completion, you could free that money up and send that money back. But right now for the Lower Monongahela River project, the Chickamauga Lock project and the Kentucky Lock project, this is generally the process each of the District's project managers go through in order to submit their budget request. This is how we do it today.

Are there any questions on our current process?

CHAIRMAN HETTEL: Steve, can you give us what is involved in that contingency? I assume it includes the possibility of a contract modification. What else?

MR. DURRETT: It is any risk and uncertainty with a contract itself, whether it be from a modification -- and then it would probably all be for modifications which could be a change in site conditions. You think your geotechnical conditions might not be right, or you find something wrong with the site. You might have to redesign your monolith if you are constructing a lock and dam with a monolith. You might find a foundation fracture when you do the base contract. When you are doing the foundation preparation and option one has a monolith in it, you may be forced to redesign that monolith, add more steel. Those would be some examples -- that is in that risk of unknown with your other options.

CHAIRMAN HETTEL: Okay.

MR. DURRETT: When we award these big contracts with multiple options, there are a lot of uncertainties as to what is going to happen as you move through those things.

CHAIRMAN HETTEL: Where is your 80 percent confidence level that you will get annual funding? Is that \$20 million in this example? Is there money in there for the risk of not getting funding the next year?

MR. DURRETT: No sir. That is in the overall total project cost. When we do our project cost and schedule risk analysis, they put some money into the overall total project cost for that uncertainty of funding. We go to these each individual year and look at the task we have to do, what option that is, and what we believe is the appropriate level of contingencies for that option. One option may be 20 percent. One option could be five percent. One option could be 30 percent. It just depends on the nature of the work we are going to do and the risk and uncertainty tied to that future work.

CHAIRMAN HETTEL: Okay. Mr. Woodruff stated at our last meeting, and maybe this is an opportunity for you to be more nimble in that contingency and the risk of not being funded. Let's face it, since the passage of WRRDA 2014 [the Water Resources Reform and Development Act of 2014, Public Law 113-121 signed into law on June 10, 2014], and since the Congress raised the inland waterways fuel tax in December of 2014 [Section 205 of Title II of Division B of Public Law 113-295, the "Achieving A Better Life Experience Act of 2014" also referred to as the "ABLE Act of 2014" signed December 19, 2014, increased the inland waterways fuel tax from 20 cents per gallon to 29 cents a gallon] I believe in FY 2015, 2016, 2017, and 2018 you have had full and efficient funding

It seems like the risk isn't there as much as it was prior. Is there an opportunity on that issue?

MR. DURRETT: I think you will see some of that will be incorporated when we do total project cost and schedule risk analysis updates every two years. What we put in there ten years ago, uncertainty with funding, is probably not the same percentage we are using today for uncertainty of funding when we do total project cost and schedule risk updates.

I think you will see that through the presentations on the Lower Monongahela River Locks and Dams 2, 3 and 4, the Kentucky Lock and the Chickamauga Lock projects. You are seeing some reduction in the cost, particularly on the Lower Mon project. Some of the money you saw in that Olmsted slide, in the cost slide where the total project cost went from \$2.9 billion down to \$2.7 billion, some of that is probably attributable to the certainty of funding.

We are receiving efficient funding, so those uncertainties and those risks did not materialize. Hence, we thought we were going to get the last total project cost estimate where we were at \$2.9 billion. When in reality, right now we are marching towards trying to deliver the project at about \$2.7 billion, and some change.

That project cost estimate was based off the last project cost and schedule update, which is completed every two years. It looks through those uncertainties, whether it be funding, whether it be whatever the feature of work is that you are dealing with.

CHAIRMAN HETTEL: Let me put you on the spot here for a moment. This is my sixth year on the Users Board and will soon be my fifth annual report that this Board has put together.

Each fiscal year we get funding information from the Corps to put in our annual report. What you are telling me, by this bottom line, excesses affect the national budget request. We should see a reduction in FY 2020 requested funding from what was last year.

MR. DURRETT: I am not sure what you mean by that, so I am going to say, "Yes."

CHAIRMAN HETTEL: Okay. If the excess is subtracted from the next year's budget request; if we had a budget request for \$100 million, using easy terms, for a project and you had \$10 million excess that you can subtract, you said you are only going to request \$90 million.

MR. DURRETT: I think you are going to see that on the Lower Monongahela River project.

CHAIRMAN HETTEL: Okay.

MR. DURRETT: On the Lower Mon project, it is showing a decrease from the last Users Board presentation to this presentation on funding necessary for FY 2019 because of that annual review of those contingencies that they did not materialize. The amount they thought they would need in FY 2018 or FY 2017 is rolling forward and we are going to request less funding necessary to take care of what work we need to do in FY 2019. You will see some of that rolling forward process that I was talking about.

CHAIRMAN HETTEL: In the words of the old adage of "trust, but verify", I trust you; I just want to verify it. I would request that we get efficient funding numbers for the Chickamauga Lock project, the Kentucky Lock project, the Lower Monongahela River project and the LaGrange Lock major rehabilitation project at our next Users Board meeting.

MR. DURRETT: Yes sir.

CHAIRMAN HETTEL: Then we can compare that information to what we were given last year to, in fact, see if these excesses are subtracted.

MR. DURRETT: Understood.

CHAIRMAN HETTEL: Thank you.

MR. DURRETT: I think some of the uncertainty we get in these total project costs, we put as total project with total risk and uncertainty tied to it, and then we have other targets that we shoot for, like the Olmsted project. The difference between the \$115 million that was shown as a delta was the differences between the two numbers of how we got there. One is the number we are working off of, it is our working number to support near the end in things we can really deliver for \$2.75 billion. In reality the last total project cost update we had said \$2.9 billion. That \$115 million is really that difference between rolling those numbers and how we dealt with

the budget. Contingencies are all in that big number, but in reality, we are not using them and we want the contingencies.

Next slide. This is how we do budgeting now for the final work plan. This is what we are going to try to do in the Great Lakes and Ohio River Division this year. We are submitting numbers for the FY 2019 Work Plan. We are going to look at all three of our projects as a whole. Instead of doing some budgeting, we are going to look at the potential of budgeting and look at those tasks that are going to be awarded in FY 2019 and look at what project contingencies are necessary for those tasks like we always do.

Then we will probably look at where we think we can reduce those. Again, I am going to use an arbitrary example. We are going to have each of the three projects have a \$100 million option we are going to exercise. That is three projects. If we take only 75 percent of those contingencies and take some risk with that, because the odds of all three of those projects actually heading south or needing all of those contingencies, all those risks actually materializing, is relatively small when you start compounding these things in multiple projects.

We can take some risk and maybe budget only 75 percent for all three of those projects. Now, in reality I may do 100 percent on one project, and 50 percent on another project, and some combination thereof, but we are going to look at some of this. Then if something does go south on one project we don't think is going to be, or they do need that full pot of contingency -- we found something unknown -- we have the ability to use project reprogramming authority, within the Division's authority, that I can move \$5 million from one project to another project.

If one project didn't need the whole \$20 million, that was a number we really thought we needed and it didn't materialize, we have the ability to reprogram some money and move it from one project that wasn't seeing the contingencies, if necessary, and move it to a project that was materializing something that we didn't expect to happen. That is something we can look at that theoretically can save \$15 million. I am just throwing out arbitrary numbers here. Don't hold me to any of these numbers, but I am just using examples to try to put some kind of semblance to understand what could happen if you just take some risk associated with this.

MR. MONAHAN: Mr. Durrett. On the contingency money, is that 100 percent related to the appropriation process of the President's Budget request or are some contingency funds related to other administrative issues with regard to the cost of the project?

MR. DURRETT: I would think most of the contingencies today that we are budgeting for are in the Great Lakes and Ohio River Division are probably not because of the funding. They are because of other things you are going to have. You will see that when you get to the Kentucky Lock project update. I think you will see some of the underwater work they are doing. There are a lot of unknowns when you are doing underwater work. They have found some flaws in Kentucky.

They found some things when they were doing foundation work for the Chickamauga Lock as well, that were not in the base contract.

They were all multi-million dollar change requests from the contractors for more money. You have to rectify a fault that they found at Chickamauga Lock. We are going to have to rectify some of the uncertainties on a concrete slab at Kentucky Lock, I believe, maybe find a way to bust out underwater, get it removed, and then put down a cofferdam.

Those are some examples -- the contingencies are really tied to those kind of issues and not to whether or not we are getting funding. The reliability in funding, it should be a small factor in what we are budgeting for right now, relative to the contingency.

The total project cost, that big number when we do a project cost and schedule risk analysis, that number for contingencies for unreliable funding may be a little larger there. But for the year-to-year budget that we are doing for the work plan, I think that is a small factor for a lot of the project managers here, for one of the three projects. If you want to correct me, please feel free. But my guess is it is a very small percentage of what we are asking for relative to contingency.

MR. MONAHAN: Thank you. I am trying to understand the risk factor when we are playing with the amount of contingency money that you have in the bank so to speak. If we adjust it five or ten percent, then we are assuming some additional risk in the process, is what you are telling me.

MR. DURRETT: Yes sir. One of our metrics in the Corps is trying to eliminate and minimize our carryover. How much money don't we expend from one year to the next? Good carryover is I am required to carry my administrative costs to administer a contract from one year to the next year, which makes sense. You should carry that money over. I budget for that, and I budget for that not to be spent until the next fiscal year. Those are what we consider good carryovers.

But there are also bad carryovers. That is why we do this yearly update where if we don't need contingencies, and we have got our two-year long option, and we are halfway through it, and we are out of what we believe most of the risks are, we are reducing our contingencies that we think we need on the project. We are freeing that money up and we are then asking for less money the next fiscal year.

MR. MONAHAN: Have you evaluated prior projects where you have allocated contingency money, how close you were on a percentage basis? Is that 20 percent a reasonable factor, or how much wiggle room have you seen?

MR. DURRETT: I don't want to get locked into 20 percent because 20 percent is my made up number for my theoretical example.

MR. MONAHAN: Okay.

MR. DURRETT: I am almost afraid to put numbers on this slide, because you show a slide and these numbers now become reality. This is a theoretical example. It varies from the feature you are working on. I have been working construction, design and construction for 35

years. Foundation is one of your most risky things. Once you get out of the ground and you are moving up, the amount of contingencies greatly decreases, so mostly it depends on what phase of a project you are working on.

You start working under water; your contingencies greatly increase because you can't see what you are actually working in. You are requiring a lot of divers and other type of uncertainties, and you really don't know what you are going to hit. Weather becomes an unknown, what type of weather conditions are you going to have.

This past year we had a very wet spring that has influenced a couple of our projects. I don't think they really influenced any of our navigation projects, but a few of our other projects were greatly impacted by the very wet spring we had in this valley. We are paying money because we are delaying a contractor because he could not work. Those costs we have to pay because it will now take longer. The contractor has to have people on the project site that aren't really doing anything because of the very wet season we had. You can even have weather impacts that are accommodated in that contingency pot, but you got to be able to have funds to accommodate and account for those things.

MR. MONAHAN: Thank you.

CHAIRMAN HETTEL: Mr. Durrett, explain to me, with everything you just went through, how the Olmsted project has requested \$35 million for FY 2019. That project isn't scheduled to be completed until 2022. It is obvious that we have prefunded Olmsted because you are not requesting any more money for FY 2020, 2021, or 2022. They are going to be spending money, so why wasn't that contingency reduced and – in FY 2020, 2021, and 2022, they request the funding they needed?

The whole point I am making is, as we delay other projects that are authorized, the cost of the project goes up. If we can be more nimble with not funding projects upfront, we can fund the sluice gates at Calcasieu Lock, the major rehabilitation project at LaGrange Lock, we could possibly get other authorized projects completed, rather than waiting until a year or two before the project is completed at Chickamauga Lock, Kentucky Lock and the Lower Monongahela River project, and then say, "Oh, we don't need any more funding."

MR. DURRETT: If we get the \$35 million in FY 2019 and a budget is passed, the intent of Olmsted is by very early FY 2019, most of those remaining contracts will be awarded. Any money we have – I will call it "in the bank" -- that the Corps is still holding, it is probably going to be a lot of that is tied to the administration and oversight of those contracts and not actually awarding new contracts.

Most of our contracts should be awarded in FY 2019 on the Olmsted project. There is still money there, but it hasn't been paid out yet. Again, I don't know some of these other charts on the budget side. Is that a payout? Is that executed or is that obligated? I need the money in my office or the Districts need it in their offices to award a contract. We have to obligate it. It doesn't show up in another category code until you actually spend it and pay a contractor. That is a different way to look at money.

