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Inland Waterways Users Board Meeting No. 98

Holiday Inn Resort Galveston on the Beach
Galveston, Texas

December 1, 2022

Minutes
Inland Waterways Users Board
Meeting No. 98
Holiday Inn Resort Galveston on the Beach – Paradise Room
Galveston, Texas

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The following proceedings are of the 98th Meeting of the Inland Waterways Users Board held on the 1st of December 2022, commencing at 9:00 a.m. This is the third meeting of the Inland Waterways Users Board held for 2022. Mr. Spencer Murphy, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present at the meeting included the following:

MR. MARTIN T. HETTEL, Board Member, American Commercial Barge Line LLC (ACBL).

MR. DAMON S. JUDD, Board Vice Chairman, Marquette Transportation Company LLC.

MR. W. SPENCER MURPHY, Board Chairman, Canal Barge Company, Inc. (CBC).

MR. LANCE M. RASE, Board Member, CGB Enterprises, Inc.

MR. ROBERT D. RICH, Board Member, Shaver Transportation Company.

MS. CRYSTAL D. TAYLOR, Board Member, Ingram Barge Company.

MR. JEFF WEBB, Board Member, Cargill, Inc., Cargo Carriers, Cargill Marine & Terminal.

MR. W. MATTHEW WOODRUFF, Board Member, Kirby Corporation.

Board Members not in attendance were MR. DAVID LOOMES of Continental Cement Company, MR. DENNIS OAKLEY of Bruce Oakley, Inc., and MR. TIMOTHY POWER of SCF Marine, Inc.

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

MR. JAIME A. PINKHAM, Principal Deputy, Office of the Assistant Secretary of the Army for Civil Works, Headquarters, Department of the Army, Washington, D.C.

MS. HEATHER GILBERT, Policy Advisor, Office of Coast Survey, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, Silver Spring, MD.

MS. TRETHA CHROMEY, Deputy Associate Maritime Administrator for Ports and Waterways, U.S. Department of Transportation, Maritime Administration (MARAD).

MR. RICHARD HENDERSON, Transportation Services Division, U.S. Department of Agriculture (USDA).

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:

MAJOR GENERAL (MG) WILLIAM H. GRAHAM, Users Board Executive Director and Deputy Commanding General for Civil and Emergency Operations, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

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

MR. THOMAS P. SMITH, Chief of Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

MR. STEVEN D. RILEY, Alternate Designated Federal Officers (ADFO), Inland Waterways Users Board, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, Virginia.

MR. DAVID A. FRANTZ, Inland Navigation Program Manager, Navigation Operations, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

Program speakers in scheduled order of appearance were as follows:

Mr. Mark R. Pointon, U.S. Army Corps of Engineers, Headquarters, Inland Waterways Users Board Designated Federal Officer (DFO) and Executive Secretary, Institute for Water Resources.

MG William H. Graham, U.S. Army Corps of Engineers, Headquarters, Users Board Executive Director and Deputy Commanding General for Civil and Emergency Operations.

Mr. W. Spencer Murphy, Chairman, Inland Waterways Users Board, Canal Barge Company.

Mr. David A. Frantz, U.S. Army Corps of Engineers, Headquarters, Navigation Operations Branch, Inland Navigation Program Manager.

Colonel Jesse T. Curry, U.S. Army Corps of Engineers, Rock Island District, Commander.

Mr. Jose R. Lopez, U.S. Army Corps of Engineers, St. Louis District, Program Manager.

Mr. James A. Bodron, U.S. Army Corps of Engineers, Mississippi Valley Division, SES, Regional Business Director.

Mr. Andrew R. Weber, U.S. Army Corps of Engineers, Galveston District, Program Manager.

Mr. Craig R. Pierce, U.S. Army Corps of Engineers, Little Rock District, Deputy District Engineer for Programs & Project Management.

Ms. Stephanie L. Hall, U.S. Army Corps of Engineers, Nashville District, Deputy District Engineer.

Mr. Stephen R. Fritz, U.S. Army Corps of Engineers, Pittsburgh District, Program Manager for Mega Projects.

Mr. Steven D. Riley, U.S. Army Corps of Engineers, Institute for Water Resources, Systems Manager and Alternate Designated Federal Officer (ADFO).

There were two public comments made during the public comment period of the meeting, and one written public comment submitted for the record. Public comments were provided by: Mr. Geir Kalhagen of the Texas Department of Transportation and Mr. Paul Dittman of the Gulf Intracoastal Canal Association (GICA).

PROCEEDINGS

Mr. Mark R. Pointon: It's not quite 9:00 o'clock, but we're going to convene the meeting right now.

I hope everyone had a great day yesterday. Other than the howling wind, I thought it was a fantastic trip that we had on the Gulf Intracoastal Waterway (GIWW), and the Brazos River Floodgates. My thanks go to Kirby for their hospitality. My thanks go to the Gulf Intracoastal Canal Association (GICA) for their hospitality yesterday.

Thank you, Paul.

My name is Mark Pointon; I think you all know me. I'm the Designated Federal Officer (DFO) for the Inland Waterways Users Board. Welcome to the 98th Meeting of the Inland Waterways Users Board. We've actually met here in Galveston; I think three or four times over the years. The last time we were here was in 2019, so, it's been about three years since we've been out here. I think maybe we'll be coming back little more with the focus on the Gulf Intracoastal Waterway (GIWW), and the Colorado River Locks and Brazos River Floodgates.

For the record, the Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. It provides the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterways system.

The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended. This is a Sunshine in The Government Act meeting and as such, it's open to the public and it looks like we've got a pretty good group here today.

The U.S. Army Corps of Engineers (Corps or USACE) is the sponsor of the Board and it provides for the Executive Director, which is General Graham and the DFO and all the normal activities, I am the DFO.

We have two requests to make public comments today. So, at the appropriate time in the agenda, hopefully, we'll be able to get those statements in. There are no statements for the record that were submitted, written statements for the record. A little different than our last meeting in Walla Walla; where that was – I mean, I've done a lot of Board meetings and that was overwhelmingly the most public comments and public statements that we've ever had. And that's a good thing; I don't mean that in a bad way.

Anybody here who wishes to make a public comment, let me know at the break, or just shoot me a little note here at the table and we'll go ahead and work you in as time permits at the public comment section at the end of the meeting.

We are recording the proceedings. We have our court reporter and our A/V folks over there. So, there will be a transcript. The transcript will be available after the meeting, and hopefully faster than I did it for the last meeting; so, that'll be available.

With that, I'd like to turn the mic over to General Graham. The "owl", I'm turning the owl over to General Graham.

Major General (MG) Butch Graham: Good morning, everybody. Thanks, everybody for joining us. I guess, first and foremost, we're going to see if we've got the slide formats all the same, going into this. So, Mark's been working on that, which is a long time overdue. We'll put that to a test today. Because, what we're wanting to focus today on is taking the information that's there to reach an understanding of how this industry and

federal government partnership is working to deliver this important transportation network to its country. And so, I look forward to a great day of transparency to see how we're doing.

Mr. Pointon: Comments from our Chairman.

Mr. Spencer Murphy: Good morning, and welcome to The Inland Waterways Users Board 98th Meeting. I want to thank the Galveston District for hosting the meeting and for working with Kirby yesterday to tour sort of, the key GIWW infrastructure that plays such a pivotal role in our nation's energy economy. I'm sorry I had to miss it, but my day job required me to be elsewhere. I also want to thank the Corps for their continued involvement and partnership in addressing the needs of the inland waterways.

This final meeting for 2022 represents a commitment fulfilled by General Graham to hold three meetings this year, as we are a newly reconstituted Board. We appreciate you and your team's commitments to the industry and to this Board.

Before I begin my statement, I have a little bit of housekeeping to do, which is, I'd like to announce project designations for the Board members who will work with our Corps partners to track progress on some of these key projects.

For Chickamauga Lock, it'll be Crystal Taylor with Ingram; for Kentucky Lock, Damon Judd, of Marquette; for the Upper Ohio, that'll be Marty Hettel, with ACBL (American Commercial Barge Line); NESP (Mississippi River – Illinois Water Navigation and Ecosystem Sustainability Program) will be Jeff Webb, with Cargill; Three Rivers and MKARNS (McClellan-Kerr Arkansas River Navigation System) is going to be Lance Rase with CGB; and the GIWW projects will be Matt Woodruff, with Kirby, although I'm going to retain an informal role over the IHNC (Inner Harbor Navigation Canal) Lock project.

Mr. Pointon: We can give you a formal one.

Mr. Murphy: That would be great, right. That would mean that it becomes a tier-one project, right?

So, now as an industry, we've recently successfully advocated for infrastructure investments and a water resources bill. We've worked to update the Capital investment Strategy and continue to advance the Board's mission by assisting federal decision makers. However, despite these policy successes, we have dealt with our fair share of adversity.

Cost overruns are a concern for many of our ongoing investments, and cost uncertainty is looming for future construction projects. This meeting is essential to help the Board identify those shortfalls and work toward the solutions that fully utilize the Inland Waterways Trust Fund while reducing construction timelines for large scale projects.

Since our last meeting, Congress has made significant progress on legislation to advance inland waterways projects. It's very encouraging to see Congress take these positive steps toward advancing our collective mission.

However, the Inland Waterways Trust Fund (IWTF) itself remains a focus for the Board. Over time, the exact timing and amounts of annual appropriations, expenditures, and remaining balances have yet to be well understood by many in this room, myself included.

Accurate accounting of trust fund expenditures is necessary moving forward. As stewards of taxpayer dollars, the Board believes the trust fund balance should never see $30 million. Full use of the trust fund is one of our key objectives.

For Fiscal Year (FY) 2024 appropriations, the Board asks The Corps to share funding capabilities as soon as possible to help us achieve this goal. As we've seen in the past, when the Corps and the industry are not on the same page, our efforts can sometimes work against each other, creating confusion at the policy level and at the expense of the inland system. Projects like NESP, the Upper Ohio, Brazos River Floodgates, Colorado River Locks; they're all ready to move forward with construction, but that's only going to be possible with open and candid lines of communication. As we move into the Fiscal Year 2024, the Board remains committed to this objective and to transparent communications.

Finally, a note about the challenges surrounding low water on the Mississippi and its tributaries. Those challenges continue to impact us today and they will for some time forward. Grain shipments have been particularly impacted. Dry cargo tows, including critical agricultural exports, have been reduced by up to 50 percent. Some grain elevators are full or are even unable to load barges and must turn away farmers grain due to insufficient water levels. All this coming at a time when the conflict in Ukraine means that the U.S. farmer is needed more than ever to feed the world.