CHAIRMAN HETTEL: Okay.

MR. DURRETT: You need to understand what the slides are based on, to understand what comparisons you want to look at.

CHAIRMAN HETTEL: To help us understand this better, for our next Users Board meeting, could you break that down on the remaining money you are going to spend on the Olmsted project in FY 2020, FY 2021, and FY 2022, how much you are going to spend on contracts, contract administration, Supervision and Administration (S&A) and Engineering and Design (E&D) during Construction?

MR. DURRETT: Yes sir. I think there may be some of that information presented. Dewey [Mr. Dewey Rissler, Project Manager, Olmsted Locks and Dam project] may be able to talk to some of that today. If you still need that, we can do that for you. Let's wait, if you don't mind, and ask Dewey that question. I am going to put him on the spot. If he can't answer it, I will come back and do it at the next Users Board meeting and get you a more detailed breakdown of what you are looking for on Olmsted.

CHAIRMAN HETTEL: Great. Thank you.

MR. DURRETT: Moving on. The last thing on the slide is we do have the ability to move money around up to about \$5 million on these navigation projects. If we want to exceed that limit, that means I can only move it off of one project, and that project can only give \$5 million and a project can only accept \$5 million. If I have three projects, I can't move \$5 million off two of them and move that to one of them. That is \$10 million going to one project. I can't do that. It is a loss or gain of \$5 million that is the limit that I have the authority to do. Anything more than that, and we have to go back to notify Congress and say we want to move money from project B to project C of something more than \$5 million.

My flexibility and that timeframe becomes a lot longer when we have to run through all of the steps. It has to go through the process of notifying Congress. That lengthens the timeframe. The easy timeframe is what we have authority to do in our office. It takes us about somewhere between five and ten days, and we can reprogram money from one project to another.

That is why I am trying to hold it to the \$5 million limit so that we have flexibility that we can adjust our steps, and quickly adjust, because if we find something that happens and we have a big change, we need the money. If I don't budget for it, I have to have an immediate need to put the money on that project, so I need to have that flexibility within my office to make those adjustments.

This is my last slide with some concluding points. First, we review these projects every year. These three projects, Chickamauga Lock, Kentucky Lock and the Lower Monongahela River Locks and Dams project were not included in the President's Budget request. We prepare

these project request documents during the development process of the President's Budget. However they have not been included in the President's Budget that is released.

However we do a budget and project review of these projects every year to look at the contingencies. We look at where we are on each of the task orders or contract options that have been awarded on each of these three projects. We are constantly reviewing these on a yearly basis prior to making our next submission for work plan money. We are constantly updating so we don't keep this large amount of money in contingency, sitting in an office. It is very minimal that we try to carryover as contingency money, and we carryover from time to time. I may tell you I have \$20 million sitting that is left over, but \$10 million of that could be tied to Supervision and Administration of contracts or Engineering and Design oversight of those contracts. Only \$10 million may be actually contingency. You have to be careful about the numbers you look at, what you are asking, and what we report as far as numbers come out.

There will not be a really large amount of flexibility unless we can change some real rules on how we do this. What is in the ability and flexibility of the Corps is very limited, so there is going to be very little availability or impacts we can do relative to contingency, based upon the way we do it today.

Any greater flexibility will have to get done through some Congressional budgeting policies. Like I said, right now, \$5 million is my limit. If we centralize this stuff in a pot, one way, at a regional or at the Headquarters level, it is going to take some different ways of doing it, because money is appropriated by project and not necessarily appropriated in a navigation pot. It is appropriated to the Olmsted project. It is appropriated to the Chickamauga project or the Kentucky project.

To move it from one project to another, that is our flexibility, the limit is \$5 million. Anything more than that would require some sort of Congressional help to make some better utilization and try to really minimize the pot of contingency.

I think our ability to minimize or control contingencies is going to be very restricted. There is going to be not a large dollar gain there. You may pick up another \$10 million or \$15 million or \$20 million overall, but I think the overall pick up is going to be minimal. \$20 million is a lot of money, and we can do some stuff with \$20 million.

MR. MECKLENBORG: Steve, you mentioned reprogramming funds from one project to another and if it is in excess of \$5 million, you have to get Congressional approval. I thought Congress got out of the business of approving project-specific appropriations. That anti-earmark mantra that we hear about all the time.

MR. DURRETT: Thank you Mr. Mecklenborg. This reprogramming of funds is not viewed as an earmark. The Congress told us that they were going to give us a certain amount of money for a project. If we move money from one project to another project that is over that \$5 million we have to do a notification. That is not necessarily approval, but it is a notification, and that process does take time.

MR. MECKLENBORG: Okay.

MR. DURRETT: And the Congress reserves the right to say no to the reprogramming.

MR. POINTON: And those requests for reprogramming -- those would go through the Administration, as well, before it would even be submitted to Congress?

MR. DURRETT: Yes sir, it would. The process is the reprogramming request would first go to our Headquarters in Washington, then it would go to Assistant Secretary of the Army's office, the Honorable R.D. James, and then it goes to the Office of Management and Budget (OMB), and then ultimately it gets transmitted to Congress. There are a number of procedural steps that a reprogramming request has to go through.

MR. MECKLENBORG: Thank you very much for that description of the process. I greatly appreciate it.

MR. DURRETT: Subject to any additional questions or comments, that will conclude my presentation this afternoon. Thank you.

MR. POINTON: Are there any other questions for Mr. Durrett? Hearing none, thank you very much sir. Greatly appreciate your presentation.

MR. DURRETT: All right. Thank you.

MR. POINTON: Next up on the program, we are going to have a two-step presentation on the Olmsted Locks and Dam project. One presentation will be an update on the status of the construction of the new locks and dam. That update will be given by Mr. Dewey Rissler. Mr. Rissler's name has already been mentioned a couple of times this afternoon. Then we will have Mr. Waylon Humphrey who will talk about operationalizing, if that is the correct word, for the new Olmsted Locks and Dam. We will begin with Mr. Rissler. Sir, please proceed when you are ready. Thank you.

MR. DEWEY W. RISSLER: Thank you. Thank you Mr. Pointon. For the record, my name is Dewey Rissler. I am the project manager for the Olmsted Locks and Dam project, whose official name is the Locks and Dams 52 and 53 replacement project, commonly referred to as Olmsted.

As you see from the cover slide of my presentation, this is an overview photograph of the project. You see the entire construction area toward the bottom of the photograph. On the upper part of the photograph is the Kentucky shoreline. On the bottom part of the photograph is the Illinois shoreline and the surrounding area adjacent to the project site. You can see the two 1,200 - foot lock chambers. On the upper left of the photograph on the Kentucky shoreline, you can see the four completed river dikes upstream that are out of the water.

Next slide. This is our Bottom Line Up Front slide. This hasn't changed much. The project is still ahead of schedule, under budget, and we are still reporting the same keys to

success as in the past. Those being: (1) efficient funding which has allowed the project delivery team to effectively plan and execute our annual work plan, and (2) being able to take advantage of good river conditions allowing the work to continue in the river beyond the contractual low water season, which is from June 15th to November 30th.

Next slide. This is our project overview status slide. Beginning at the top middle of the slide and proceed clockwise, you can see we have all of our navigable pass shells and wickets have been installed. All of the tainter gates have been installed. The completion of the testing and commissioning of the control systems for those tainter gates is expected to be completed in September. We have three areas where isolation piles are being installed. Because we are a high seismic zone here, an isolation pile is basically a shock absorber, if you will. We have three locations for those. Two of those locations have already been installed. We are currently fabricating the sheet piling for the third location, and that fabrication will be completed this week with installation to follow shortly.

The lock master's building and maintenance buildings on the right side of the slide, towards the bottom of the slide are still under construction, and we are currently working through a punch list items to finish construction of those buildings. On the bottom left of the slide, you can see the box which is labelled "River Dikes." We are talking about a series of river dikes on either side of the river. We have a series of 13 river dikes to be installed on the project. As I said earlier, you saw the four on the title slide. In total we have completed the first seven of those. Dikes numbered 8 through 13, we broke it into two parts. The armoring of those dikes has been installed, and we are getting ready to issue an RFP [Request for Proposal] to our SATOC [Single Award Task Order Contract] contractor for the completion of those dikes. We should be able to award that by the end of the fiscal year. Above the box titled "River Dikes" you can see a box titled "Left Boat Abutment." The box reads "Lift 20 complete – 22 October 2018." Currently we are showing that lift as being completed in the October timeframe. We have pulled that to the left. That will be completed sooner. We are starting those placements this week, as a matter of fact. That one isolation pile at the left boat abutment we were showing in November, and like I said a minute ago, we have pulled that to the left as well.

Next slide. Some photographs of the site restoration activities on going at the project site. My intent here, which didn't come out very well, was to show progress on some of our site restoration. As we complete our work activities, areas of the construction site that we no longer need, we want to go ahead and start getting those cleaned up.

The portion in the middle of the slide is the precast yard, and that picture was taken in July, the early part of July of this year. Since that time, we have done a lot of surface grading. We have removed a lot of the rock in that area and re-graded all of that to be a more natural terrain as we clean things up as we start to move out of the project.

Next slide. This is the installation of the template for the first upstream mooring cell. We have four upstream mooring cells being installed. This photograph was taken when the contractor was setting the template for the first one of those mooring cells.

Currently, this mooring cell is accepting its last concrete placement this week. The one right next to it, the one immediately upstream from this, will be getting a second concrete placement. For the third mooring cell we are setting the template on that one right now. We have those all ongoing.

Next slide. The total project cost in the upper right hand corner of the table is \$2.856 billion. That is our last certified cost and schedule analysis number. Further down in the far right hand column you can see the \$2.740 billion figure, which is the amount of funds that we have been allocated and have received to-date.

If you take that number, the \$2.740 billion figure and add the \$35 million from the Fiscal Year 2019 budget request, our total is \$2.775 billion. That is the number we are working to complete this project to. The difference between that figure and the \$3.1 billion that was originally authorized for this project has already been taken out and used on other projects.

CHAIRMAN HETTEL: Mr. Rissler?

MR. RISSLER: Yes, sir.

CHAIRMAN HETTEL: With respect to that \$2.740 billion figure. Can we add up all these columns and we come up to \$2.740 billion? This total cost, the \$1.834 billion plus the \$212.7 million plus the \$268 million plus the \$250 million plus the \$175 million plus the \$35 million.

The reason why I ask that is, at your presentation at the last Users Board meeting in Pittsburgh in May, that total allocations to-date number was \$2.775 billion and today it is \$2.740 billion.

MR. RISSLER: You are correct sir. What I did in Pittsburgh was I included the \$35 million figure for the Pittsburgh meeting. For this afternoon's meeting, I took the \$35 million which is our requested amount for FY 2019 out of that figure. The \$2.740 cost figure is what we have received to-date through Fiscal Year 2018.

CHAIRMAN HETTEL: Okay.

MR. RISSLER: You can see in the lower right hand corner of the slide the box titled "Next Steps" and you can see the activities we are currently working on or have planned. We are still working to flush out the land chamber culverts. We are grouting the sheet pile cutoff wall that is in front of the tainter gates. That work was delayed a little bit. If you recall, earlier this year we had a barge come up and break apart. We had a barge sink in front of the tainter gates. It took us a while to get that barge removed, which has affected the completion of that work. The isolation piles, like I said a few minutes ago, we have two of those already installed. We have one yet to finish up. The mooring cells work is ongoing. The demolition of the marine portion of Lock and Dam 52 is on the street. We are going to open bids on that work on Thursday. We will know what that cost is going to be. Also for Lock and Dam 53, those bids

will open in mid-September. By the end of fiscal year, we are hoping to know what our big ticket items are going to cost and be able to work out the remaining daily work.

CHAIRMAN HETTEL: Dewey, I was under the understanding that you already let the contract for the deconstruction of Lock 53.

MR. RISSLER: We have issued a Notice to Proceed to our WGA [Washington Group – Alberici joint venture] contractor for the removal of the lock and the wicket gates at 53. We have already issued a Notice to Proceed to the contractor for that portion. Then there is a portion – the fixed weir and some other work on the Kentucky shore that will remain. That is the remaining portion of Lock 53 that we are getting a hold of.

CHAIRMAN HETTEL: Okay. So WGA's going to remove everything but the fixed weir on the left descending bank?

MR. RISSLER: Yes, sir.

CHAIRMAN HETTEL: And that you have yet to bid? Will that be removed or will that stay in place?

MR. RISSLER: I am sorry. I did not hear your question. Can you repeat it?

CHAIRMAN HETTEL: Will that fixed weir at Lock and Dam 53 be removed or will that stay there?

MR. RISSLER: The fixed weir will be removed.

CHAIRMAN HETTEL: Okay. Do you have a contract for that work yet?

MR. RISSLER: Yes, sir.

CHAIRMAN HETTEL: Do you have a contract for the removal of 52 yet?

MR. RISSLER: Yes. The contract for 52, like I say, that opens on Thursday, and that is from basically wall to wall.

CHAIRMAN HETTEL: Okay, then you have a contract to install the curtains on the guidewalls?

MR. RISSLER: Yes, sir.

CHAIRMAN HETTEL: Those are the three major contracts left?

MR. RISSLER: We also have a site security contract that should award in September for fencing, security cameras, and that kind of stuff. The remaining portions of dikes 8 through 13, we have those. That was about \$6 million.

Then for Fiscal Year 2019, we are wanting to get the packages together for the land portion of Locks 52 and 53.

CHAIRMAN HETTEL: One more question on this slide. On your second slide, you said your Total Estimated Price is \$2.778 billion.

MR. RISSLER: Yes sir.

CHAIRMAN HETTEL: That is the \$2.740 billion plus the \$35 million in FY 2019.

MR. RISSLER: Yes sir. That is our current number, and that number will fluctuate as we go through the project. As work activities wrap up costs are finalized on our cost reimbursement contract. Those numbers will fluctuate a little bit.

CHAIRMAN HETTEL: Okay. Thank you.

MR. RISSLER: Next slide. This is our schedule of remaining work. You see everything else we have going on is tracking. Our Buildings and Grounds contract is a little bit behind schedule for contract completion. Like I said earlier, we are working through the punch list of items with the contractor. That is currently ongoing.

The next slide is our Time and Cost Scorecard. Again, the expenditures through June, we are ahead of schedule and under budget. The bar graph in the lower left hand corner of the slide shows the difference between our CSRA [Cost and Schedule Risk Analysis] numbers in red and our Total Estimated Price as we go throughout the project. We are still looking for opportunities to pull the overall project completion to the left. We work on that every day, trying to get everything done and completed sooner rather than later.

In the lower right hand corner of the slide you can see the major activities remaining on the project. We talked about the tainter gate control commissioning aspect that is currently underway. That is scheduled to be completed on September 20th. The awarding of the river dikes contract for dikes 8 through 13 is scheduled to be done by the end of September. The awarding of the contract for the Locks 52 and 53 demolition projects is also scheduled for the end of September, as the completion of the installation of the isolation piles in scheduled for November 7th.

Next slide. This is a graph of our one year and five year cost trends. Again, is a graphical representation of the bar graph that was shown on the previous slide. The top section shows a tracking of the CSRA estimates that were developed. The CSRA certified cost estimate are developed every other year during even years. In odd years, we do a regional assessment of that cost estimate. The bottom line is our Total Estimated Price that the project development team is working on and working through. You can see we are turning down -- still working toward that \$2.775 billion cost figure.

Next slide. One of the things that we have been working on, again, because we have a cost reimbursement contract is equipment disposition. We have received approval from the GSA [General Services Administration] to do some equipment disposal using Limited Direct Sales Authority once it goes through the GSA screening and disposal process. If they are not successful in getting the prices of reserves that we have set, we have the ability now to take those items and try to sell those through our construction contractor, with the caveat that we have to get the same reserve price as what it was with GSA. Last time there was a request for a listing of pieces of equipment that have been sold and a listing of pieces of equipment that are coming up for sale. I have provided that. To date, we have recovered or brought back into the project about \$3.5 million from the sales of those pieces of equipment and parts.

The “out year” marine work packages, again, the culvert flushing of the land chamber, we are still working on that. We will get that completed during this low water season. The upstream mooring cells, we talked about that earlier. We have given a Notice to Proceed on all of those items since these slides were put together. River dikes 8 through 13, we will get those awarded. They will need river elevation above 300 to get those in, so it will be probably later this calendar year or early next calendar year before those are complete and completely installed. The backup wicket lifter, that procurement also is progressing nicely. We should get those numbers in by the end of this fiscal year. The last item there at the bottom of the slide, the functional transition, the course of action should Lock and Dam 52 not be able to function is to operate Olmsted.

Subject to your questions or comments, that is all I have on the status of the construction activities at the Olmsted Locks and Dam project. We have Mr. Waylon Humphrey, our Deputy Chief of Operations, coming up next to talk about the transition to the new lock, so he may be able to answer some of your questions if I can't.

CHAIRMAN HETTEL: Mr. Rissler. Before I get there, we received a list of the disposition of equipment.

MR. RISSLER: Yes sir.

CHAIRMAN HETTEL: I don't know what good it is to us if we don't know how much you sold the equipment is for. When you get rid of all this equipment, what the total is going to be? And how will the proceeds from the sale of that equipment be either applied to the contract or reimbursed to the Trust Fund?

MR. RISSLER: There should be a total on the bottom of a column on one of those pages.

MR. POINTON: \$3,274,635.75 as of 31 July 2018.

CHAIRMAN HETTEL: Where is that total shown? On the bottom of page 3. So pages 1, 2 and 3 all go together?

MR. RISSLER: Yes sir.

CHAIRMAN HETTEL: The \$3 million is on the third page of what you sold so far.

MR. RISSLER: The \$3 million is the total of all three of those pages.

CHAIRMAN HETTEL: Have you sold everything that is shown here?

MR. RISSLER: Yes sir.

CHAIRMAN HETTEL: Is there any other equipment that you have to dispose of?

MR. RISSLER: I am sorry sir, I did not hear your question. Can you please repeat it?

CHAIRMAN HETTEL: Is there any other equipment yet to be sold?

MR. RISSLER: Yes sir. There is also a list included in your read ahead materials of what is anticipated to sell in the fourth quarter of FY 2018 and the first quarter of FY 2019. That is a separate spreadsheet.

CHAIRMAN HETTEL: I didn't know if that \$3 million figure includes these two pages.

MR. POINTON: These are new items that have yet to be sold.

CHAIRMAN HETTEL: This is what has been sold?

MR. POINTON: Yes sir.

CHAIRMAN HETTEL: And this has yet to be sold?

MR. POINTON: Exactly.

CHAIRMAN HETTEL: Just for clarification, the two pages I was referencing is equipment that has not been sold, and Mr. Rissler said all three pages. It is only the third page, the final page, with the total on the bottom of equipment that has been disposed of.

Still, it would be interesting to know how the proceeds of those sales is ultimately handled, whether those proceeds go back to the Inland Waterways Trust Fund or whether it is returned to the General Treasury.

Maybe you can find out the answer to that question for the next Users Board meeting.

MR. RISSLER: Are there any other questions?

MR. POINTON: Are there any other questions for Mr. Rissler? Hearing none. Thank you very much, Mr. Rissler. Next on the agenda, we are going to bring up a new presenter. Mr. Waylon Humphrey, Deputy Chief of Operations in the Louisville District. Mr. Humphrey is going to talk about how the Louisville District is going to operationalize transition from Locks

and Dams 52 and 53 to the operation of the new Olmsted Locks and Dam. Sir, please proceed when you are ready.

MR. WAYLON D. HUMPHREY: Good afternoon, everyone. I appreciate the opportunity to come to this afternoon's meeting and provide this update on where we are with transitioning Olmsted from a construction project to an operational project. I provide these updates to the RIETF [River Industry Executive Task Force] group on a weekly, sometimes daily basis, and so it is good to see some names of people that I know that are on that roll call. Many of you probably recognize my voice, but haven't seen my face before, so feel free to stop by and introduce yourself.

Next slide. For Olmsted, first, I want to talk about some terminology to make sure we are all on the same page with respect to the language that I am using to describe this project. Next I am going to talk about the transition team we have established, which is instrumental in making the project operational.

It took a tremendous effort to build a project like this, but it is an equally important effort to take it the last mile of the home stretch to get it to where we can make sure all the pumps are working, the lights come on when we hit the buttons, and everything is working together like it should.

I will talk about the operational schedule and how that has been impacted by the Notice to Proceed for the Lock and Dam 53 demolition.

I will then talk about how Olmsted will operate this year with Lock and Dam 52 still being an operational project, as well as how it will operate next year when Lock and Dam 53 is no longer holding water. There is a slight difference between how we will operate this year versus next year.

I will give you an update of where we are with respect to the training and testing of the wicket lifter, as well as the remaining navigation impacts that could be experienced as a result of operating ahead of schedule, because the 2018 construction schedule was based on Lock and Dam 52 being operational the entire year. Whenever we take Olmsted live and we begin holding pool there, we will have some slight impacts to navigation and to the construction progress that is underway, but those impacts will be minor in comparison to what we are currently experiencing at Lock and Dam 52.

Next slide. Mr. Rissler touched on this a little earlier, but the Kentucky bank is on the upper-left corner of the screen; Illinois is on the right side. Hopefully, everyone will get to see this layout when we are out at the project site on Thursday.

Over here in the upper left corner of the slide is the LBA, the left boat abutment. It is over on the left hand side of the screen. Adjacent to the left boat abutment, you will also hear us refer to the "fixed weir". There is a series of sheet pile cells that connect that left boat abutment to the Kentucky bank. If you hear us say "fixed weir," that is what we are referring to.

In between the left boat abutment and the right boat abutment is the wicket dam. We have 140 wickets that are all ten-foot wide and approximately 30 feet tall. That is what we use to impound the water. Under normal operations, we will go out and raise all 140 of those wickets and begin controlling flow with the five tainter gates that you see adjacent to the right boat abutment.

Unlike Locks and Dams 52 and 53 where we have to control flow with either the bear traps that are antiquated or through manipulation of wickets, like we are doing this year because of the deteriorated state, at Olmsted we will have push of a button operations to account for fluctuations in the flow as it comes down the river.

At the bottom portion of the slide, close to the Illinois shoreline, is the biggest improvement, the two 1,200-foot lock chambers. Those lock chambers should greatly expedite the movement of traffic movement up and down this stretch of the river.

Next slide. This slide shows the organization of our Olmsted Transition Team. My normal job as the Deputy Chief of Operations for the Louisville District is the management of our 30 projects. But our district commander [Colonel Antoinette Gant, District Engineer and Commander, USACE Louisville District] is giving me the unique opportunity to serve as the transition lead for the Olmsted project, so I assembled this team of aces to help me out with this project. They are the ones doing all the work. I just come and do presentations and answer conference calls.

We split up the transition team into four main areas: people, plant, processes, and safety. I have a team lead for each one of those areas and support elements that make this project a functional one. The big key here is we want to take Olmsted operational as soon as possible, but we also want to prioritize for reliability and prioritize for safety of the employees at Lock 52 and at Olmsted.

Next slide. This slide is the Olmsted Operational Schedule. This schedule has been out for a while. This is what we released with the RIETF briefings. As you can see, the Olmsted ribbon cutting is shown on line 8, so we are in that week. We are right in the middle of the area where we said Olmsted would be functional if Lock and Dam 52 fails.

Whether you want to say we have been lucky or unlucky this year, Lock and Dam 52 has been able to maintain traffic for the most part through the 1,200-foot chamber. I do suspect that there are some impacts that go along with that, but that has bought us some great construction progress, as well as some great training and testing opportunities for the wicket lifter while Lock and Dam 52 has been in operation.

I want to acknowledge that while we say it is a good thing that Lock and Dam 52 has been up because we have made progress, we do understand that that is an impact to the mariners and the shippers that are moving cargo up and down the river.

The biggest thing that changed here from the last RIEFT update where I showed this slide, as of August 16th of this year, our Commander made the decision that we move out on the

Notice to Proceed for the demolition of Lock and Dam 53. At that point when that decision was made, we are in a situation where if the river elevations fall to a point where Lock and Dam 53 would need to be operated, then we would be relying on Olmsted being an operational project to impound that pool and to protect the intakes of, primarily, the Shawnee Fossil Plant that is owned and operated by TVA [the Tennessee Valley Authority], just below Lock and Dam 52 [The Shawnee power plant is located in West Paducah, Kentucky at Ohio River mile 35.0 above its junction with the Mississippi River].

The critical constraints for doing that operation, we are tracking the Cairo gage of 18 feet to 16 feet, as well as an Olmsted gage of around ten feet to eight feet. That is sneaking up on us and is just around the corner.

The current forecast shows that that could happen anywhere between September 1st and September 3rd. Backing out from there, we are going to have to take four days to raise the Olmsted Dam this go-around, simply because Lock and Dam 52 is in operation.