However, the Corps has done a tremendous job keeping navigation channels open and finding creative ways to fund non-stop dredging operations. We have never lost our ability to operate on the rivers despite record low water conditions. It's a credit to the Corps' proactive work to identify dredging needs and mobilize into action. For this great work, we thank the Corps, including many leaders in this room, for your help in ensuring that our inland system remains a reliable mode for moving the nation's critical freight.

With that, I look forward to a productive meeting. And at this time, I would ask to open the floor to any Board members who might wish to make their own statement. Thanks.

Mr. Pointon: Any members wish to add on to Chairmen Murphy's comments? Seeing none. Great, thank you.

We're going to move in to opening remarks from our Federal observers. We're going to start with NOAA (National Oceanic and Atmospheric Administration), with Miss Heather Gilbert, who's a – maybe I can characterize you as a regular. So, you know, here for the Admiral.

Ms. Heather Gilbert: Thank you. Good morning, General Graham, Chairman Murphy, members of the Board, fellow observers, and staff. It's good to be here with you all today and thank you for yesterday's great tour on the Brazos River.

For the record, my name is Heather Gilbert. I'm here as a Federal observer to the Board, representing the National Oceanic and Atmospheric Administration (NOAA), and the National Ocean Service (NOS).

Rear Admiral Ben Evans, the Director of the Office of Coast Survey and a member of the Mississippi River Commission (MRC), sends his greeting and regrets that he is unable to attend today, and is hopeful he can attend the spring meeting.

This fall, a massive new dataset release will help maritime navigation become safer, easier, and more efficient. The data made possible through the Harmonized Waterway Project is part of an effort to synchronize identifiers, such as names and abbreviations for the rivers, bays, and maritime landmarks across all government agencies.

This dataset revolutionizes the delivery of critical Marine Safety Information (MSI) to mariners by: deconflicting and synchronizing names and abbreviations for rivers, bays and landmarks; it improves interagency coordination for enhanced waterways management; provides online access navigational information for U.S. waters; and provides a tool for waterway managers, planners, industry leaders and researchers to study and monitor national waterways with implications for the Marine Transportation System (MTS) supply chain, along with resilience and safety.

NOAA, the U.S. Coast Guard (USCG), and the Department of Homeland Security are contributors to this project. This was a project that was about five years in the making. So, seeing it through completion has been a great next step.

This leads me to the NOAA's transition to electronic navigational charts (ENC), which you've heard me mentioned before. We are on track to complete cancellation of all traditional NOAA paper charts and related raster products by January 2025. Of the 1,007 paper charts being maintained when the transition started in 2020, 211 have now been cancelled. Another 207 are in last-edition status and will be cancelled within the next six months. That leaves just under 60 percent of the charts -- 587 -- to be scheduled for cancellation at a rate of about 30 a month. Charts in the Houston and Galveston area have not yet been scheduled to become last-editions, but they could become cancelled as soon as June of 2023, or as late as November 2024.

Our Regional Navigation Manager, Dr. Quentin Stubbs, who is here with us today, has been working with the Army Corps and the U.S. Coast Guard, pilots, the ports, and facilities, to prepare local stakeholders for this transition from raster charts to the ENC viewers. Discussions have also occurred at the South and Southeast Texas Waterway Advisory Council (STWAC and SETWAC) meetings and Lone Star Harbor Safety Committee meetings, on how to utilize USACE tools like e-Hydro to help expedite chart updates regarding widening and the deepening of the ports, as well as subsequent amendments to channel framework.

Regarding upcoming hydrographic surveys, the NOAA ship, Thomas Jefferson, and our Navigation Response Teams (NRT) from Stennis are currently scheduled to conduct surveys in the Houston/Galveston area during the summer and fall of 2023. These surveys will be of great value as USACE continues deepening and widening of projects and continues to prepare for the Texas Coastal Barrier.

And now, I want to give you a quick update on the NOAA Physical Oceanographic Real-Time System or PORTS. As many of you are probably aware, our sensor data is invaluable, and is a support tool for the maritime community and is used daily by professional and recreational mariners to safely navigate constantly changing weather and water conditions. In the Gulf Intracoastal Waterway, a new side-looking current meter was installed at the Surfside Bridge just above Freeport Harbor, Texas. This new Freeport PORTS went live this past September.

And additionally, there is a current meter at Light 19, at the intersection of the Matagorda Ship Channel and this meter is a part of the Matagorda Bay PORTS.

And there are also several enhancements this past year to the Corpus Christi PORTS, which now include new current meters and seven visibility stations. The system serving Sabine Neches up to Port of Beaumont -- let me see how much I can butcher these names -- and Houston/Galveston, up to the upper ship channel remain operationally robust.

And lastly, outside of PORTS there are several operational National Water Level Observation Network (NWLON) and Texas Coastal Ocean Observing Network (TCOON) in tidally navigable waters along the Gulf Coast.

So, thank you, General, Chairman Murphy, and the Board, for this opportunity to provide my remarks at today's meeting. I look forward to the rest of today's meeting. And that concludes my remarks.

Mr. Pointon: Thank you, Heather.

Let's move to the U.S. Department of Agriculture, Richard Henderson.

Mr. Richard Henderson: Thank you, Chairman Murphy, General Graham, Board members, and other attendees at today's meeting. For the record, my name is Richard Henderson. It's an honor to be here today on behalf of the U.S. Department of Agriculture (USDA), along with my colleague Alexis Heyman. The USDA continues to acknowledge the importance of barge transportation to facilitate the export of large domestic shipments of agricultural related products and the need for continued construction and rehabilitation projects to maintaining and further transportation infrastructure.

In the marketing year 2021/22 the U.S. exported 135.6 million tons of grain, 25 percent of which was moved on barges on the Mississippi River. The Mississippi River barges move 30 percent of U.S. corn exports worth about $4.8 billion (18 million tons) and 25 percent of soybean exports, worth about $7.2 billion (14 million tons).

Farmers are now at or near complete with their corn and soybean harvests. This year's corn and soybean projection is projected down about six percent from last year, but on par with recent years. Transportation across multiple modes have been a challenge for U.S. farmers and shippers from poor rail service to limited barge capacity and high rates. USDA continues to monitor challenges affecting U.S. agriculture supplies, such as low water levels on the Mississippi River system and short- and long-term efforts to address the challenges, including construction projects of the inland waterways.

In recent weeks, barge rates for grain have fallen from their peak in October and grain shipments transiting the lock system and unloading in New Orleans have increased.

USDA is currently collaborating with the University of Arkansas to create interactive flow maps that use the Army Corps of Engineers Lock Performance Monitoring System (LPMS) and waterborne commerce statistics to provide visualization tools to analyze U.S. grain barge movement along the U.S. inland waterways system.

The USDA is also collaborating with the Ohio State University to develop an operational framework to evaluate the economic consequences of an inland waterways system failure, and resilient options that can help agricultural transportation and related businesses and supply chains recover more rapidly from disruption. The study specifically looks at the economic consequences of unexpected failures of Mississippi Lock #25 and Illinois Waterway LaGrange Lock.

Both studies are expected to be finished by spring of next year.

Thank you again for the opportunity to participate in today's meeting and for yesterday's tour of the Brazos River Floodgates.

Mr. Pointon: Thank you, Richard. Appreciate it.

Moving on, we have a newbie here, from the Maritime Administration (MARAD). She's the Deputy Associate Administrator for Ports and Waterways.

Ms. Tretha Chromey: Yes, sir.

Mr. Pointon: We have Bill Paape here typically, and he couldn't make it. So, Tretha is hopefully, ably, filling in for Bill.

Ms. Chromey: Ably. I like that. Thank you. Thank you very much.

So, again, thank you everyone. Thank you, General Graham, Chairmen Murphy, and to the Board. On behalf of Secretary Pete Buttigieg, Maritime Administrator to Admiral Philips, and I'm very happy to be here with you today.

As Mark pointed out, the Associate Administrator for Ports and Waterways, Bill Paape is typically the representative and I am participating on his behalf; he had to attend the Maritime Transportation System National Advisory Committee, known as MTSNAC, and was unable to join you today. He sends his regards.

Joining me today is Travis Black, he is our Inland Waterways Gateway Director, from Saint Louis. Travis, I hope you're back there. Yes, there he is back there [indicating in his direction].

And for introductions, as Mark pointed out, my name is Tretha, you can call me Tree -- it's also, that's fine. I joined MARAD as Deputy Associate Administrator for Ports and Waterways in October. I'm excited to return to MARAD and be part of the Ports and Waterways team that works with stakeholders like you to strengthen the U.S. marine transportation infrastructure.

We are poised to make significant progress in modernizing the maritime industry because of the historic $1.2 trillion investment made available by the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act -- the IIJA.

As many of you know, for the maritime industry, the BIL invests more than $17 billion in port infrastructure and waterways, and of that, the Maritime Administration is administering $2.25 billion to be awarded over the next five years through Port Infrastructure Development Program.

Just recently, the first year's projects were announced this past October with more than $703 million to fund 41 projects in 22 states and one territory. Of this, more than $58 million went to six projects supporting the inland waterways system.

Early in October, we also announced and awarded $39 million in American Marine Highway Program grants to 12 Marine Highway projects, and of that over $14 million went to five inland waterways system projects.

Currently, MARAD and the department are preparing their next round of notices of funding availability. This will lead to more success and opportunity for the maritime industry and the system itself.

Thank you for the opportunity to provide this short update and I'm thrilled to be here and join you today. Thanks.

Mr. Pointon: Thank you.

We have one more Federal observer. I believe this is his first Users Board meeting, we have Mr. Jaime Pinkham who is the Principal Deputy Assistant Secretary of the Army for Civil Works.

So, he's here representing Mr. Connor. Sir.

Mr. Jaime Pinkham: Thank you.

Chairman Murphy, and the Board, and General Graham, this is my first Users Board meeting, and I've been in this position as appointed a little over a year and a half ago. And I know one of the first tasks that landed on our desk was to reinvigorate this Board. And believe me, just in yesterday and last night's dinner conversation, there is value added. I was on the phone with Mike this morning, told him where I was at and he said, "Well remind them that they were one of my first visits and it was impactful."

We're about ready to pause to acknowledge Mike's first year on-the-job. And after his first 100 days, and after he visited with you, he huddled the leadership team and he said, "I want to come up with five focus areas to really advance the administration's agenda." And so, we did.