We are going to have to take it slow and segment it, as well as wash the herders as we go out because the wickets have been down for so long. We could be starting to raise the Olmsted Dam as early as Friday. That is the conversation we had on the RIETF calls this past Monday as well as last Friday.

Next slide. Here are a few photos of how the Olmsted project will operate. In the upper-left corner you can see the Olmsted project, how it could be in a high-water state. If you go out there in January, February, March, and you have got significant rainfall through the region – we are in those spring rains, winter rains. The lockwalls are completely under water, with the exception of the floating approach walls. All of the equipment is under water. That is when we would be taking advantage of this maintenance facility, and we would be doing repair and refurbishment of the wickets we pulled out that previous low water season.

So as the river begins to fall out from say it is elevation of 325, 330, down to 310, which is the top of the lockwalls, once we hit that 310 elevation, the lockwalls are going to be covered in sediment, sand, debris, trees, anything that you see floating down the river.

During high water events, it will be stuck on top of the lockwall. Our guys will go out there. We have equipment to clean all that stuff off and prepare the facility for operation. As the river continues to fall, we get down to a 305. That is the top of our machinery pits, the equipment that operates the miter gates. We have big washing pumps and wash down bars, and we will continue to clean off this mud, and sand, and debris off of it. As the river continues to fall out, the top of the LBA, the left boat abutment that we referred to in the earlier slide, is at 303.5. At that point, we can go over there and make sure it is cleaned off and prepped and ready. Then at 302, we will be moving the fleet over there, preparing for the wicket lifting operations. Then we will actually start the operations anywhere between 301.5 and 300.

As you see, as the river's elevation continues to fall, it is going to be very, very busy for our guys and our crews, and we are going to be time constrained, depending on how fast the river elevation continues to fall.

The metric we have used to develop the time that is required to raise the dam and our operational parameters for raising the dam, it will be 48 hours. We are shooting for 24 to 36 hours to get the dam up, and that is based on our operational window of 295 to 300. If the river is falling out at about a tenth of a foot an hour, you could lose 4.8 feet in 48 hours.

That is why we have that window where we have to have this project operational in in order to keep navigation from Olmsted up to Smithland [Smithland Locks and Dam, located at Ohio River mile 62.5 above its junction with the Mississippi River], this 47-mile stretch of the river.

That is how we would operate during a normal year. This year, we had to think of the Olmsted pool as essentially one large bathtub from the Smithland Locks all the way to Olmsted. This year, split that bathtub in half; you have a small bathtub at Lock 52 and another small bathtub at Lock 53. Currently, the Lock 52 bathtub is filled, and it is spilling water over into the Lock 53 bathtub.

What we will have to do is, when we raise the wickets and start closing off the tainter gates, is impound that water to fill up the bathtub at Lock 53 prior to being able to come up and lower the dam at Lock 52. If we start this operation on Friday, it takes four days to get all the wickets up. Monday of next week, on Labor Day, we will have wrapped up this operation. From there, we will begin closing off the tainter gates and start impounding water to establish Lock 53's pool to make sure we have reached a steady state for that second half of the bathtub.

Once we have done that, we will continue to make reductions on the dam at Olmsted to essentially simulate Lock and Dam 52 being lowered because of a high Cairo gage. As the Cairo gage typically climbs, there are situations where Lock 52 would have to go down because of the tailwater being up so high.

What we are going to do is force that condition using the Olmsted project. Once the tailwater comes up high enough, we can go out and start segmentally lowering Lock and Dam 52 and transferring the head pressure from Lock and Dam 52 down to Olmsted.

This year it is going to be a little different. You guys bear with us and we appreciate everyone's patience. We will do our best to communicate daily where we are, especially this weekend, as we work through getting the wickets raised and then next week as we transfer the pool from 52 down to Olmsted.

But essentially, next week we could be in a situation where Olmsted is fully functioning, Lock 52 is down, and we have essentially transferred that pool and operating the Olmsted project under its intended parameters of a 300-foot elevation at Paducah and a 302 elevation at Smithland tailwater.

Next slide. How are we going doing that? The wicket lifter, the picture on the left of the screen, you see that the picture on the left is the control station for the wicket lifter crane. As you can see, it looks much more like an F-16 fighter cockpit than it does a traditional hydraulic

excavator like we have used at Lock 52 and Lock 53. There are several operator aids that are built into this equipment, and it has taken us some time to get training and testing on this equipment and on the controls that are on the wicket lifter itself so that we can get these wickets sustained.

The picture on the right of the screen is when we were doing the 25 percent test. I think that is around 26 wickets standing. In the future -- these pictures are unique because you would normally never see this much of the wicket out of the water, because we stood those wickets up below the elevation 295.

Next year the dam would be holding back water, in that 295 to 300 range, prior to ever seeing that much wicket sticking out. That is really a unique opportunity to see the project operating in a way that it was not exactly intended, but we are going to make it happen so that we can get this project up and running.

CHAIRMAN HETTEL: I have a question for you on your normal operating procedures for Olmsted. You referenced when you start picking up the wickets Friday, the tainter gates all out of the water.

MR. HUMPHREY: Yes sir.

CHAIRMAN HETTEL: You get the wickets up, you lower the tainter gates, start impounding the water.

MR. HUMPHREY: Yes sir.

CHAIRMAN HETTEL: Is that going to be the normal process going forward?

MR. HUMPHREY: Yes sir.

CHAIRMAN HETTEL: Because if you were to lower the tainter gates first, it may stop the outflow for us to still be able to navigate, and then raise your wickets after you lower the tainter gates.

MR. HUMPHREY: Correct. If you raise the tainter gates first, that allows operational conditions for us to go out in the safest environment to raise these wickets. If we have all five tainter gates in the water and we have to go out and start raising against them, we will quickly begin building head pressure. The wicket lifter arm itself is only designed to operate within seven feet of head, and so our fear would be that you would go beyond that seven feet of head and, at which point, would greatly slow down the wicket-lifting operations, because then we would have to wench the wickets up versus just being able to reach down and raise them up by hand.

CHAIRMAN HETTEL: You couldn't work those simultaneously, like lowering tainter gate number one, and as you get closer, raise that one?

MR. HUMPHREY: Theoretically.

CHAIRMAN HETTEL: I am simply trying to find some way to keep traffic moving without a four day shutdown of the river.

MR. HUMPHREY: Correct.

CHAIRMAN HETTEL: I don't mean to interrupt this meeting, but stop and think about that.

MR. HUMPHREY: Yes, sir. The big advantage we have at Olmsted is the lock chamber is so much deeper, we will have opportunities to move traffic as we are starting to raise the dam. Depending on what the flows are doing, we will work with our local industry committees, Steve Southern with Ingram Barge Company and our Chief of Locks and Dams have very good communication.

We will let those guys work that out and see how long we can push the limits and safely move traffic while we are doing this dam operation. This is some of the training we have done already. We have focused on testing and training for the basic minimum operations of Olmsted. This piece of equipment is designed to operate and maintain the facility, and we have been focusing on the operation side of it and specifically operations of the normal variety that we would see in a normal dam raising.

We have really focused on the stern winches, the generators and the electrical controls that go along with it. The knuckle boom crane, as I have said. It has a GPS [Global Positioning System] sensor built into the tip, as well as sonar. There are operator aids that are getting those guys up to-date and up to speed with what they are going to be experiencing when they are out there, and specifically the Z-drive vessel that is going to accompany the wicket lifter on the dam.

I want to make a clarification to the perception that the wicket lifter propels itself across the dam. It does not. It has a motor vessel alongside on its starboard hip towards the stern. That vessel not only keeps tension on the stern lines when we begin raising the dam, but most importantly, it provides thrust to push the vessel into the dam to keep it from wanting to get sucked around the end of the dam as we are raising it.

If you can imagine, it is a water hose and you are sliding your thumb over that water hose. By the time we get to the end of it, the conditions have become pretty violent. Those stern winches are our safety lines that keep us tied off to the bank. That vessel, the Z-drive vessel, is allowing us to provide that thrust directly into the dam to maximize our safety of our employees while they are out there.

Training yet to be completed. Obviously, we will have to be 100 percent raising the dam, and that could be as early as this weekend. Making some revisions on some of the tools that we have tested and updated processes for and, some slight changes and stuff we want to make. But then, once we get the pool established, we will work on our positioning winches that are on the deck. That is essentially if we have wickets that fall for whatever reason, the propeller is set on a

log versus being where it is supposed to set and it falls down. We will hook the wicket lifter into an anchor system that is installed upstream of the dam and wench ourselves down into position.

If you imagine, you have ten feet of head in between the high pool and the low pool and a wicket missing or two wickets missing, it is like a vacuum wanting to pull you into it. Those wenchers and those anchors will protect us as we work our way down into that opening to go in and make those repairs.

MR. MONAHAN: Mr. Humphrey, based on the new lock and dam and the larger pool, how often are we going to be dealing with the wickets compared to the old system at Locks and Dams 52 and 53? Do you have any modeling that tells you how many times we are going to have to be concerned with navigational issues with raising and lowering the wickets?

MR. HUMPHREY: Good question. The total time for the dam being up will be around five months, plus or minus a month. Some years it might be up six months. Some years the dam might be up four months, three months, depending on how much rain we have and how much water is in the system.

But how many times do we have to raise and lower the wickets? Hopefully, it will be less because we can use the tainter gates to flow more water than the ability that we currently have at Locks and Dams 52 and 53, but it really just depends on if you draw a straight line on the graph of that 300-foot elevation, how many times the river wants to go up and down below that.

MR. MONAHAN: But will that be an improvement over what we have experienced with Locks and Dams 52 and 53?

MR. HUMPHREY: Yes, sir. Right now at Locks and Dams 52 and 53, especially in recent years with Lock and Dam 52, we are operating it in a failed condition. We are taking three to four, five days to do dam operations, and we are having to shut the river down to go out and do repairs, to build river dikes, and trying to increase the reliability of those projects. We should not be getting any out at Olmsted. We should be able to raise the dam 24 to 48 hours. You have got to start to use the lock chambers. You have got twin 1,200-foot chambers at your disposal and unimpeded river from Olmsted all the way up to Smithland Locks, to Kentucky Lock [located at Tennessee River mile 22.4 from its junction with the Ohio River] and Barkley Lock's tailwaters [Barkley Lock is located at Cumberland River mile 30.6 from its junction with the Ohio River].

The next slide shows the details of the Wicket number 32 anchorage failure, which occurred while we were performing our 25 percent test, and anchor bolts broke on wicket number 32. When that occurred, we backed off the testing to make sure that there wasn't something that we were missing and took advantage of that opportunity to accelerate construction activities.

Earlier in his presentation when Mr. Rissler was referring to the progress we made on the left boat abutment, the progress we made on the fixed weir, those are because of when we

backed off of here, we really pushed to get those items done, and tried to take a bad situation and make it a positive one.

Essentially what happened, the wickets themselves, unlike the wickets at Locks and Dams 52 and 53, they don't get picked up from this end. At Locks and Dams 52 and 53, when the wickets are lying flat, it gets picked up from that upstream end and then tips down into position. At Olmsted, you will pick it up from this downstream pick point, which is here when the wicket is laying down, and you basically stand it up. Any material that is right here on the front edge of this wicket in this trench is going to get compacted by the wicket as it stands up. Then you take this compaction, along with a 30-foot lever arm, imagine prying a nail with a 30-foot lever arm and you're pulling on these bolts that anchor this casting at the wicket down into the dam.

We have been cleaning. The big takeaway here is we realized that there is more meticulous cleaning that needs to be performed when we are doing these operations. Right now, this year, we are taking advantage of the contractor. We had them do a dive inspection of the full trench all the way across the face of the dam, the entire 1,400 feet.

They did find sediment in some areas, but the majority of it was clean. It was more of a dive inspection than it was a dive cleaning project where they were air-jetting out or pumping out material.

We modified our operations. We will be using the water jet nozzle when we are going out to clean that area. Moving forward, we are working on a permanent engineering solution because the jetting nozzle we have on the wicket lifter isn't necessarily designed to move that much material. Our Engineering Division is hard at it.

We got away ahead this year. The operations with the contractor still in place. The target, of course, is next year, when we move into the next low water season, have a permanent, engineered solution in place, whether that is a larger jetting nozzle that is attached to the wicket lifter or some type of scrubber.

We will let the engineers in our Engineering Division figure that out. Of course, from an operations standpoint, we are going to prioritize reliability and then the timeliness in order for us to get the dam raised. That is still in progress.

Next slide. In the beginning of my presentation I made reference to some potential navigation impacts once we take the Olmsted project operational. Again, the construction schedule for the Olmsted project was under the assumption that Lock and Dam 52 would be operational this entire low water season. Due to the impacts we are having, it is in everyone's best interests to accelerate Olmsted and get it operating sooner rather than later to prevent these.

For instance, when we had a hydraulic failure early this morning, I think we had up to 50 tows that were backed up as a result of that failure, which is an increase from the normal 25 to 30 that you see when we are in operation. Limiting the failures like that, getting Olmsted operational is key for us.

Here are some of the impacts that we might experience. Installation of floating guidewall curtains. That is going to have an effect on the mariners more than anything. We will have helper boats to offset any out-draft concerns that we have this year. Up until those floating guidewall skirts are installed, we will try and have those helper boats in place to minimize any potential of a tow getting slammed into those approach walls, especially on the upstream side.

Navigation signage. We are going to set up a meeting with our local industry groups, as well as the Coast Guard. The permanent life-safety signage will not be installed fully until November. We will have to make sure the temporary signs, everyone is aware of those, and we will not have fully established signs all the way up until November. We have some mitigation measures that we are putting out there for temporary signs and stuff that. We will do our best to meet the intent of the sign program and try to maximize safety to make sure that we don't have any accidents and everyone is on the same page with what to expect as they make the approach.

Demolition of Locks and Dam 53 is going to continue. Associated impacts is we will have to navigate around that effort from the upstream side, so going from the navigation pass at Lock and Dam 53, making that hard cut over to the Illinois bank in the approach to the 1,200-foot chamber at Olmsted.

Lighting installation and upgrades, we are currently upgrading the LED lights right now. If you are out there at night, they are pretty bright. We left this on the slide because they won't be totally complete, but worst-case scenario, we limit to daylight time operations until that work is complete. I think they have progressed enough to this point where we could probably navigate in night time conditions as well.

Pressure grouting of the sheet-pile cutoff walls. Mr. Rissler touched on this item during his presentation. Our Engineering team is currently looking to see if that is something they feel they can do while we impound the pool once we have reduced flows in the tainter gates.

Completion of isolation joints. Mr. Rissler touched on this item as well during his presentation. We have mitigation measures in place to block off the one that is remaining. The barge has HESCO sandbags. It is not because we are worried about something catastrophic happening, as it is. We are putting these in place to prevent premature failure of the project. There are no pending concerns right now.

Getting this project operational this year, doing these mitigation measures allows that to happen.

A good news story is the left boat abutment. Mr. Rissler mentioned the final concrete pour. The picture on the right, these castellations that are left in this left boat abutment, which is where we land the wicket lifter, were left from the thin wall sheet-pile cofferdam that was used to construct that left boat abutment.

Anywhere you see a gap in the concrete, essentially, there was a strut arm that was supporting that thin wall cofferdam. Once they got it all removed, getting that concrete pour

done, when we backed off the testing and training because of the wicket number 32 anchorage failure, we accelerated that.

They went out there and they did the pour yesterday, and they are pulling the forms today. That is a good news story. It is done; it is out of the way. It won't hinder any future operations.

Next slide. A few summary remarks. The big takeaway – we are prioritizing safety and reliability in the system, safety of our employees, and reliability in the system for the Lower Ohio River to get the Olmsted project operational as soon as possible.

Again, with the forecast that we are seeing right now, it looks like we will be working this weekend to make that happen, starting Friday and look to wrap it up as early as Monday.

A critical failure of Lock and Dam 52 is what we were using as the driving factor from when we continued to have to operate on Olmsted, but it looks by divine intervention, we have been able to make it as far as we have with Lock and Dam 52.

That ended up not being the driving factor for operating Olmsted so much as it was needing to control pool at Lock and Dam 53. Again, I just want to make sure that we are all on the same page and that everyone understands our risk with cost and schedule impacts associated with delaying any of the construction work.

I know Mr. Rissler is doing a very fine job of going through and counting the pennies on the project management side of the project. But if we start delaying the contractor, like we expect to, on Friday, there may be construction activities that may not be able to be completed because of us using the project while they are still trying to construct it. There could be some cost and schedule impacts associated with finishing up that work that wasn't accounted for in the original schedule.

That concludes my presentation on the operational aspects of the Olmsted project. I would be happy to answer any questions you may have.

MR. POINTON: Are there any additional questions or comments to Mr. Humphrey. Hearing none. Thank you Mr. Humphrey. Very informative presentation. Greatly appreciate it. Thank you, sir.

MR. HUMPHREY: Thank you.

MR. POINTON: Next on the agenda is Mr. Steve Fritz from the Pittsburgh District who will give us an update on the status of the Lower Monongahela River Locks and Dams 2, 3 and 4 replacement project. Mr. Fritz is the Mega Projects Program Manager for the Pittsburgh District. When you are ready Mr. Fritz please proceed.

MR. STEPHEN R. FRITZ: Good afternoon, Assistant Secretary James, Chairman Hettel, General Spellmon, other Users Board members and other attendees. My name is Steve Fritz. As

Mr. Pointon said a moment ago, I am with the Pittsburgh District. I am the Mega Projects Program Manager in the Pittsburgh District, and I will be briefing on the Lower Mon project today.

Okay, this is our bottom line upfront slide. We did receive \$98 million this year in the FY 2018 Work Plan, which was a great boost to the project. With that funding we plan on awarding River Chamber Completion contract Option number three and the Stilling Basin contract. We also plan on awarding Dredging Task Order number two with that money.

We are not in the Fiscal Year 2019 President's Budget request, so there still remains a potential for us to have project cost growth, the issue associated with what Mr. Durrett was talking about earlier.

That is a project contingency -- cost growth that is applied to the project. We continue to look for ways to increase productivity at the project site and deliver the project sooner.

We still plan to be operational in March of 2023. And based on the current project schedule, by January 2024, we plan on being physically completed, and then we will wrap up the project, and fiscally complete the project in the 2025 timeframe.

We are continuing to move dirt, put concrete in the river, and put steel in the river, and that is a good sign.

Next slide. The project scope itself really hasn't changed. General Spellmon, since you are new to the Users Board, we are replacing three lock and dam projects on the lower part of the Monongahela River with two lock and dam projects. The big deal there is that we are going to be removing Lock and Dam No. 3. That is going to come out. We built a new gated dam at Braddock Lock, Lock and Dam No. 2. That was completed back in 2004.

We are in the process currently of building a river chamber at the Charleroi Locks and Dam, Lock and Dam No. 4. The total estimated cost to get to the 90 percent project benefits is \$1.2 billion. We are delaying the land chamber construction at the Charleroi Locks. We are going to get this river chamber operational, and do all of the other project features, and still be able to capture 90 percent of the overall project benefits.

Next slide. Nothing has changed on the project schedule since the last Users Board meeting in Pittsburgh in May. We still plan on the project being operational in 2023 with the completion of the river chamber.

Next slide. This is a busy chart with lots of information displayed. This chart shows all the work that is currently on going on at the project site at Charleroi and the future work that is planned for the future at Charleroi. We currently have two contractors working at the project site. We plan on awarding a dredging contract by the end of the fiscal year.

We have two contractors working in this area right now. This area highlighted in green is the stilling basin contract we plan on awarding by the end of this fiscal year. We are going to have three contractors in that small footprint.

It gets pretty complicated out there at times. Our resident engineer does a really good job of keeping contractors moving in and out of the work areas. Some things that have changed on this slide is the progress, as measured by the percentage completed, which is shown in the far right column. We show increased progress on these options. The base contract stayed the same at 88 percent. That was an error in last report. We had a mistake in how we calculated the percentage completed for that element. There has been an increase in the percentage completed on the M-22 to M-27 [Monolith number 22 to Monolith number 27] contract. That went up about seven percent since the last report. Option one of the River Chamber Completion contract is up about five percent.

Option two moved up four percent, up to seven percent total. And as I spoke about earlier, we plan on awarding this River Chamber Completion option three by the end of this fiscal year.

One of the areas of conflict we are having is where our River Chamber Completion option three contract work is going to be going on and a separate contractor down here working on the M-22 to M-27 contract. They are both going to be in that same footprint, so our resident engineer is working really hard right now to try to de-conflict that particular sequencing of work. But that is a risk to us.

Next slide. This slide shows a couple of photos of some of work that is currently underway out at the Charleroi Lock project site. The photo on the left side of the screen is of the dewatered coffer box for monoliths M-2 to M-6. That is part of the River Chamber Completion contract.

The photo on the right side of the screen shows the installation of the Lower Waler in the M-23/M-24 cofferbox which is part of the M-22 to M-27 contract. This is called the lower whaler, and it will support the coffer box when they dewater it so it doesn't collapse.

Next slide. This slide is the Lower Monongahela River financial status. There is a lot of red on this slide because we have had a lot of changes here. I believe Mr. Aldridge talked a little bit about the changes on these slides. We consolidated the allocations received through fiscal year 2014. It was FY 2013 previously. We changed that line. We also changed the amount of allocation we received in FY 2018; we received \$98 million. We are not in the President's Budget request for FY 2019, so that shows a zero on that line.

To date, we have been allocated \$925.552 million. The \$308 million figure, I know this causes a lot of consternation, but we would need \$308 million to get us up to the full \$1.23 billion project cost estimate. We do not plan on getting to that cost figure. We plan on coming in at about \$1.1 billion. We plan on coming in about \$100 million below that cost figure.

MR. MONAHAN: Just to make sure we are clear, you received \$98 million this year?

MR. FRITZ: Yes sir.

MR. MONAHAN: And what did you say you would need to finish the project on time in 2023?

MR. FRITZ: We would need \$200 million to finish the project on time.

MR. MONAHAN: \$200 million?

MR. FRITZ: \$200 million, yes sir.

MR. MONAHAN: For full and efficient funding?

MR. FRITZ: For full and efficient funding, yes sir.

MR. MONAHAN: Each year, you will – that is what you will need.

MR. FRITZ: Yes sir.

MR. MONAHAN: Thank you.

CHAIRMAN HETTEL: Not \$200 million each year.

MR. MONAHAN: No.

MR. FRITZ: No. That is right. That is \$200 million between now and 2023, and that will get us out of the project.

CHAIRMAN HETTEL: Does that include the \$75 million reduction you told us about at the March meeting in Chattanooga [Inland Waterways Users Board Meeting No. 86 was held in Chattanooga, Tennessee on March 1, 2018]?

MR. FRITZ: Yes, sir. That includes that reduction. We still need \$200 million to get to project completion.

CHAIRMAN HETTEL: That \$200 million – it would have been \$275 million had you not reduced the cost by \$75 million?

MR. FRITZ: Yes sir. I made an error in that \$275 million figure. I didn't account for -- it was actually \$261 million. I made a mistake in that number. That should have been \$298 million.

CHAIRMAN HETTEL: We are not going to give it back to you.

MR. FRITZ: That is all right. We are good. We revisited that recently, and that is what we need. We need \$200 million to get out of the project. I have a slide that lays out that glide path if you want to see that at the end.

Next slide. This is the Lower Monongahela River project schedule. There are no changes in the schedule. This is just a schedule update. Nothing has changed since the last Users Board meeting.

Next slide. This is our earned value slide. As I reported here in the past, we report this two different ways. We report it internally as the without contingency number, and that shows a Cost Performance Index of 0.95. When we use the expenditure number with contingency included, the Cost Performance Index it is reported as 1.01.

What this means is we are spending contingency when we are below the Cost Performance Index of one. If we include contingency in our project, if you have a Cost Performance Index over one, that means we are not using all of the contingency.

When we use the formula to calculate our total project estimate at completion, we are coming in at about \$1.2 billion. That reflects very well with our incremental calculation for that same estimate of completion. We are still about \$1.1 billion for that.

In the upper right corner of the slide I continue to show the schedule here as yellow because we were not included in the President's Budget. If we do not receive funding in 2019, 2020, 2021 or 2022, all these costs could go up. The total project cost could go up, because that funding risk does come into play at that point. Overall, that could add close to \$100 million to the project and take another three or four years to get it done.

The primary point is that if we stay on this efficient funding stream that we have right now, we will get out of the project on time and on budget. We will have the project operational in March of 2023. But if not, it depends on when funding comes. I talked already about what we plan on awarding this year, and we are on pace to do that.

As a matter of fact, this Friday we plan on opening up bids for the stilling basin contract in Pittsburgh. We will wait to see what that cost is or what the low bid is for that contract. That is estimated to be about a four-year contract, so that takes us into 2022.