And those focus areas are supply chain, we need to strengthen the supply chain.

Number two, climate resiliency, we need to build systems that can withstand the changes that the environment is experiencing and what our communities are experiencing.

Number three, R&D (Research and Development). Boy, going down to ERDC (USACE Engineering Research and Development Center) will just blow you way. So, I encourage you if you haven't been to ERDC. What the Corps is investing with R&D is amazing, but we need to do more. The changes that we are experiencing, we need to have the research to keep up with those changes.

Another area was to modernize the Civil Works program so that no community gets left behind. So, building relationships and help other smaller communities. Where do we -- where does our vision align, or where does our mission align with their vision?

And the fifth area was around strengthening communications and partnerships. And if you think about it, three of those areas focus on the infrastructure itself. But two of them, just as important, focus on the strength and power of relationships and communications. And that's why this Board exists, is how do we strengthen the communications?

Mr. Chairman, you talked about the challenges that you're facing, and the importance of the trust fund. And how do we keep this trust fund and its purpose, and the needs that you're expressing, woven into those five focus areas, as well as the administration's agenda. And, you know, right now we recognize the challenges around the linkage in transportation systems with rail. But I'm really encouraged by the conversation that we've had yesterday about this other linkage that is just as vital out there, is what is transportation's role around comprehensive benefits. How can transportation help us respond to the changing climate conditions so that we can make communities stronger, make the environment--help rebuild the environment into naturally functioning systems. But also, the linkage that we have in communities that are looking for stronger voices, a stronger role in what navigation can support and bring back to their communities and align with their vision.

So, I want to thank you for -- I agree with Mike, his first visit was impactful. And I would say it mirrors the same with me. And I look forward to today's conversation.

Mr. Pointon: Thank you, sir.

I believe we are -- next up on the agenda -- I think I'm next up. I provided the minutes of the last Board meeting. I think that was one of the delinquent due-outs for read-aheads. I sent those last week. So, those were sent out, I hope you all had a chance to review them.

Do we have a motion to approve those minutes? [Member motioned in the affirmative.]

Matt Woodruff, thank you.

Is there a second? [Member motioned in the affirmative.]

Thank you, Jeff Webb.

All in favor? [All members indicated an affirmative response.]

Any nays? Very good. No nays. I like to see that.

This may be disturbing if you had somebody that doesn't approve the minutes.

I think I'm still next up -- yup. You've already got it up there.

Next is the status of the Inland Waterways Trust Fund, or IWTF. So, I'm turning Marty's mic off right now. [Laughter.]

Just kidding, Marty. [Mr. Pointon moved to the podium.]

All right, that's just the title slide. I think I can do this myself [indicating towards the slide presentation].

So, the statement for October actually came out, but I kept this for September, so that it's FY 2022.

So, as you can see, the fuel tax revenues ended up being $123.5 million; a little less than what we were thinking. Considering it had record pace through the first nine months of the year, I can't explain the revenue for the fourth quarter from FY 2022. But it wasn't a typical year, which does not make too much sense because that's a big year of movement for the industry.

So, $123.5 million. The interest was almost $2 million. Again, that's a little more than what we typically see. That's probably a reflection of the balance that's been in the trust fund for the last year. The transfers from Treasury were reflected at $146.5 million.

I put a TBD and zero in there for The Corps of Engineers, what the number that we're estimating to be what's available out of that trust fund. I told Marty that I would tee this up for him to ask me the question that he wants to bring up about that. I believe you actually touched on it at the last Board meeting, Marty. So, I set myself up here, I am going ahead and asking you to ask your question.

I'm not a masochist, Marty, but I know you're going to ask it anyway. So --

Mr. Martin Hettel: Well, and we discussed this yesterday, Mark. This $146,549,812 that was transferred to the Corps. When I look through our presentations today, I only see in FY 2022, $58,667,350 accounted for. That's $52,150,000 for Three Rivers, and $6,517,350 for Upper Ohio Project. That leaves almost $88 million unaccounted for. We need to figure out where those $88 million -- what project they're being applied to, and how soon can we get that information, and can we get it before the end of December?

Mr. Pointon: What we've been doing for the last few weeks is we went through the appropriations, we went through the work plan, we went through the financial system that the Corps of Engineers uses and each of the Inland Waterways Trust Fund projects. And we could not find a direct correlation, or any --we could not reconcile between the numbers that Treasury has been reporting and the numbers that we are reflecting and any

of those sources of trust fund dollars. I am reaching out to Treasury to try to get a hold of their trust fund person so that we can figure out what that $146.5 million really is.

And I believe you brought it up at the last meeting, which projects are receiving those transfers, it doesn't come as a corporate transfer to the best of my knowledge. So, we're reaching out to do that. There is a wide discrepancy from the low end to the high end, depending on what numbers you're looking at. To paraphrase General Graham from the last meeting, I'm not going to put a number out there that's not ready for prime time. So, I hope I can get that to you by the end of December. Of course, it's the holidays coming up. But I've literally spent every free moment in the office the last three weeks trying to figure this out. And I almost wanted to skip over it, but I knew you would ask so, I couldn't get away with that. So, no, I'm quite confused myself, Marty. I have no idea where $146.5 million comes from.

MG Graham: Is this the first year you've seen that?

Mr. Hettel: It's the first year I've examined the transfers and what's being recorded in the presentations.

MG Graham: So, we might have had this disconnect for a long time.

Mr. Hettel: Very well could have. Because I----

Mr. Pointon: We have. I went back and looked at the last five years, and I can't correlate anything for the last five years.

Mr. Hettel: So, when we see a transfer from the Treasury to the Corps, should that not match up to the presentations of the projects on the fiscal year they received the money.

Mr. Pointon: They should all be the same number, the ones that are presented on the presentations between what they're being allocated, the numbers that were included in any appropriations act, whether that's from a work plan dollar amount or actually included in the budget as the appropriations come through. Those should all be the same number, and they are not. On our financial systems, they're fairly close. There is no correlation between what Treasury is reporting as transfers. So, I don't know if it's a timing thing. I don't know -- at this point, I'm questioning what they even consider a transfer as they report in their trust fund statements.

Mr. Hettel: Well--

Mr. Pointon: We're gonna get into that, sir.

MG Graham: We'll look into that and we're going to unpack it and if we can, we'll get it done before the holidays hit, Marty, we'll push that out.

Mr. Hettel: Well, the importance is, General, to get it at least before we send our recommendations to Congress.

Mr. Murphy: Okay, when's that?

Mr. Hettel: That'll probably be, Mr. Chairman, sometime in January, once the new Congress convenes.

MG Graham: Yes, okay. Okay, we'll do our best to --

Mr. Pointon: That would be about the time of your annual report. Which I know you'll want this number for your annual report.

Mr. Murphy: Correct.

Mr. Pointon: That's why I was trying to get that squared away. I was hoping to come here with some good news, and in fact, it was worse news than I thought I could possibly even come up with.

Mr. Hettel: And second part, going forward for our next meeting, if there is another transfer from the Treasury to the Corps, those should match up an FY 2023 funding, correct?

Mr. Pointon: Yes.

Mr. Hettel: So that's another thing we need to tag on to our next meeting and see if those numbers are correct.

Mr. Pointon: Yeah, I don't want to get into all the weeds here. But there are Treasury warrants, there are apportionments that the agency receives from the trust funds, the Harbor Maintenance Trust Fund as well as the Inland Waterways Trust Fund. And we're going back through that through our Resource Management office and our Finance Center to see how all that happens internally. And like I said, I'm reaching out to Treasury because I need to figure this out for both of these trust funds. Because now -- and the Harbor Maintenance Trust Fund is considerably larger than the Inland Waterways Trust Fund.

So now, I need to figure out what are they reporting for that one, as well. Now, that's not inland, that's coastal maintenance and dredging. So--

Mr. Hettel: There's 65 percent of General Treasury revenue moneys that have been allocated for the $146 million. So, it's certainly important to us to know where those -- what projects are being funded from that very large chunk of money.

Mr. Pointon: I agree 100 percent with you, Marty.

Mr. Hettel: Thank you.

Mr. Smith: I just want --

Mr. Pointon: Thomas Smith.

Mr. Thomas Smith: Thomas Smith here. You said something there, I want to make sure we bucket the problem. You said, internally our numbers add up. So, the appropriation dollars that we get, we can track those to the project allocations --

Mr. Pointon: Yes.

Mr. Smith: -- clearly. I mean, minus something about --

Mr. Pointon: Yeah. It's not down to the penny, but yes, sir.

Mr. Smith: That's right. Right. So --

Mr. Pointon: Very close.

Mr. Smith: So, this is a gap between Treasury -- the way Treasury transfers dollars and what they think they've transferred to us and where it's showing up on the projects. Because when we trace it from -- I'm stating it like fact but I'm just trying to assure myself. When you said, internally was we're straight, but when we track it from the appropriations, through, you know, they come like from OMB (Office of Management and Budget), to Army, to us; if we can allocate that directly to project, that is adding up?

Mr. Pointon: Yes.

Mr. Smith: So, it's just something about the business process of Treasury's transfer to us, for this report. Okay.

Mr. Pointon: Yes. And so, that's my takeaway is to see what they're doing. And there seems to be a divide between what we're doing internally for the agency and what Treasury's doing for the trust fund.

Mr. Murphy: Okay. So, Mark, Spencer Murphy. Just moving one line below, this discussion to the zero for estimated existing budget authority. So, does that mean there are no further obligations against the Inland Waterways Trust Fund as of September 30th?

Mr. Pointon: No. There are no additional obligations as of September 30th. There are none as of October 31st either.

Mr. Murphy: ~~Okay~~. So, pending the work that you all are going to do to clarify how this number relates to your numbers, your internal numbers, this is, subject to that adjustment, this is the most recent and accurate balance -- what will be an accurate balance once that, kind of, accrual --

Mr. Pointon: I believe so. And I looked at the numbers.

Roughly speaking, it's $2 million in fuel tax revenue for October, and about a half a million in interest. So, you add the two and a half million to the balance here, and there's $203 million that are available as of October 31st.

Mr. Matthew Woodruff: This is Matt Woodruff. I'm not an accountant or a financial professional; so, I'm going to really dumb this down a lot to see if I can understand it. As I appreciate it, Congress says through appropriations, "Corps, you've got this much money to spend." And the Corps knows how much money Congress said it could spend and takes the credit card and knows exactly how much it's charged on that credit card to do all the different projects. And, has not charged any more than Congress said could be spent. And what we're talking about now is, how long it takes and whether the bill's been paid, or the bill hasn't been paid. So, you've not spent more than what Congress has said. And you know how much you've charged on the card. What we're asking about or trying to sort out is, how much Treasury has actually spent paying those bills.