Next slide. I can now open it up to any additional questions or comments you may have. You can see from these photographs how the project site is very congested. There are a lot of activities going on in a tight space. There is a lot to see at Charleroi, as you saw last May when you visited the day before your last Users Board meeting.

If there are any other questions, I will be happy to entertain those right now.

MR. MONAHAN: First off, I want to personally thank you for coming to these Users Board meetings. I think it is extremely important to receive these project updates, and I know it

they take time out of your busy schedule and I just want to say that I really appreciate your and the entire team's outstanding efforts.

MR. FRITZ: Thank you, Mike.

MR. MONAHAN: Secondly, for the members of Users Board and everyone in this room, I want you to know that Steve is doing an outstanding job for us in the Pittsburgh region. We have excellent communications and I think the working relationship is right where it needs to be, so thank you.

MR. FRITZ: Thank you, Mike. Thank you for your attention.

MR. POINTON: Thank you Mr. Fritz. Next up on the agenda is Mr. Adam Walker who will be giving us an update on the status of the Chickamauga Lock project on the Tennessee River. Mr. Walker is the project manager for the Chickamauga Lock project in the Nashville District.

MR. ADAM C. WALKER: Thank you Mr. Pointon. Good afternoon Assistant Secretary James, Chairman Hettel, Major General Spellmon, other distinguished board members, federal observers, and guests. As Mr. Pointon said I am Adam Walker, the project manager of Chickamauga Lock replacement project in Chattanooga, Tennessee.

Next slide. Bottom Line Up Front. I will be talking to you about the current work we have going on with the two active contracts, the lock excavation contract and the lock chamber construction contract, which are both progressing well.

The new total project cost estimate was just completed and certified in June of 2018. The total project cost estimate came in at a new fully funded price of \$757.7 million. That assumes a December of 2024 completion date.

I will also talk briefly about the Post-Authorization Change Report [also called a "PACR"] that we have ongoing through the review process at this time.

This is the Chickamauga Lock project overview slide. This slide shows all the previous work that was done at the project site, the current work underway, and the future work planned for the overall project. The boxes shown in gray are the completed works including the highway relocations, the cofferdam itself, and the pre-fabricated items, such as the miter gates, the culvert valves and the approach wall concrete beams that are currently stored at other TVA projects, waiting to be installed. The two yellow boxes show the active contracts, those being the lock excavation contract and the lock chamber construction contract. I will talk about those in a bit more detail in just a second. Then the final two boxes shown in red are the approach walls and decommissioning contract, which will be the last large contract on the project after the lock chamber contract is completed and the site restoration contract.

We are looking to award the approach walls and decommissioning contract in the September 2021 timeframe. The site restoration contract, we are looking to award that contract

in the September 2023 timeframe. The box shown here at the Chickamauga project site is shown, and then there will be two others at the other sites to restore those back to their original configuration.

This next slide is a photograph of the project site, taken from the dam looking downstream into the cofferdam work area where the lock excavation work is now underway. In the lower left hand corner of that slide, you can see the total cost of that contract. The lock excavation contract is now coming in right at \$34.9 million, including all the contract modifications that we have done. This lock excavation contract is scheduled to be completed in November 2018. This contract pretty well consists of all the rock excavation that is needed for the project. There will be some left over in the lock chamber contract. But primarily, this is preparing the site for concrete placements in that follow-on contract. You can see here, the footprint of the new lock -- this elevated platform in the middle, that is the finished floor elevation for the new lock chamber. It is a natural rock floor. Along the two sides, you can see the footprints of where the monoliths will be located, so it is really starting to take shape.

Next slide. This is a picture of the lock chamber construction contract. This multi-colored diagram indicates the different work that will be done by the various options in the lock chamber construction contract. Again, the total value of the contract when you take into account the base contract and all 13 options is \$240 million. The contract was awarded last year, in September 2017. As we stand today, we have awarded the base contract and option number one. Option number one was exercised in July of this year. The current value of this contract is \$54.8 million. The work currently underway is scheduled to be completed by March of 2019.

Every time we award another option on that contract, it will increase the total cost of the contract and push the contract completion date further out into the future. This contract option was awarded with the \$76.5 million in FY 2018 Work Plan funds we received.

We are also going to be exercising contract options two and three this year, but we had to do a contract modification to correct some concrete quantities that were kind of disproportionately allocated in the contract originally. It is a no-cost change of the contract, we are simply moving concrete quantities from one option to another. That was an error we discovered recently. Once that is done, we will be exercising options two and three in September with the possibility of also exercising option five. The catalyst for not making that determination yet is the potential unknowns for modifications or any claims that happen as we close out the lock excavation contract. That is what we are evaluating, but we will make the decision on that in the coming week or two so that if we want to pull the trigger on option five, we will do that as well in September.

For options two and three, the contract value is about \$30 million. Once we exercise those options, it will be about a \$30 million increase, added to this \$55 million cost figure. Option five is valued at right about \$11 million. So this is a lot of the work.

Next slide. This is a picture of the on-site concrete batch plant. It is primarily covered by the base contract, which is to construct an on-site concrete batch plant. This is the batch plant and it is pretty well operational at this point. They are actually doing checks this week to test all

the electrical and control components of this so that we can actually produce concrete. The plan for the contractor is actually setting up a demonstration day for our construction staff to go out and actually see the actual steps the contractor plans to go through as they start up that concrete batch plant before any kind of placement. By visiting the plant, they will be witnessing the processes that the contractor goes through to verify that we are all on the same page whenever we start placing concrete.

CHAIRMAN HETTEL: Mr. Walker, please go back to your previous slide for me for a minute. Option one, two, and three, what is the total cost of those three options?

MR. WALKER: Option one's contract value is right about \$26 million. Options two and three combined are about \$30 million.

CHAIRMAN HETTEL: So that is \$56 million between those three options?

MR. WALKER: Correct.

CHAIRMAN HETTEL: And when is option four going to be awarded?

MR. WALKER: It would be awarded when we get additional funding.

CHAIRMAN HETTEL: Okay.

MR. WALKER: Hopefully in FY 2019.

CHAIRMAN HETTEL: You received \$76.5 million in FY 2018 Work Plan funding for \$56 million worth of contract. Is the other \$20 million S&A and E&DC?

MR. WALKER: We have S&A and E&DC for this contract, as well as the lock excavation contract that is already going on as well. Any modifications that are happening with that contract used some of that money, and then the remainder would be for S&A for this contract as well as contingencies. Yes, sir.

CHAIRMAN HETTEL: Does that \$20 million include the completion of all 13 options of the lock contract?

MR. WALKER: I am sorry. What money did you say?

CHAIRMAN HETTEL: Don't you have the \$20 million difference between the \$76.5 million that you received from the FY 2018 Work Plan and the \$56 million for these three options; that \$20 million difference, is that entirely for S&A and E&DC? Is that \$20 million through all of the options of the lock construction contract or just through this year?

MR. WALKER: No, sir. It would just be for the awarded work that we have in the Work Plan. If we ask for money for options one, two, and three, for instance, that budget request

would include the required S&A and engineering support that is needed for that specific scope of work.

CHAIRMAN HETTEL: Is that \$20 million for S&A and E&DC for one year?

MR. WALKER: No, sir. That would be the S&A and E&DC for this work, in addition to the lock excavation contract that is already underway, as well as some stated contingencies for those contract options.

CHAIRMAN HETTEL: Does that include all the options of the lock construction contract – the \$240 million contract?

MR. WALKER: It would include all the options that have been exercised at this point in time. Each additional budget request would include the additional needed S&A and E&DC funds.

CHAIRMAN HETTEL: Is that \$20 million a year, or what is that number?

MR. WALKER: It is not \$20 million a year. There are contingencies rolled into that number as well. For our contract right now, our new total project cost estimate, based upon our risk register that we developed amounts to about 13 percent for contingencies, which is what we are budgeting for this work. That number is also in that \$20 million figure you are looking at.

CHAIRMAN HETTEL: Again, going back to what we talked about earlier during the discussion on contingencies and how the Corps accounts for contingencies in their project cost estimating. To be able to define to us what is in that contingency, I think, is important. I understand you need contract administration support, and engineering and design support during construction, all of the above.

What I am trying to figure out is what is included in that extra \$20 million that you have got that isn't going into building the lock. How much money would you need each year going out to completion? That is what I would like to see on S&A and E&DC and contingency.

MR. WALKER: Right. To address your question concerning the specific numbers. Options one, two, three total up to be about \$55 million. We are calculating a little over \$5.5 million for administration of that contract work. Then 13 percent would be added for contingencies, which that number calculates out to be a little over \$7 million.

CHAIRMAN HETTEL: And that contingency is for what? Contract modifications?

MR. WALKER: So that amount adds up to about \$68 million, and we received \$76.5 million. We needed some money just to cover contract modifications on the previous lock excavation contract because we did not have contingency in hand for that contract. Then the delta would be used to cover the potential exercising of option five, which is what I mentioned earlier, depending on how the modifications work out for that lock excavation contract. We

would be utilizing some of those funds to exercise option five, which the contract value for option five is around \$11 million.

CHAIRMAN HETTEL: I am just more confused, but thank you anyhow, Adam.

MR. WALKER: I understand. The math does get confusing, particularly when you don't have it on screen to look at, but I can certainly meet with you afterward to talk about it more.

CHAIRMAN HETTEL: That would be great for the next meeting. I appreciate it.

MR. WALKER: If there are no further questions on the construction photos of progress, I will attempt to talk about the total project cost estimate that was certified in June of this year.

Next slide. I believe at the last Users Board meeting, which unfortunately I was unable to attend, this slide was presented where we have the large features of our project cost estimate broken out by category. You can see the different cost columns going across the top of the table as the amount "spent through September 30, 2017;" "remaining cost;" "contingency amount;" and "fully funded amount." This table includes an additional column where we have done a simple addition or subtraction from the 2016 estimate to the 2018 estimate. On the table is it the column labeled "change in fully funded amount since 2016." I will make a note that I did not do the conversion for cost level increase. There is a one-year cost increase between FY 2016 to FY 2017, which is not accounted for in these numbers.

If you do the math, this is the new fully funded project cost estimate number that I mentioned earlier, the \$757.7 million. That is in FY 2018 dollars. If you were to escalate the old FY 2016 project cost estimate up to the same price level, it comes out to be about \$760 million. Really, in an apples to apples comparison, this new, fully funded number is about \$2.3 million lower than it was certified two years ago.

There are a couple of big ticket changes here which I want to talk about for a minute. First, for this line titled "Planning, Engineering and Design,, the feature code 30 as we call it, there is about a \$12 million uptick. There are a variety of things that went into that. We actually did, as part of this update, an actual on-site assessment of what our needs would be for S&A and E&DC, where previously we would simply use rules of thumb to calculate it based on a percentage. That actually resulted in about a \$2 million increase in this line item, as well as about a \$2 million increase in the construction amount, so about a \$4 million total on the overall project cost. The sunk cost actually increased from actual sunk cost and that occurred during FY 2016 and FY 2017. That number went up about \$3 million because of that. The real change happened because during a review of our previously sunk cost analysis, we identified that we had misclassified about \$3 million that had been previously called out here on line item 05 "locks." We corrected that and brought it down into the line item 30 series, the "Planning, Engineering and Design." There were some costs that we had not previously accounted for in the sunk cost, primarily from the early days of the project back during the Investigation phase. We have corrected all of those and included that into the sunk cost column here. That accounts for the \$12 million in what we are reporting, but essentially, it is about a \$2 million increase in actual cost increase, based on the analysis from this cost estimate.

Again, the negative \$9 million cost figure here, on line item 19, “Buildings, Grounds and Utilities,” those are primarily the costs associated with the operations building that is being constructed for the new lock as well as the control stands. Those have been previously categorized in this “Building and Grounds” feature code, but since that is included in one of the options for the lock chamber contract, it is actually getting captured in this line item 05 series now. These costs are not gone; they just moved to this category up here.

As I said, the end result of the fully funded number didn't change dramatically over the last two years, but it did have some shifting and a lot of variables. There are a lot of moving parts when you start looking at these cost estimates.

Are there any specific questions that anyone has about the new cost estimate that I can try to address before I move to the next slide?

This slide shows the cost sensitivity of the 2018 total project cost estimate. This slide actually goes back to a lot of the discussion during Mr. Durrett's presentation on contingencies. When we do our risk assessment as part of this project cost update effort every two years, we do a sensitivity analysis to see what risk drivers are actually causing our contingencies or what factors are driving our contingency numbers.

In the last update, you will recall funding was a big risk driving force. I think that number was around the 66 percent range. As was talked about earlier, we have gotten efficient funding for the last few years. Our confidence level in that funding has improved, relative to the confidence that we have in potential contract modifications and claims. As a result, the sensitivity analysis bears this out that now the risk driver for our contingency numbers is primarily driven from this construction uncertainty, or 57.8 percent specifically.

That falls in line with what Mr. Durrett was saying earlier. As we continue working on these projects, and have a history of more and more funding coming in an efficient manner, our confidence levels do change and that helps drive our contingency numbers for future updates.

CHAIRMAN HETTEL: Adam. Help me understand that 57.8 percent. As Mr. Durrett was saying, for example, and using round numbers, let's say you need \$100 million next year. Is 57.8 percent of that is contingency due to your risk of funding? You say your contingency went down from 63.1 to the 57.8 percent.

MR. WALKER: This percentage is just a relative scale of how the sensitivity reacts to different risk drivers. When we do this risk analysis, we will look at a risk item, and using knowledge from our Engineering staff or expert elicitation, we will try to bookend the high and low ends that we expect that might have an effect on our project. Then that runs into the analysis. As it bears out, the risk driver for our state of contingency is driven from a proportional standpoint. Fifty-seven percent of that contingency is tied to Construction Modifications, Construction Claims and Value Engineering studies.

CHAIRMAN HETTEL: Okay.

MR. WALKER: The second highest risk driver is funding and the awarding of contracts. I think the point of this slide is, the last time we showed this slide, funding was our number one risk driver from a sensitivity standpoint, and it was up in the 67 or so percent range.

This illustrates the fact that, as we move forward with this two more years of efficient funding, it has allowed us to have more confidence in funding being there when we need it. As a result, the risk contingency that we have calculated is more driven by the construction modifications and the unknowns, because we are still working in a karstic limestone environment. Construction options two and three of the lock chamber construction contract are still subsurface geologic type construction. Thus we still have a lot risk there from the geologic conditions on site.

CHAIRMAN HETTEL: And you say your risk for contingencies associated with funding, as you reported in the last meeting, which was 63.1 percent, and now it has dropped down to 18.2 percent?

MR. WALKER: Again, that is on a relative scale amongst all the risk drivers that factor into our contingency calculations. That is how proportionally they affect that.

CHAIRMAN HETTEL: Okay. That big of a jump should reduce your annual funding request to completion, should it not?

MR. WALKER: It will be factored into that, certainly.

CHAIRMAN HETTEL: From 61 percent to 18 percent ought to reduce it?

MR. WALKER: Again, these percentages are not applied to the project cost. It is a relative scale amongst the contingencies that are calculated based on the range of contingencies. I think we are talking on slightly different wavelengths, I believe.

CHAIRMAN HETTEL: I am simply looking at your funding from contingency from the last Users Board meeting was 63.1 percent. Funding this meeting is 18.2 percent. That is a big drop in your risk for annual funding.

MR. WALKER: Again, that is a relative calculation of how much influence the funding risk has on our contingencies. There is still risk there, but the main driver of that risk to develop our contingency amount is now construction-related and not funding-related.

MR. WOODRUFF: The question you [Mr. Hettel] are trying to get to is how big the pie is, and he [Mr. Walker] is talking about how big each slice is.

CHAIRMAN HETTEL: I am simply trying to figure out how to get the pie smaller.

MR. WALKER: The contingency that is included in the new total project cost estimate -- if we go back to this slide, is now \$91 million. That is our state of contingency for the

Chickamauga project, moving forward from today to completion. I believe that number was \$128 million in the last certified total project cost estimate.

CHAIRMAN HETTEL: Yes, it was.

MR. WALKER: So there was a reduction in the contingency amount for the project.

CHAIRMAN HETTEL: It dropped down from \$128 million to about \$91 million, which means your out year funding should be a little bit less to completion.

MR. WALKER: The contingency portion of our budget request would drop down. Any other cost increases that we might incur would obviously increase it. But yes, sir. You are correct. The contingency portion of the budget request will be going down, or has gone down over this two-year cycle.

Next slide. This slide is the Time and Cost Scorecard for the project. In the upper left hand corner of the slide, you can see the expenditures as of June 30th. We are tracking pretty closely with our actual expenditures as compared to our planned expenditures and our earned expenditures, so we are pretty well burning at the planned rate that we had expected to. The new total project cost estimate did result in a new project cost and schedule risk analysis, so we are now showing a project completion date with efficient funding of December 2024 and our lock operational, our current best estimate would be September of 2023.

That happens in our follow-on contract with the lock approach walls and decommissioning contract. The scope of that contract includes the actual breaching of the dam and the cofferdam, so there is a little bit of fluctuation in that number. It may change as we start developing that set of plans and specifications. Again, that is planned for award in September of 2021, so it is still a few years away.

CHAIRMAN HETTEL: This is an easy question. This slide was not in our read ahead materials, was it?

MR. WALKER: No sir, it was not in the pre-brief materials. The S curve slide which I will show next has a lot of the same information.

CHAIRMAN HETTEL: To me this slide is easier to read than this slide. Would you be so kind as to forward that slide to Mr. Pointon so that he may distribute it to the members of the Board?

MR. POINTON: We will send them out, yes sir.

CHAIRMAN HETTEL: Thank you.

MR. WALKER: It is in the current slide deck, so we can resend the slide deck.

CHAIRMAN HETTEL: My request is continue with this slide in our future meetings. Thank you.

MR. WALKER: We can do that, sir. Continuing to look at the Major Activities Schedule which is shown in the lower right hand corner of the slide. I want to note that the actual dates came through the certified cost estimate that we have been tracking for a while, actually happened on June 21st.

The Post Authorization Change Report, or PACR was approved by our USACE headquarters level and the Director of Civil Works produced his report on July 19th.

At that point, we were able to notify Congress with the intent of having a Post Authorization Change Report going up to them, so they were made aware of it. We are not sure if the Post Authorization Change Report has made it into any type of Water Resources Development Act legislative language, and we are anxiously awaiting to see if that happens.

The PACR is still under review. It is currently at the Assistant Secretary's office under review, and we will continue that review on parallel path. Congress was notified of the intent for us to have a reauthorization request for the Chickamauga Lock project as of July 20th.

Again, the last line there, the item that reads "Lock Chamber – Base and Option number 1", that is the current contract completion date for the base contract and option number one. The current scheduled completion date is March 18, 2019.

If we exercise options two and three, that completion date will be extended out to November 2019. As I said earlier, every time we exercise a contract option, that will extend the completion date further out.

Next slide. This is the Chickamauga Lock Replacement Project S Curve slide. The actual, planned and earned values are here and they are graphed along this chart, and you can see we are tracking closely to what we had planned. We have not updated this slide, as far as the Section 902 limit. We are waiting for the hopeful reauthorization to be included in the Water Resources Development Act of 2018. We will update this slide if that occurs.

Next slide. This slide show the Chickamauga Lock project schedule. The red indicates revised dates from the previous report. Again, we have updated the contract completion date based on our best guess of when the lock chamber construction contract options would be exercised. That contract will be completed in May 2023. Again, we have combined the approach walls and decommissioning contract into a single contract so that changed some of the award and completion dates. We are now looking at a contract award in September 2021 for that contract, and a scheduled completion date of December 2024. But as I said earlier, the operational date of the lock would be sometime in 2023, most likely September. And then we have one more follow up contract action with one final site restoration contract that would be awarded in September 2023 and scheduled completion date of December 2024.

Next slide. In summary, we are still moving forward with lock excavation in a karstic limestone geology environment, which carries with it a high risk of uncertainty due to the site geology, so we still have a potential for some changes there.

The lock chamber is ramping up with the additional work plan funding, so we will be continuing that. Efficient funding is needed on an annual basis to make sure that is a viable contract moving forward and we don't have to go through the process of re-soliciting and repackaging any unexercised options.

I mentioned the Post Authorization Change Report was approved by Headquarters last month, and we are in the process of working that through the Office of the Assistant Secretary and the Office of Management and Budget review processes.

The last point I want to make is that the allocations are projected to reach the 902 limit in Fiscal Year 2020 timeframe with efficient annual funding. We are still a couple years out on that, but the idea was to get the authorization taken care of in a WRDA 2018 in plenty of time so that we don't have any scares of a potential slowdown in a few years.

With that, that concludes my presentation and I would be happy to answer any questions or comments that you may have.

MR. POINTON: Are there any additional questions for Mr. Walker. Hearing none, thank you very much Adam. Greatly appreciate your presentation. Thank you.

Next up on the agenda is Mr. Don Getty who will provide us with an update on the Kentucky Lock project. Mr. Getty is the project manager for the Kentucky Lock project in the Nashville District. Mr. Getty will also be leading the site visit and tour of the Kentucky Lock project site that we will be conducting tomorrow. Mr. Getty, please proceed when you are ready. Thank you.

MR. DON B. GETTY: Good afternoon Assistant Secretary James, General Spellmon, Chairman Hettel, other Board members and other attendees. My name is Don Getty. As Mark has already mentioned I am the project manager for the Kentucky Lock project, and I work for the Nashville District of the Corps of Engineers. It is my privilege to give you an update on the Kentucky Lock project this afternoon.

Next slide. Bottom Line Up Front. There are three big activities going on in the project. First is our ongoing construction at the project site. Hopefully, you will get to see that tomorrow, the downstream cofferdam. Second, our next big contract, the Downstream Lock Excavation contract, is out for advertisement now. We have a bid opening next week and that is on track for award by the end of the fiscal year [September 30, 2018]. The downstream lock excavation, I will talk about that a little bit later. And third, I will give you an update on the economics and the cost of the project, and I will update you on the progress of our Post Authorization Change Report.

Next slide. This is an overview of the Kentucky Lock project, similar to Mr. Walker's slide on the Chickamauga Lock project, showing the past, ongoing, and future major construction contracts. The gray boxes show contracts that have been already been completed. The two ongoing contracts are shown in the yellow boxes, those being the big downstream cofferdam contract and a smaller site, demolition and utilities contract. It is a small contract, but an important one, and you will see some elements of that. We are mainly rerouting some utilities on the project site. In the red boxes are our future contracts, including the downstream lock excavation contract, the downstream lock monoliths contract and the approach walls contract, and I will talk a little bit more about those in a few minutes.

Next slide. This is an overview of our ongoing downstream cofferdam contract. The awarded amount was \$67 million. The current contract amount is \$1.6 million lower than that because of the Value Engineering change proposal that we implemented on that contract. The contract has a scheduled completion date of March 2020. That completion date got pushed out because of high water this year, and I think Mr. Durrett mentioned that. But that is the nature of our business, and that is why it got pushed out.

Next slide. This is the plan view of the downstream cofferdam. I wanted to give you a little bit more information on it so you can understand what you will see tomorrow. We are looking down on it. This cofferdam is unusual because most cofferdams are temporary in nature and you demolish them.

This cofferdam is temporary in nature, but what you see outlined in red, those are ten concrete monoliths that will be incorporated into the future lockwall, and therefore, will not be demolished. It saves us the cost of that demolition as we are able to incorporate it into the future lockwall.

It is a more expensive cofferdam, but it saves money in the long-term. Plus it has less impacts on the existing lock while we are building it.

When we designed this in 2003, we thought we were going to close the lock for three months. We put the contract out. We came up with a way we could close for just 30 days. Now with incentives it looks like we are going to keep the lock closure down to about ten days while we construct the cofferdam. So that is a very good news story on our progression of designing these types of projects.

Next slide. I want to go over those ten squares, our ten monoliths that we call them, and show you how we are building them. Adam, I might need you on this to get this animation going.

This is a 3-D animation if Adam can make this work: there it is. What we have here is one of these boxes going in place. What we do is we cast these big concrete boxes on barges, and then we lift them off the barge with this big gantry crane.

This concrete box is about 45-feet wide, 50-feet long, and 33-feet tall. It weighs about 1.3 million pounds. The walls are about a foot-thick concrete, open at the bottom and open at the

top. We lift the box off this barge with this special gantry crane designed specifically for this project, very similar to what they did at the Olmsted project.

There you can see we are putting in these four spuds. This has never been done before in the world that we are aware of. When we lower this box onto this prepared foundation in the river, it is going to rest on those four spuds. Those four spuds are adjustable because we are not - even though in some areas we have a prepared foundation, we are mainly putting it down on an uneven rock surface.

By having these adjustable spuds, we can adjust for that uneven rock surface. I believe the next animation shows you how we can adjust those spuds. When you go out there tomorrow, you will see the first shell we set and how we can adjust those spuds. They actually have jacks on each of the four spuds. We can adjust those spuds as we are setting the shell down to match the river bed.