Is that sort of where we are?

Mr. Pointon: I think so. And I'm going to use an accounting term; I think what we're trying to figure out is, what is in float between what we say we've got and what we've used, and what Treasury is ultimately reporting as we've received and used. So, like, we've written the check, but the check hasn't been cashed yet.

So, that's what I think -- that's where I think the disconnect is. Whenever Treasury gets around to reporting that a check has been cashed, it's I think when they take the transfers out. But I can't say for sure, I don't know.

Mr. Woodruff: Same analogy. Yeah.

Mr. Murphy: And then, Mark, just again just to kind of, keep it real simple, subject to that adjustment, we certainly can't say that we've had a full use of the trust fund in this fiscal year just passed. That there is going to be a healthy balance heading into the next fiscal year?

Mr. Pointon: Yes, I would agree with that, sir.

Mr. Murphy: Thanks.

Mr. Hettel: Mark, Marty here.

Mr. Pointon: Yes, Marty.

Mr. Hettel: One last comment. At many of our previous Users Board meetings we have requested to have somebody from the Treasury do a presentation on how all this works. And we've never been able to get them here. Is that opportunity --

Mr. Pointon: You're stealing my thunder, Marty. [Laughter.]

Mr. Pointon: I want to initiate a communication with them and see what they tell me. And that's the next thing out of my mouth is, well, the next meeting is going to be in the spring, and you need to send somebody here and talk to these guys -- excuse me, Crystal Taylor, I'm sorry. [Laughter.] The Board members that are contributing these resources into this trust fund. You need to come and tell them how you manage this and how you add all this up.

Stay on me on that, Marty. I don't doubt that either.

Sir?

MG Graham: So, Chairman, you had in your opening comments actually spoke to fully employing the tax revenue. And I think I captured you right, you said, $130 million, is that right?

Mr. Murphy: Well, what I meant to say is, at any given time we believe that balance should be drawn down to no more than $30 million at a time, sitting in that trust fund.

MG Graham: Okay. So, beginning balance where we had $221 million, you'd be more comfortable with coming into 2023 if we only had $30 million sitting in there?

Mr. Murphy: Right.

MG Graham: Okay, I got it.

Mr. Murphy: What we want to avoid is, a situation we had in the past, where the balance grew and grew and grew and it was not being spent. And we put a lot of effort as an industry, and as a partnership to make sure that the trust fund was spent and spent wisely on projects. And not just becoming an offset for deficit reduction, or other things that can sometimes happen.

MG Graham: Let me put it another way, Spencer. Using that $200 million there, you played it the other way around, you want to spend $170 million out of that $200 million?

Mr. Murphy: Exactly.

Mr. Hettel: And that equates to about a total of $600 million when you add the 65/30.

Mr. Murphy: Right. But if that $200 million was the actual number, we would say there's $170 million left that ought to have been deployed.

Mr. Woodruff: This is Matt Woodruff. The nation has needs, we saw some of them yesterday. That money can do better work for the nation being spent to improve infrastructure, than sitting in the bank.

MG Graham: Okay, I got it. Thank you.

Mr. Pointon: Everybody ready to move on now? We've exhausted that? Marty, we're good? [Indicating in the affirmative.]

Great.

Mr. Pointon: So, these are your typical presentations of the revenues we've received. So, as you follow through from October from the beginning of the Fiscal Year for 2022. If you follow through, the revenues for 2022 are ahead of every month in the previous years, until you get to September. Which is why I can't explain why we shouldn't be ahead of record revenues in 2022. Ahead of what we got in 2021.

Mr. Murphy: So, Mark, Spencer Murphy. So, from July to August, it looks like, you know, the trust fund declined. Am I reading that correctly? Was that like estimates being chewed up. Is that what occurred?

Mr. Pointon: My understanding of the Treasury process is, they come up with an estimate based on prior year and historical numbers. And when the actuals come in, then they do an adjustment. Sometimes it's gone up, sometimes it's gone down. Now, typically, it goes up; so, they've been conservative with their estimates, for the most part. In this case, it went dramatically down.

So, the only thing I can figure is that the initial estimate that they put in for that order was woefully greater than what it should've been. And then they did an adjustment for the next month. And that's what we should expect to see in those revenue numbers.

Mr. Murphy: And is that -- do we know, is that an annual estimate or is it done every quarter?

Mr. Pointon: I do not know.

That was one reason why I wanted to check the October numbers to see if they made an adjustment in October, again, either up or down, to end the fiscal year.

Mr. Murphy: Because 2022 was basically outpacing 2021 every month until we get to last month.

Mr. Pointon: Right, until we got to the end.

Mr. Damon Judd: Mark, Damon Judd. Just on that point, from an operator's perspective, and I think others around the table who are paying into this trust fund probably have the same view. It's not intuitive at all but, this year, more than last year, there were several things last year that led to lower fuel consumption that generates a tax. So, if someone from the Treasury comes and presents some of this process, I think it would be great to really understand how we match what we see as utilization and activity in the industry with, you know, the money coming in that they're reporting on through these slides. Thank you.

Mr. Pointon: Yeah. I would hope to be something as simple as a lag in when things are reported and then accommodating the adjustments that they make as a transfer or revenues, for that matter.

Thank you, Damon.

We're ahead of pace for every month until we get to the end of the fiscal year. We probably won't get the November statement till the end of next week. It usually takes about two business weeks to post the numbers.

These are just the regular projects; I have not added any numbers to them yet. We don't know what we're getting in FY 2023, at this point. The budget, of course, was submitted long ago. And the House and Senate both have markups which are not for public consumption. In fact, I haven't seen those numbers either, yet. So, those will be shared once they're publicly released. Hopefully they will conference.

I'm going to talk about it later in the next presentation on the funding. But the Continuing Resolution for FY 2023, so far, it's set to expire December 16th, I believe. And I know there's a lot of rhetoric on the news about, Congress needs to pass long-term funding for the fiscal year and all that. So, we'll see what happens.

I don't want to say it's business as usual, but typically, we have a Continuing Resolution to start the year. That's just become the way it is, unfortunately. So, nothing new to add here on this one. We've got all the questions. I'm not going to talk about these projects, I'm just putting out that we have presentations on all these coming up on the agenda later on today.

So, in Southwestern Division Area of Responsibility (AOR), we've got the two MKARNS projects, and Craig is here from the division -- well, actually he's from the district, but representing the division.

And then, the Brazos River, which we saw yesterday, and the Colorado River locks. I don't see who's here from there but, we'll cover that for sure. I'll make Richard Turner do it if nothing else. He's freaking out over there now.

So, Mississippi Valley Division, we've got the Mississippi River Lock No. 25, we have Jose Lopez here to talk about that project. And we've got the Illinois Waterway closure, the consolidated closure, let me make sure I get that word in there. And Colonel Curry is here to talk about that. So, I appreciate the Colonel taking time out of his busy schedule to come here and talk to you all about that waterway closure.

Thank you, sir.

I think that's all I've got. So, we've got the regular projects for the Great Lakes and Ohio River Division, Chickamauga, Kentucky, the Monongahela River, Locks and Dams 2-3-4. For the Upper Ohio, Montgomery Lock, we've got Steve Fritz here. And I believe Stephanie Hall is hiding back there. Hey, Stephanie for Kentucky Lock and Chickamauga Lock.

And I think that's it. All right.

Any questions, comments? Like my old Marine Corps buddy used to say, "any questions or comments, violent or otherwise?" I was always disturbed by when he would say that to me.
All right. Moving on to the Navigation funding; there's not much change here either. I've already mentioned -- let me go through the presentation.

So, this is the timeline that we're executing. We're handling at least three fiscal years at any given time, whether it's development and defense, or execution. So, we're executing FY 2023 now, and FY 2024 has been developed, it's with the administration. And we are in the throes of developing the FY 2025 budget. I think the field is probably throwing some of that stuff together. The guidance has been, well I don't think it's been released yet, but it's been drafted, and it's been sent out to the field for review. And then there's, I think those two green boxes are for the Bipartisan Infrastructure Law and for the Disaster Relief funding that we received in FY 2022.

This is probably the only slide that has anything of significance on it, from what I presented at the last meeting on the Navigation funding. So, we're under a Continuing Resolution, as I mentioned. It was signed on September 30th, thankfully, that's the last day of the fiscal year, and it runs through 16 December.

And this is probably the most important item that's of concern that the current administration guidance is, you are allowed to account for the lower of your budget, the House, or the Senate amounts.

So, if your project was not included in the budget, whether the House or Senate has added something in their markups, is irrelevant. You can only show zero, or for that matter, if, let's say there's a million in the budget and they're giving you $100 million, you can only use that $1 million.

So, that is a limitation, the lower of the House or the Senate or the budget. That's nothing new, just thought I would point that out. So, I know that the project that we saw yesterday is not included in the FY 2023 Budget. So, they have, basically, zero as what they can consider to be funded for that project in FY 2023, at this point time.

Mr. Murphy: So, Mark, if I remember from prior presentation, the only projects that were in the budget were the IIJA projects. Is that right?

Mr. Pointon: For 2023? I think Chick Lock was in there for $39 million. Stephanie's shaking her head, yes. So, I didn't "bolo" on that one. Good. Yeah. I think that was the only one that was included in there.

Mr. Murphy: Okay. Thank you.

Mr. Pointon: So, that would be the only one that could say we think we're going to get $39 million in FY 2023, if it is the lower of the budget and markups.

And then, FY 2024, I already talked about that. That the recommendation, the Corps Headquarters has already submitted that to the Assistant Secretary's office and we've been working with them. And it's been moved on to the Office of Management and Budget. And for the most part Mr. Pinkham's staff is coordinating with OMB on that and they reach out to us as they do sometimes for clarifications, and so on, if they have any comments or questions or clarifications.

Mr. Hettel: Mark, Marty here. Question on the FY 2024 Budget request. It's probably confidential, it's not something that we could see that the Corps requested for trust fund projects?

Mr. Pointon: No, it is not disclosable, if you will. Until that's actually transmitted from the administration to the Congress, Marty, we can't release that information.

Mr. Hettel: I figured as much.

Mr. Smith: Marty, it's also the case that when it is released, we wouldn't -- what you're saying is that what the Corps asked for, that's still all one budget when it comes back.