The cross section, if you look in sideways, we place sandbags around the bottom to seal the bottom of it. It is an open bottom, and then we are going to fill the bottom up with what we call tremie concrete. That concrete is placed below the water, that seals it, and it allows us to pump the water out. Then we fill the rest of the box with concrete. It is a stay-in-place concrete form.

Then we remove the spuds, and we go on to the next step, and repeat this ten times. And you can see how low it is. We actually take concrete all the way to the top of the wall here. We actually take concrete from here on up. That is just typical cast and place concrete. I believe that is end of video.

Next slide. We actually set the first box, and this is a sequence of pictures of how we did that. The upper left-hand side is a 3-D rendering. This happened from August 2nd through August 6th, so earlier this month. It was supposed to be a two-day operation that turned into a five-day operation, so things did not go smoothly, which is somewhat to be expected. This is the first time we have ever done this. The biggest issue we had were the strand jacks.

This gantry crane has four strands jacks, you can see them here -- that lift the shell up. We had problems with those that delayed us, probably, for two-and-a-half days of that five-day period.

But even though we had a lot of obstacles, the team overcame them all. There are lessons to be learned. We won't be repeating those same errors again, so it is going to go smoother the next time. We will get better as we go along. Nothing cannot be overcome. I think that is an important point to remember.

CHAIRMAN HETTEL: I don't suppose you could have used the same strand jacks that they had at Olmsted?

MR. GETTY: I don't know if they could have or not. Remember, we were issuing a firm, fixed-price contract. If our contractor wanted to go out and get those strand jacks, he could have. He went out and developed the lowest cost alternative to him.

In hindsight, maybe he should have, but they went to a subcontractor and got these, so it wouldn't have saved us any money, I don't think. Strand jacks, actually, there aren't too many companies that make them.

And when we have problems with them – they already had one guy on-site. They flew another guy in from Switzerland. They rebuilt all four strand jacks. We have used them since then, and they work well.

Anyway, you can see the sequence of pictures, we are lifting the shell off the barge. You can see a gap here. We just now transferred all that 1.3 million pounds from the barge to the gantry crane.

Here we are moving the gantry crane into place, so this is the final resting point. Here is another close-up shot where they are getting it close to the lockwall, so we are getting flush, almost, to this lockwall.

This is after five days. Five minutes before midnight, we finally got it set. It was a success.

This is what it looked like the next day. This is what you will see when you go out there tomorrow. Not only did it take us five days, but we also had issues in that when we didn't ultimately place it exactly where we wanted it to go. It was about seven inches off in this corner, and that for two reasons.

One is our survey methods were not quite up to snuff for this activity. And we had a geological problem. We already mentioned geology here today, and one of our spuds came down in an interface where we place concrete and rock, and it actually moved.

We had to pick that box up again and move it back into position. We did that a week ago today, last Tuesday. It does show you that we have the flexibility to make those adjustments in this. It is no cost to the government; this is the contractor's issue.

It may have some schedule impacts. This was not a critical path activity, so it shouldn't have much impact on the overall schedule of the project. But, we are doing stuff that has never been done before in the world that we believe.

Now, we are using similar concepts that Olmsted has used and that Chickamauga is actually using, but nobody has done it exactly like this. The geology, again, is something that is a challenge every time we go forward. When you go out there tomorrow, we are in the process of putting the sandbags around the bottom of the shell now, and that will provide the seal so we can place concrete inside of it and create a water seal.

We will not be placing that first placement of tremie concrete until next week, so you won't see that. But you will see these large sandbags that – we are using cranes and divers to position around the shell.

Next slide. For what we call the downstream lock excavation contract, we are about to open bids on this contract. It is very similar to Chickamauga's lock excavation contract in that we are trying to excavate out the area to get it ready to place concrete for the rest of the lock.

We built upstream 15 percent of the lock. Now we want to clear the way for the downstream 85 percent. That is what this contract does. It is going to be a base contract with 12 options. I gave you some information about the contract on the slide. You can see it on the screen.

We try to gear it to break these options up to give us as much financial flexibility or funding flexibility as we can. You can see, again, the bid opening is scheduled to take place next week on September 6th.

Next slide. This is a picture of a unit from Fort Campbell transiting the lock on the way down to Louisiana this past February. This picture shows our downstream cofferdam construction during high water, and the units from Fort Campbell on the left. They had two 15 barge tows that came through. I think that the analysis that they did was really interesting, and their analysis of moving this equipment by rail versus barge. They think they can save about \$1 million per roundtrip and save about ten days roundtrip when they move this equipment and materiel versus rail.

It makes sense because it takes -- they can only fit about two of those vehicles per rail car, and it takes a long time to load those versus this is like driving on a ferry. They don't have to tie the vehicles down.

This was back in February. Just a couple of weeks ago, they had three 15 barge tows that came through on a similar roundtrip movement. I think it is a good news story. I think it tells the power of our waterways, so that is why I wanted to show it to you. Maybe you can share this story with other folks as well.

Next slide. This is our time and cost scorecard. We are looking green on our metrics. We are still pretty early on this, but we are tracking pretty close to what is planned, both on schedule and budget.

CHAIRMAN HETTEL: I would request that this slide also be sent to Mr. Pointon so that he may send it out to the members of the Users Board.

MR. GETTY: Yes sir, will do.

CHAIRMAN HETTEL: Thank you.

MR. GETTY: I have some changes to the project schedule. They are reflected in my second to last slide. I was going to go over those in a little bit more detail in the end.

Next slide. This is our S curve slide that has some of the same information as the previous slide. One thing it has that the other slide didn't have is it shows you where we fall on our project contingencies. It shows you that we are following going downwards instead of upwards, so we have not gone into any of our project contingencies yet. I think that is a powerful slide from that standpoint.

Next slide. This is the Kentucky Lock project schedule slide. The dates in red have changed since the last report. I mentioned high water pushed us out here. The downstream lock excavation, a refined schedule analysis pushed that date out. And we have slipped our economic update and our Post Authorization Change Report or "PACR" dates.

The reason we slipped that is because we are about to embark in our two-year cycle of a total project cost estimate. As soon as we have a bid opening on September 6th for the downstream lock excavation contract, we are going to start that, and our total project cost is going to change.

We have some lessons learned from Chickamauga. They came out with their PACR right before they came out with the total project cost estimate and, through the review process, they had to revise their report. So, we are going to wait until this total project cost estimate is done before we finish our economic updates. These are the dates that follow out from that. Once we incorporate those new costs into the economic update, this is where we expect those to be. And this is the date we expect to send our PACR up to Headquarters for approval.

CHAIRMAN HETTEL: Don, help me understand the difference between your cost estimate and what you just went through last year when you learned that the project cost would increase by \$396 million.

MR. GETTY: Last year was the first time we ever did a risk-based cost estimate, period. We produced a cost estimate with an 80 percent confidence level, which we had never done before, which is, by definition, it was a conservative cost estimate. Now, we are on the two-year cycle of updating that. It will still be a risk-based cost estimate, but it should not have that radical change like the last one had, because we went through such a radical change in our methodology for that cost estimate.

CHAIRMAN HETTEL: So you are doing another -- that is the same cost estimate you are talking about doing again that you did -- that produced the \$396 million cost increase?

MR. GETTY: Well, I wouldn't characterize it that way. I would hope that our project cost estimate would go down, but we don't know that. The biggest change we have had since our last cost estimate is the bid opening that we are going to hold next week, and we are waiting for the results of that bid opening to come out. We ought to have a much better handle on our future costs over the next two years after we find out what the results of that bid opening.

CHAIRMAN HETTEL: Okay.

MR. GETTY: Next slide. In summary, overall things are going well. You have heard we have had some challenges with our downstream cofferdam, but we are overcoming those. Our traffic levels at Kentucky Lock are very healthy. Coal is going down. We have a lot of those things going up at Kentucky Lock. Mr. Earl [Users Board member Mr. David Earl from the Marathon Petroleum Company] is shipping a lot of gasoline and diesel through Kentucky Lock, which is certainly helping. And we are on track for a bid opening and award of the downstream lock excavation by the end of this fiscal year.

Subject to your questions or additional comments, that concludes my presentation. Thank you very much for your attention and I look forward to seeing you and hope you can join us on our tour of the Kentucky Lock project tomorrow.

MR. POINTON: Are there any additional questions for Don at this time? Hearing none, thank you Don. Very good presentation. Thank you, Mr. Getty.

MR. GETTY: Thank you.

MR. POINTON: Next on the program is the public comment period of the meeting. One individual, Mr. Jim Stark from the Gulf Intracoastal Canal Association has requested time to make a public comment. Jim, would you still want to make a public comment, or do you feel your remarks from earlier in the meeting will suffice?

MR. STARK: Mr. Pointon, I think the discussion we had earlier during the meeting on the Brazos River and Colorado Locks study and the ongoing work at Calcasieu Lock with the discussion of the importance of the movement of high value cargoes on the GIWW and the incorporation of the issues raised by the navigation users and stakeholders along the GIWW and the additional information provided members of this advisory Board this afternoon sufficiently conveyed my comments and concerns. Thank you again for the opportunity to raise this issues.

MR. POINTON: Very good. Thank you, Mr. Stark. Before turning the microphone over to General Spellmon and Chairman Hettel I would like to offer my personal thanks Ms. Joanne Mann from the Nashville District, Jack Sweeney from the Great Lakes and Ohio River Division, and Don Getty and Adam Walker from the Nashville District for helping out and getting everything set up here.

Without further delay I would now like to turn the microphone to General Spellmon for his concluding remarks.

MAJOR GENERAL SPELLMON: Thanks, Mark. Just a couple items. For me, this was a very good afternoon and investment of time. I just want to thank, again, the presenters who prepared the information briefs. I know, as we stated, some of you had to travel some distance to be here with us. Again, for me personally, this meeting was very, very informative. I also want to say I greatly appreciate the engagement by the Board and the questions that each of you have asked.

I found the questions and discussion particularly helpful for someone who doesn't have all the history on some of these projects. You have given us a lot to consider here. I took a page full of notes, but really, I should say more questions than notes for our internal team.

Again, Chairman Hettel and to all the Board members, I want to thank you for pushing us on a number of topics. Mark, I will follow up with you on a number of these issues. I am sure we have captured all the due-outs and a number of questions the Board has asked us to take on and follow up. Let me just leave it there. Mr. Chairman.

CHAIRMAN HETTEL: Well, thank you General and Mr. Secretary. I hope this was enlightening for you. We appreciate you being here, and, again, we look forward to your tenure as the Deputy Commanding General for Civil Works and Emergency Operations. The most important due-out I can think of for our next meeting is your funding requests going forward for the Lower Monongahela River project, Kentucky Lock, Chickamauga Lock, and the LaGrange Lock major rehabilitation project. We need to start working in the first half of December on our Annual Report, due to Congress and to the Assistant Secretary, so that is one of the real important things that we need for our next meeting, is your funding numbers.

MR. POINTON: Efficient funding for those ongoing construction projects.

CHAIRMAN HETTEL: Your funding numbers for next meeting. I am not going to label them efficient numbers. That is all I have. Would any of the other Board members care to make a comment? Hearing none, I will turn the microphone over to you Mr. Pointon.

MR. POINTON: Okay great. Can I have a motion to adjourn the meeting?

MR. WOODRUFF: So moved.

MR. POINTON: Thank you Mr. Woodruff. Can I have a second?

MR. MONAHAN: Second.

MR. POINTON: I have a motion to adjourn the meeting. Can I have a vote? All in favor, please signify by saying "aye".

BOARD MEMBERS: Aye (unanimous).

MR. POINTON: Any "nays". Hearing none, I hereby declare the 88th Meeting of the Inland Waterways Users Board, held this day, the 28th day of August, in the city of Paducah, Kentucky, to be adjourned. Thank you very much everyone and safe travels and I look forward to seeing you at the 89th Meeting of the Inland Waterways Users Board.

(MEETING CONCLUDED AT 5:25 PM CST.)

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I do hereby certify that the foregoing transcript was taken on the date, and at the time and place set out on the Title page hereof; and that the said matter was recorded stenographically and mechanically by me and then reduced to typewritten form under my direction, and constitutes a true record of the transcript as taken, all to the best of my skill and ability. I certify that I am not a relative or employee of either counsel, and that I am in no way interested financially, directly or indirectly, in this action.

CHELSEA SEVILLA,
COURT REPORTER / NOTARY
MY COMMISSION EXPIRES ON: 06/16/2019