Mr. Hettel: But within that bucket of money, would be funding for Inland Waterways Trust Fund supported projects, right, on your budget request?

Mr. Smith: Yeah, I was just trying to be precise to your question. When our recommendation, the Army's recommendation, OMB, when it comes back as a number that, is internally deliberative in those steps.

Mr. Hettel: And I didn't think we'd get the number between you and OMB, but I had to ask.

Mr. Smith: Okay. So, even when it comes back, when we get that, when the President announces the budget--

Mr. Pointon: That becomes our number.

Mr. Smith: That's the number. That is the number. Perfectly represents what we asked for.

Mr. Hettel: Understand.

Mr. Pointon: I have a vague recollection that you've asked that question a number of times before, Marty but I guess you're hoping to get a different answer, he's hoping to get a different answer.

Yeah. Typically, the budget gets transmitted to Congress in early February. That really hasn't happened in the last three or four years. And my guess is, with an election in November and the change of party in one chamber, probably won't see that again this year coming out in February. So, fingers crossed it's not May. Hopefully March or early April; earlier the better, of course. For us to know what we're getting.

And, yes, Marty, those numbers will be provided to you all as soon as we know it's in the President's Budget.

Mr. Hettel: Thank you.

Mr. Pointon: Nothing new here. So, again, we have no numbers to update. So, we're just showing the FY 2023 Budget that I believe you all saw this the last two meetings we had that in there.

And so, we didn't break it up by inland and coastal. I don't think we need to rehash any of this. There's nothing new.

There's no pearls of wisdom, there's no diamonds in the rough or anything in there. They're all the same numbers until something gets releasable.

Just a quick summation of the major items that were in --

Mr. Murphy: So, Mark, the reserve pending allocation decisions of $113 million, where does that stand, because that number hasn't changed. Do we know?

Mr. Pointon: That has not changed yet.

So, there's still--the decision is still pending. The deliberations are still going on.

Mr. Murphy: Okay. Do we know when those decisions might be made, and that money will be allocated?

Mr. Pointon: I do not. And I'm going to go to hell for thinking I know what OMB is thinking, but my guess is they are probably making that decision concurrently with how they're looking at the FY 2024 Budget that they're marking up right now.

Mr. Murphy: Okay.

Mr. Pointon: Does that make sense?

Mr. Murphy: It makes sense, unfortunately.

Mr. Pointon: Not that what they're doing makes any sense, but that you understand what I said.

Mr. Murphy: I understand the answer. I guess I would just say a similar comment to what we talked about on the trust fund slide. You know, that $130 million that is eligible to be spent on our projects that is just sitting there.

Mr. Pointon: I agree.

MG Graham: But that's five-year funding, correct?

Mr. Pointon: Yes.

Right. The clock is ticking, sir.

MG Graham: I understand. But it's also for some known/unknowns that are probably out there. Like, inflation -- things might cost more.

Mr. Murphy: Which I follow that logic. I just -- the sooner we can allocate that or understand what -- where it's going to go.

Because, as you can tell, we get frustrated when we see eligible funds not being put to use.

Mr. Pointon: Yeah, put two and two together. One-hundred-and-70-million-dollars in the trust fund and $100 million plus here, so you're sitting on a lot of money.

Mr. Murphy: Brazos River Floodgates.

Mr. Pointon: That's right.

MG Graham: We certainly acknowledge that, but we also acknowledge finish what you start. And there's some unknown costs associated with some of the stuff that we started. And so, to have some reserve at a reasonable level. But, certainly, Mr. Murphy, your point is well taken. That money isn't doing anybody any good sitting in the bank.

Mr. Pointon: Correct. Okay.

Mr. Hettel: So, a timeline on the use of those funds, is that six months, or?

MG Graham: I doubt it.

Mr. Pointon: I think that's all I have. Of the projects that received funding, it would be a two-and-a-half-billion dollars that was earmarked for inland, earmark is probably the wrong word, that we're dedicated for inland. There's your $113 million. And I think you asked the question last time.

Mr. Stephen Fritz: Mr. Fritz. Steve Fritz.

Mark, I believe the Upper Ohio number should be $934 million.

Mr. Pointon: I'll check -- I'll check into that. Give or take ten million. What, are you complaining? You complaining about a hundred million, Steve? [Laughter.]

Mr. Fritz: No.

Mr. Pointon: All right. I think that's all I have on the budget. Excuse me, the President's Budget. Some of the Investigations, that's included in the President's Budget and the Construction projects that are included.

That answered your question, there's your Chickamauga right there, that's included the FY 2023 President's Budget.

And then some of the common O&M, so that's your regular recurring operations and maintenance-type activities. That's mostly maintenance. Obviously, some dredging for the high use and some for the low use projects, specific work, replacing a culvert valve, fixing a strut arm on a gate, those kind of activities that are not annual, but regular maintenance activities. Yeah. There's going to be maintenance in there. BWT (Black Warrior and Tombigee Rivers) down there, and I believe that's all I have for this.

Any questions?

There's not a lot of new information, unfortunately, on the funding in FY 2023 yet, just because things have to progress through the administration and through Congress. So, fingers crossed, and you know, Christmas present if we get an appropriations act and they're using $170 million from the trust fund.

MG Graham: So, Mark, when that does come out, how do we communicate that information to the Board members?

Mr. Pointon: Any way they want it, sir. We typically go through the Appropriations Act, the actual Statement of Managers, and we pull out all the information there, they don't actually have an item that says from the Inland Waterways Trust Fund for X-millions of dollars. And so won't have anything unless we look at it.

Honestly, that's the first thing that I go look at it when it comes out. And then I can send an email on to everybody, that this is what's included.

MG Graham: We're committed to doing that when Congress acts, unless it's a day before the holidays start, which it might be.

Without killing Mark and his staff, we'll put that together and package that to you soon as we can.

Will that work for you?

Mr. Pointon: Yes. I mean, fortunately, we're talking about a fairly small portfolio of projects. I don't have to pull out information for hundreds of projects. It's not that many, typically; unfortunately, from your end.

All right. Any other questions, comments?

Thank you, Steve, by the way. Appreciate it. You could have held that until you got up here.

Mr. Fritz: That's alright.

Mr. Pointon: I've known Steve a long time.

All right, all right, all right. David Frantz is next up. He's going to give us the final update on what we've been doing for updating the Capital Investment Strategy for 2022, update the numbers and the project listings.

Mr. David Frantz: Good morning, General Graham, Chairman Murphy, Board members, Mr. Pinkham, and Federal observers. For the record, I'm David Frantz and I serve as the Inland Navigation Program Manager at Headquarters. And today I'll be giving the final report on the CIS 2022 update, for the 2020 report. Specifically, the Board had requested us to provide a third construction scenario to replicate the three tables that were in the original 2020 CIS report.

As a reminder, the baseline table represents a 65 percent/35 percent cost share between the Inland Waterways Trust Fund and General Treasury. There are no changes from this slide from the last presentation, except for, we spent a lot of time trying to clean up some of the footnotes to make it a little bit easier to understand. We had a couple of requests from folks who were having a little trouble following some of our logic, and we had a hard time ourselves. So, we spent a lot of time working on the footnotes to try to get that that cleaned up.

What you can see with this for the 20 years, the total construction is about $7.05 billion; however, you know, you can see that not all of the projects have had an opportunity to start with construction. And based on this baseline, it would take through 2052 to complete all of the construction projects, with a total cost of but $10.2 billion to complete everything.

What we did do is we have added a new enhanced scenario slide, this reflects approximately a 75 percent/25 percent cost share. And you can see under this scenario, all the projects that we currently have listed have actually were able to start and they all have finished construction, except for NESP Lock 20, which is seven out of an eight-year construction period. So, we have one outlying year that falls outside of this 20-year window. And the total, you know, right now, estimated is at $8.5 billion for the enhanced scenario.

And I'll just go through the next slide, which is the maximum scenario, doing all the construction within 10 years. Again, no changes to this slide other than cleaning up the footnotes. So, we can go on to the next slide if people have any questions.

But basically, what we did is we just did the enhanced scenario for this particular presentation, I just put the three scenarios in as a slide deck for ease. Some people have all three in their hip pocket to look at.

And then, again, actions to complete, we've done everything we can. The final step is to finalize the document and distribute it to the members as the final.

Pending any questions, that's what we have for the final update for CIS.

Mr. Murphy: David, Spencer Murphy. I would just say thank you for showing us that enhanced scenario. That was a due out we had from Walla Walla. So, I think that is really helpful for us to see it and just, to see the scope of projects that can be accomplished with -- under that scenario, which we hope becomes a reality. And the savings for the nation is pretty obvious, just from a dollar and cents standpoint. The more that we can fully allocate and use our funds, the more projects we've done and save more money.

So, thank you.

Mr. Frantz: And, just in case anybody is thinking, we probably will start working on the next update once we get the FY 2023 appropriations. As of now, we have made all the changes based on the funding that we have and that we know about. So, as of today, the CIS update is as current as it can be.

Mr. Judd: David, Damon Judd. Just a quick question kind of echoing Spencer's point, to make sure I'm kind of tracking. Between the three, $10.2 billion in the first scenario compared to like, $8 billion in the last scenario, for the same projects, right? So, when you think back to this, what is the cost savings of avoiding inflation and moving forward based on the parameters you use. And I think that goes back to reemphasizing, General, some of our emphasis on spending the money we have.

And in addition, wanted to thank Tiffany (Burroughs), as well, for the work done on this. I know you all have a lot of engagement with us as an industry, to work through the scenarios, and that was additional work streams and very much appreciate the efforts.

Mr. Pointon: So, I was remise earlier. Tiffany Burroughs is the Chief of Navigation for the Corps of Engineers. She's in the audience. So, acknowledging that she's here. I'm the horse whisperer for her on trust fund things. So, that's why she's here, to make sure I'm not lying to you all. I don't lie to you all.

Mr. Smith: I don't want to preclude any questions; this is Thomas Smith. I want to make a couple of comments here because it's a really sophisticated table and you have to understand the assumptions. And the reason I'm stating that is because there is a concern every time you put a number on a paper that can be taken around and shown to people So, David, just as a way of briefing it has just kind of removed the formatter, which lays out the assumptions of what this is not and what it is. So, there are quite a few of assumptions that are built into this. So, the goal of this is to show what we can do with balances in the trust fund; how we can advance projects based on, you know, allocations. But it is not a budget document, directly. I'm stating that because with the amount of concern that we all have, certainly, General Graham, working with the cost of projects. These tables are built on information that has been in appropriations, specific guidance, specific statements about what our total was, certified. So, there are footnotes here that describe projects under review, the total costs, and other things. It's a planning tool, which is I think how we approached it. I think that is the part that works out okay. I think it fits that purpose. But I'm stating this because once we close this, we have to be careful about anybody presuming that this is a budget blueprint. We are precluded from doing that, that type of document would require OMB approval. We have not sought that. We have worked out, collaboratively with industry, how projects could move under different scenarios. And it says all that in the full document and tries to say that in the footnotes here. And just, kind of a little bit of concern internally because of all the concern we have with cost escalation, I wanted to make sure the Board wasn't misinformed on what this document had.

Mr. Judd: Thank you, sir.

When I look at the next five years, whatever it is, based on the numbers. I added them up, averaged them out, it's $200 million. If we said under the current funding scenario, we had, kind of, $375 million. But differential is what you guys are possible assuming for the cost escalation not even inflationary.

Mr. Smith: Yes. The briefing from the last meeting and then the full document tells you that you have an assumption on the amount of cost and revenue in the trust fund. We have an assumption about what's the starting point and what's in the trust fund. And then we presume in 65/35 cost share. And that's how we get to, like that $277 million each year is available. And so, that's how you start. Yes. So, if you go back and change any of those assumptions, you know, you therefore would then change the table.

Mr. Murphy: This is Spencer. I just want to acknowledge on behalf of the Board. We don't intend for this to be a budget document or to be anything other than a planning tool. Those are the words that were in my head, is that this is a planning tool. We really appreciate the work that went into doing it and creating the different scenarios. We know that probably draws some of you out of your comfort zone inside the administration, but it's really important. And even if the numbers are not exactly correct, which is they surely will not be, just because every estimate is an estimate. Just seeing the impact of drawing those projects to the left with additional funding, it shows you what you can do. And the exact dollars and the exact projects, you know, TBD. But the model that this shows, I think is very powerful.

Mr. Frantz: Next presentations?

Mr. Pointon: You want to move on, David? No questions for David? You want to move on to the MRERs, the Major Rehabilitation Evaluation Reports.

Mr. Frantz: All right. Good morning. For the record, David Frantz, I'm the Navigation Program Manager, and I'll be providing a brief overview of the project status related to Major Rehabilitation Evaluation Reports (MRER), as requested by Board members at the last Users Board.

And, you know, what is major rehabilitation? And, basically, it kind of boils down to a major project feature restoration, with a number of criteria that it extends the physical life of the feature. It takes two years to construct, i.e., concrete as opposed to electric, it must satisfy and meet the benefit/cost and economic justifications, and it needs to have a sum of at least $27 million.

And this differs from major maintenance projects which have a cost threshold of $7 million. And really, the bottom line for this is, are these rehabilitation's, are all these improvements, are they funded with O&M dollars or are they funded with Construction, General appropriations? And that really is what we're trying to get to when we look at the difference between a major rehab and a major maintenance activity. And also, you know, the evaluations and the reports, those are funded by O&M appropriations.

And what we have here is, there are two distinct phases of the rehab evaluation. The first step is a screening phase which I'll go over in greater detail in the next slide. And then, you have the Major Rehab Evaluation Report. And at the conclusion of the screening process, there is a decision point; whether to continue with the full rehabilitation report or it gives you the opportunity to take an off-ramp towards a major maintenance or regular O&M, depending on what the screening analysis shows.

Okay. And like I said, the first step was a screening phase. The primary objective of the screening process is to make an early risk-informed decision on if a project will meet the major rehab criteria or not. And the screening process itself has seven distinct steps: The first one is, you know, you review any existing rehab or maintenance reports, you look at your periodic inspections and assessments, you look at the operational condition assessments (OCAs) of the various components; Step 2, you identify any key risks, occupational--operational condition assessments are really conversations starters, and the team is focused on any potential failures that could lead to a concern such as project closure, or a pool loss, you identify the lists of components, review component risks to see if there's a rehab potential for those particular components, you estimate cost for rehabbing and replacing those components, and then you sum up all of the costs for the different pieces that are

involved -- you're looking for this particular package to see if it meets the threshold or passes a threshold of $27-million.

Mr. Hettel: David, Marty here.

Mr. Frantz: Yes.

Mr. Hettel: Question on that. It states in your little cloud thing, decision point on major rehab or major maintenance based on rehab cost estimates. Are major maintenance cost estimates included in that rehab cost estimate?

Mr. Frantz: I believe you're looking at the cost for all of the different components, and those what you're summing up. And if it doesn't -- if it passes the $7 million threshold you're looking at major maintenance, which is O&M. And if all of those components add up together and they pass $27 million, then you are looking at rehabs.

Mr. Hettel: Okay. I brought this up that last meeting. I want to bring it up again with this meeting. LaGrange Lock and Dam. We did major maintenance and major rehab at the same time. That's a fine example on which components are major rehab and what components are major maintenance. This makes me look like you're putting major maintenance into major rehab to get it above the $27 million threshold to use trust fund dollars in order to make the rehab.

We don't want to see that. We want a clear definition between major maintenance and major rehab, and LaGrange is a fine example.

Mr. Frantz: I think, you look at the different types of components as you're adding up. For example, you know, you look at, it has to be two years. So, major maintenance may be changing out wiring, changing out some of the components. If those activities aren't two years in duration and extending the lifecycle of that overall project, then those stay as maintenance items. But there are certain criteria that you have to meet to make it a rehab -- qualify for a rehab. Like I said, it has to significantly extend the life, it has to be two years' worth of construction activity.

And so, you're going to get that with some of your major components, and you're not going to get with some of your components and some of your work that would be minor in nature.

Mr. Smith: So, Marty, we're not trying to change the model that you described. So, I can't speak to every project and what you might observe, so there's room for discussion we have some key leaders here to talk about it. There are occasions where you do a major rehab, you're going to attend to some minor maintenance items throughout that activity that--we're not trying to get to a total so that we can go to major rehab.

Mr. Hettel: That's certainly what we don't want to see is, pile up the major maintenance till it gets above $27 million and then use trust fund dollars.

Mr. Smith: Right. So, this has gotten a lot of internal discussion, so we really have the two key leads here. INDC and then the PCI --

Mr. Frantz: PCXIN.

Mr. Smith: --to try to make sure that we're not doing something. I do understand the concern. And we're not trying to change the practice, you know. We can have discussions about individual projects if we're somehow

confusing anybody that we're going to have to get some leaders here and we can talk about these on a project specific basis.

But the goal isn't to get the dollar to get to major rehab. But sometimes, if you look at what we're trying to do, if you look at what we're doing, it is a major rehab.

Mr. Hettel: And is that based on the components of the project?

Ms. Tiffany Burroughs: Yeah. I was just going to say, I mean, for clarity, the major rehab, I think David is trying to say, essentially you have to meet all three of the criteria. So, if it doesn't take us two years to do it, then it's not going to be a major rehab, it's going to be major maintenance. So, we're not looking necessarily at, "Oh, is this a specific component?" It's, "Does this work take us two years to complete? Is this extending the use of life? And does it meet the threshold?" So, you have to meet all three.

I think, at one point, maybe you were misunderstanding that and thought we were saying, "Oh, you hit the dollar threshold, you are a major rehab." At this point, we looked at that and say, "No, you need to hit all three of those categories to hit that."

So, I think you'll find that maybe less things will fall into major rehab now that we made the requirement clear that it has to be all three of those components.

Mr. Smith: And then, Tiffany, when we end up at the major rehab and we actually start it, there will always be a series of maintenance activities that you fund out of O&M to occur in and around it. Because you just have some access and other things that just are inevitably beneficial to do the maintenance.

Mr. Frantz: Thank you, Tiffany, for that clarification.

Mr. Pointon: And that was Tiffany Burroughs, who's the Chief of Navigation that was responding.
And we threw out two acronyms, so, you know, David owes Richard Henderson two cups of coffee.

The INDC is the Inland Navigation Design Center and the PCXIN is the Planning Center of Expertise for Inland Navigation.

So probably all of our Corps folks here know what all those mean, but everybody else is going what is all that stuff that we're talking about here.

So, to Marty's point.

MG Graham: We'll test Heather before we let you out of here.

Ms. Gilbert: I've gotten good at this.

Mr. Pointon: But Marty, and I don't want steal Colonel Curry's thunder here, but, for the closure of the Illinois Waterway, they did prosecute major rehab and major maintenance simultaneously while there was a closure and they were in there. Dewatered and what they were working on, so, they're prosecuting the work simultaneously, but it's funded from different pots of money.

Mr. Hettel: I understand. That's the example, LaGrange Lock.

Mr. Pointon: I think that's the example you wanted -- that they were trying to show is a good example.

Mr. Hettel: That's a fine example.

Mr. Murphy: And so, this is Spencer. Just to draw ahead to the next slide, I guess, with a list of projects or a list of rehabs. You know, things like Dresden and Starved Rock. Does that screening include the major maintenance that's happening, or is it a separate calculation of just what would be potential rehab? I guess, same way of asking the same question for those two problems.

Mr. Frantz: That I do not know, I will have to get back to you as to what the final report looked like and what was screened out and how they got to those conclusions. That is something that I would have to provide the Board as a due out.

Just to finish these steps real quick. You develop your screening data to estimate the component risk and possible damages, such as navigation impacts, or pool loss impacts. You conduct quantitative risk assessments. You evaluate and summarize the results and then you have a major rehab decision milestone, kind of glidepath forward, whether to go ahead and continue working on your rehab report. Or, if you do, like I said, you're off ramp and its major maintenance, and/or just regular O&M.

A little bit hard to see but, you know, this table shows the list of the status of the recent MRERs. There are 15 projects listed here. I have here T.J. O'Brien has received construction funds. And so, it has been added to Category 1 of ongoing construction projects in the CIS report update. Of the remaining projects, seven have completed the screening process; six are in the screening process; and we have one new project, Racine Lock and Dam, which is to be funded in the FY 2023 President's Budget once we receive FY 2023 appropriations and that screening process will begin in 2023.

And just furthermore, of the seven that have completed the screening process, two right now, Brandon Road and (Mississippi River) Lock and Dam 18 do not meet the threshold for rehabilitation. So, that leaves five that are still pending; like I say, they finish their screening, they're doing their analysis and writing up their final results now. So, we should know if any additional projects either are moving toward rehabilitation or staying as a major maintenance.

Mr. Hettel: David, Marty here.

Mr. Frantz: I thought you cut off his microphone.

Mr. Hettel: My famous saying, trust but verify.

Mr. Frantz: Yes, sir?

Mr. Hettel: To Chairman Spencer Murphy's question on Dresden Island and Starved Rock, you say the screening's completed. So, that should tell us what components you're looking at, correct?

Mr. Frantz: It should, yes.

Mr. Hettel: Can we see that list of components and then compare it to the components that were major rehab and major maintenance of LaGrange, just to verify that this is, in fact, going to be a major maintenance or a major rehab?

Mr. Frantz: I do not see a problem with providing that information. I may be corrected, you know, offline; but right now, I personally don't see there to be a problem once we get that report to see what all they looked at. I have not seen any of the final reports, but I believe we would be able to share those.

Mr. Hettel: I mean, that would give us an opportunity to say, hey, these components were a major rehab, and these were major maintenance at LaGrange, why are they included in the major rehab now?

MG Graham: And we should be able to defend that, those questions.

Mr. Hettel: Thank you.

Mr. Murphy: David, Spencer. Quick question, for the Winfield Lock and Dam, is that for the dam feature or the lock feature, do you know?

Mr. Frantz: That I do not know.

Mr. Hettel: Spencer, I think I can answer that. We were on an Ohio River Basin inspection tour at Winfield and that is primarily the roller gates for the dam at Winfield. And actually, they told us that the roller gates would take two years to complete, before they could even install it, that's my understanding.

Mr. Kareem El-Naggar: It is primarily for the dam components.

Mr. Hettel: That's right. Yeah.

Mr. Pointon: For the record, that was Kareem El-Naggar, who is the Lakes and Rivers Division, Chief of Operations and his response was, because I could barely hear it and he's sitting right next to me. His response was, it's primarily dam components.

Mr. Frantz: And I do know that for Marmet it is the dam components, I was actually in Huntington when they opened the new locks up. So, I know that they've been looking at the dam at Marmet for a long time.

So, pending any questions that's kind of where we are.

Mr. Judd: David, Damon Judd. One last question for me, on the $27 million and $7 million thresholds, are those static amounts and if so, do you know roughly when those were instituted or do those escalate with inflation?

Mr. Frantz: Those do escalate. I think they started at around $2.5 or $3 million back in 1984.

Mr. Judd: Okay. So as project costs go up, we're seeing the benefit of inflation --

Mr. Pointon: I can answer that *ad nauseam*. They originally were from '92, it started at $8 million, and in 2014, we increased it to $20 million. And it gets escalated every year from that $20 million in '14. So, we use our cost estimate escalation, and apply it every year. And I know because I'm the one who does it.

Mr. Frantz: Pending any questions. Thank you very much.

And I believe I have a couple due outs for the Board.

MG Graham: We'll push those due outs to you as soon as we get them. We won't wait to push them out.

Mr. Frantz: Thank you.

Mr. Pointon: All right. We'll call up Colonel Curry right now. And we're a little ahead of schedule, so the colonel is going to talk about the consolidated closure for the Illinois Waterway in 2023. And at his request, because he's got to get out of here to catch a flight. We're going to pull up -- assuming you don't have thousands of questions on the closure -- we're going to pull up the Lock and Dam 25 -- the NESP Lock and Dam 25 presentation also, so the colonel will be here to benefit from that presentation, sir.

Colonel (COL) Jesse T. Curry: Well, thank you. Good morning, Chairman Murphy, Mr. Pinkham, General Graham, and other distinguished members of the Board. I appreciate the opportunity and I believe as I'm following the pattern, I'm supposed to say for the record, I'm Colonel Jesse Curry, from the Rock Island District. And today, I'm going to be presenting a short presentation and field questions and have a discussion on the Illinois Waterway 2023 consolidated closures.

Before I start on that, I do want to, again thank the Board for the flexibility in the schedule and the opportunity to be here today to have discussion about this. One of the things that we bring from Rock Island and really across the Corps is that continued commitment to not only be transparent in what we're doing, but also remain receptive and responsive to your input and feedback. As has already been discussed this morning, the Illinois Waterway closures, consolidated closures, is really one of our greatest examples of how the Corps is working to better support the needs of all those, both public and private, who depend on the river for their economic vitality that's critical to our nation's continued prosperity.

So, as we consider that feedback and work to better adjust the consolidated closures is one of those great examples to where we have adjusted how this effort is negotiated and worked through in order to better support the needs of industry and many of those here that you represent. So, all of this is our main goal, why we also work to fully leverage both the competence and the shared investment, to address really the needs of our aging infrastructure, as important it is to our nation.

So, I've got a short presentation that I'll go through here, but I'll go through relatively quickly so that I can get to your comments and questions as we move on. So, let's go ahead and go the next slide.

So, as we take the first look at the consolidated closures and where it stands today. As many know, the four locks and dams that are scheduled as far as the 2023 consolidated closures, come on the heels of the four locks and dams completed during the 2020 closures. And that was a very challenging part of that phase of this project. But it's one that, again, we look back on and now we're able to leverage the lessons learned as we apply them to this next phase. And in this effort to truly achieve something that we've not achieved before in the Rock Island District, and I would argue probably not achieved anywhere else.

To use this consolidated closure strategy to really turn over these locks and dams and this infrastructure in a short period as possible, coordinated with industry to max benefit. So, you can achieve the benefits of planned closures versus repeated emergency closures, which is what none of us want.

So, as you look at the schedule here, you can see the current three locks and dams, the three locks planned as part of this current closure. Later, I'll address some additional options that we're working through.

But again, this is what is currently on that part of the strategy as we look at what is in front of us over the next year.

Let's go into the next slide. Really, as it comes to the summary dashboard for the presentation, the key points I want to make here, again is that project status summary and emphasizing the 1 June to 30 September closure of those locks and dams. That window is what we've worked to coordinate since before even the 2020 closures in order to provide the opportunity to prepare and plan for that type of closure on the river.

As we finish the last fiscal year, as everyone knows, that final bullet in the executive summary. One of the two -- one contract that covered two sites, both Marseilles and Starved Rock, was not able to be awarded due to insufficient funding availability. What we're working to do, post that event at the end of the fiscal year is to rework our strategy in order to still accomplish as much as possible within the consolidated closure, during the summer of 2023. Part of that translates to a lot of self-preformed work, amongst the Rock Island District maintenance crews. This current strategy includes some of the Marseilles closure and critical work that we're going to self-perform, primarily focused on the electrical cross-over, and that feature, that absolutely requires that location to be dewatered. So, that is still in the strategy for this coming summer.

Next slide, please.

Mr. Hettel: Colonel?

COL Curry: Yes.

Mr. Hettel: I'm sorry, Marty here. On that previous slide, under your project status summary states, next major contract award, says TBD for future machinery installation at Marseilles and Starved Rock. Does that future machinery installation demand a closure?

COL Curry: That's what we're working to ensure that it does not. So, I'll touch on that in a minute, again, when we talk about Starved Rock, and really what we're continuing to work for in this next strategy in 2023. And I can say that at Marseilles, the electro crossover, is a major feature that requires a closure. At Starved Rock, there is work there that is going to require a closure. So, we are continuing to work to ensure that if we can accomplish that during the summer of 2023, that is our plan.

Mr. Hettel: That closure is not a dewatering, right?

COL Curry: So, that closure is not a full dewatering, but it will require the installation of bulkheads. Which again, essentially, it will close. And I know that this was a question we anticipated would come up. The current strategy, so as we work to try to get as much back into the consolidated closure window as possible, to fully leverage that benefit of doing it all in the summer of 2023. We are still aggressively pursuing those opportunities. And one of those is at Starved Rock. Here this coming Friday, we actually have our internal ROC (Rehearsal of Concept) drill where we're going to stand around the table and go through all of our internal assets that would be performing that work to determine if it's feasible for us to do that work at Starved Rock. And we anticipate we'll have a decision on that within two weeks.

Mr. Hettel: Now, my last question on Starved Rock, then. The customers that have freight in that pool, we need to let them know as soon as possible whether we're going to be able to transit that lock or not. Even if it was twelve-hour, as we discussed the other day, twelve-hour closures with a 70-foot restriction, that's fine. We'd rather see that rather than saying this lock is going to be closed for 60 or 90 days. If that's the case, we just need to know that as soon as we can to let our freight customers know.

COL Curry: I 100 percent acknowledge and agree, sir. I think that is what we are working through in order to get that answer to you. Again, I anticipate I'll have that answer for you in two weeks, definitely before the end of the calendar year. To ensure, again, as we look at the strategy, the transition to conducting that work with your

self-performed work, it's additional challenge and risk to the district. We certainly have to prioritize and ensure that we have that bandwidth available in order to conduct that work. But fully acknowledge and recognize that we need to we need to make the decision and get that information to you as quickly as we can so that those preparations can be made.

Mr. Hettel: Yeah. And I understand putting the bulkheads alongside the lockwall; 70-foot restriction may not work. But, even with Marseilles, Dresden, and Brandon closed, there's not going to be that much tonnage that needs to go into the Starved Rock pool. Even if we can lock a single string of barges, have a 40-foot restriction, to where we could at least get our freight up to the customers in the Starved Rock pool. Just bring that into your conversation if you would.

COL Curry: Yeah, absolutely. And we appreciate that. And as I said in the beginning, I think one of the challenges, or the primary intents that we have, our primary directives is to remain receptive. And not only to just listen to the input, but also be responsive to it. So, that that is where we are working to give realistic, reasonable expectations. But also, after even we do that focused effort in order to use innovative construction methods in order to reduce the impact as much as possible.

Mr. Hettel: Thank you.

Mr. Murphy: Colonel.

COL Curry: Sir?

Mr. Murphy: Spencer Murphy. How much would the shortfall in funding that took you out of what you planned to do to this new plan that is in place that may require additional closures?

COL Curry: Well, the shortfall in funding was a result -- it was as a result of the inflation.

Mr. Murphy: How much?

COL Curry: How much, it was about $26 million.

Mr. Murphy: Okay. So, and the general and I had a conversation when this first came to light a few weeks ago. You know, that's not a lot of money in the grand scheme of things. And as an industry, we do have the resources, unlike the Corps, to go to Congress to say, “hey, we need an extra $25 million, $23 million” and that money means the difference between one consolidated closer and two.

And I would like to think that the resources we have in this room we could find $23 million for that project, because it's very important. So, what I would just say on a go-forward basis is as soon as you see that sort of shortfall coming, please send up a flare to us, because you can't lobby Congress, and that's understood; but we definitely can and will. But we need to know the information and then not when it's too late.

And so, you know, I think that that's a shared frustration in the room, is that this is a missed opportunity for us to help each other. And we could have helped you keep this into one, for sure, one consolidated closure, which is what all of us want.

Mr. Smith: Gentlemen, Tom Smith here. So, be careful, when you reduce the discussion to a single variable. Because this was kind of an exhaustively discussed, I think even General Graham took some updates, General Holland may have participated. It was the dollars and the risk associated of getting the materials that we would have -- what that $26 million was going to get us. There was even risk about whether it would come in time. So,

it's not a single variable. Because we are aware of the support that is often offered to make that appeal. And we get support from the Army when we ask, and OMB. So, it's probably too simple, is that fair to say, that it was a single variable decision. It was about some of that funds were going to buy components, which we had clear information were high risk to be delivered in that timeframe. And so, that's when the challenge was presented back to Colonel Curry is, we've got to come up with a better way to not have another closure. So, to your point, though, about your readiness to advocate. And then, like I said, every signal we get from up higher is when it comes down to the supply chain issues, is they're ready too. It's a little bit more than just that $26 million.

COL Curry: Yes, sir. Completely accurate. As we looked at those components that need to be delivered in order for that construction -- to start that construction period, it certainly was a risk. But what we are currently contracted to receive delivery on and we're monitoring those very close. Right now, everything is on track. But again, that was certainly a risk that had to be considered as we were approaching that budgetary decision.

MG Graham: It might take another two to three months to figure out how to get us additional funding. But those two or three months were key for being able to get it started, into the queue and machine and into fabrication plans. Once we missed that window, it was way, way high risk. So, they had to reengineer how they were going to do this. And so, that's when he broke it out into what work were we going to, you know, dewatering work that we absolutely must get done. And then, you've got to get creative to figure out how to get the machinery work done without severely impacting the industry.

COL Curry: And, sir, I would probably just add to that discussion. Part of the effort, again, when we reach that point at the end of the fiscal year, the challenge back to the Rock Island District and the entire team, was to re-strategize in order to do everything possible to mitigate future risks. So, some of the things that are included in that mitigation strategy is that supply contracts still awarded, those supplies still coming in. So, those components that are unable to be replaced during the summer of '23, we will have those components on hand. So, in that unfortunate scenario, if we have a catastrophic failure of one of those components at either of those locations, we at least won't be at square one for the actual manufacturing of the components to make those repairs. But that's one mitigation.

The other is again, is what I've already mentioned in looking internally to determine what strategies can be applied in order to address those features, both at Starved Rock and Marseilles that would require a future full closure. And that's what, again, that's what we're working through. Certainly have the plans set at Marseilles and we're going to do that. And we're working through the options to see if we can do the same at Starved Rock. And Mr. Hettel, acknowledging that the clock is ticking on us finalizing that plan, because you need to know. And we fully understand that.

MG Graham: The other variable in that kind of sensitive information from what the bids came in as. So, we were wanting to react to how we better understood the market looking at those bids, being mindful of the rules.

So, that was the mindset that pushed Colonel Curry down. We'll keep looking at that to see if there's ways for us to get the better -- I will go back to earlier point on, you talked earlier, some of that additional money that's sitting out there, it's not doing any good. It's good to have a little bit of BIL money laying around. Sometimes, despite our cost engineers estimates, we don't know the market until the bids come back. So, that was the Gordian knot we had to handle.

COL Curry: Go ahead and go to the next slide. We've discussed much of this, but just for the record and your awareness, again.

So, these are the numbers associated with the funding overview and fiscal year capability, again. Including, that FY 2023 self-performed work. And those are factors that continue to drive us towards wanting to get as much of that work done during FY 2023 as possible, for what we've already been funded to do.

MG Graham: Can we test Heather again since she said she's been paying attention. [Laughter from multiple members and inaudible commentary.]

MG Graham: You ready?

Ms. Gilbert: Navigation Development Center?

MG Graham: Sort of.

Mr. Hettel: Design.

Ms. Gilbert: Design. I always get those two mixed up.

MG Graham: He threw out one and this is gonna cost him a case of doughnuts. [Laughter from multiple members.]

MG Graham: He said he was going to coordinate all of these new closures now and trying to get machinery done without impending navigations significantly, he said he was gonna do a ROC drill.
Do you have any idea what a ROC drill is? Were you envisioning he was taking rocks and moving them around on a --

Ms. Gilbert: Yes. No idea.

MG Graham: So, that's one case of donuts at the next Inland Waterways Users Board meeting. Mark is recording this. So, that's an Army term for rehearsal of concept. That's what ROC drill actually means.

COL Curry: Sometimes it does include rocks. [Laughter from multiple members.]

MG Graham: Sometimes it does include rocks.

Mr. Hettel: Is that throwing them at each other? [Laughter form multiple members.]

MG Graham: But, it's basically, you're going to sit there and we're gonna walk through, okay, you're doing this piece, you're doing that piece, and we're just gonna basically, rehearse it and see where the flaws are, and that kind of thing.

Next Users Board, a case of donuts.

Mr. Pointon: We'll put you at the beginning of the agenda at the next meeting. [Laughter from multiple members.]

COL Curry: Next slide. The final slide here addresses and again, much of what we've already talked about. I do want to point out here again, continued progress on the waterway with the installation of bulkheads that was completed at Brandon Road. Really a tremendous milestone that will impact future maintenance on the river for decades to come. Having those bulkhead slots in place reduces a significant vulnerability, just being able to address those requirements quickly.

And then really, again, everything else is stuff I've already discussed and answered in questions. But that mitigation strategy is something we are still very much in the middle of and continue to work to leverage every opportunity we can to do the work in FY 2023 and mitigate and reduce the impact on industry in any future years work. And that's the commitment that we bring to the table.
With that, that's my last slide. I'll open the floor for any additional questions.

Mr. Murphy: Colonel, just a quick question on Brandon Road.

COL Curry: Yes, sir?

Mr. Murphy: The work that we're planning does not include any of the GLMRIS (Great Lakes and Mississippi River Inter-basin Study) invasive species work, correct?

COL Curry: That is correct, it does not.

Mr. Murphy: So, if and when that kicks off, that's gonna be a separate, more extreme, and potentially separate closure?

COL Curry: Agreed. Yes, sir. And certainly, it is out in front of us and it's, you know, it's right to be -- we'll remain aware of it as that continues as that project continues to move forward. The same commitment and rules will apply, as far as how we manage those closures with industry. Again, that project is scheduled to be complete by 2030, over three phases. But, as we continue to look at the implementation of Phase One(a) again, we know that will be the first point where we need to make sure we are working with industry to minimize those impacts.

Mr. Hettel: Mr. Chairman, for everyone's knowledge, I was at the Industry Day meeting on Brandon Road. And the construction of the engineered channel, they put up a presentation that said they would close Brandon Road Lock for 45 days, for five consecutive years.

I've challenged Colonel Curry to try to figure out some way else to produce that engineered channel without five consecutive years of 45-day closures.

COL Curry: Challenge accepted. And I can say that because, as you know, and as you saw at the Industry Day, the team -- the wide ranging team from Rock Island and the Navigation Design Center, the regional and state partners, they certainly all embrace and recognize the impact on navigation and the importance of mitigating those costs.

Well, thank you all very much for the opportunity to share this update on the project and look forward to providing more information as it moves forward.

Mr. Hettel: Thank you, Colonel.

MG Graham: Just to make sure we understand what we're trying to do here. And it is providing a reliable system that the folks you serve can count on. And balance that with the challenges of having to shut that down to get the maintenance done. I think we might have talked before, I used to lose my mind in traffic with, you know, they would be repaving a stretch. In my old age, I've actually grown to cheer when I hit the traffic cones, because we're actually investing in the infrastructure. So, first and foremost, Colonel Curry owes you a system that's reliable. Because we know unscheduled outages are what you can't have, okay. That's Number One, in terms of what he's got to deliver.

The secondary mission is for the scheduled outages, is to coordinate that well with you. And for this one, we appreciate the teamwork; you're right to hold us to a high standard. And we -- Mr. Smith, Tiffany, and the team -- are taking a look and, hey we probably need to give ourselves a bit more buffer room in some of these very complicated maintenance activities like a consolidated closure. We cut it to close. We pushed the district hard; we pushed the division and Mr. Bodron hard to come up with, okay, we are where we are, and let's still get the work done with only one closure. And that's still what we plan to do. Okay.

Mr. Hettel: General, I would add, and the communication has been very good on these consolidated closures. But I would add, the goal would be to limit disruptions to navigation as much as possible when we're going through these major maintenance issues.

Mr. Murphy: Keyword is consolidated closures.

Mr. Hettel: Yes, sir.

COL Curry: Thank you. Sir, I believe we were going to try to shift the program a little bit.

Mr. Pointon: Yeah, we're going to shift to the NESP Lock 25 on the Mississippi River, which is part of the NESP project. We have Jose Lopez here to fill in for Andrew Goodall, who is reflected on your agenda, but I believe you're actually the PM for that particular project of that program. So, have at it, sir.

Mr. Jose Lopez: Good morning. So, good morning, Major General Graham, Chairman Murphy, Mr. Pinkham, members of the Board, Federal observers, and members of the public. For the record, my name is Jose Lopez and I'm the PM for (Mississippi River) Lock and Dam 25, under the NESP umbrella. You probably are well acquainted with my partner in crime, Mr. Andrew Goodall, who's on-line, he's at a regional program level. So, him and I are in the trenches, we're the battle buddies and he kind of gives a big picture, I'm the nuts and bolts guy and I'm the engineer making sure we're moving along.

So, I'll dive right into my update on Lock and Dam 25. So, you know, this project like most of the projects that you guys hear about, are complex and challenging. But this is a distilled version of what we're currently designing and eventually constructing. And I want to highlight that word "designing". While we have awarded the first construction contract for this project, we are relatively early in the design phase for the larger remaining phase of the project.

So, what we're doing is we're building a new 1200-foot river wall, a new 1200-foot upstream guard wall, a new 600-foot downstream guard wall, and a 600-foot extension of the existing intermediate wall. And then also, we're building a new lock floor and associated control houses and all the facilities that are needed to actually operate and maintain the new facility.

The other thing I want to highlight, and this is kind of salient, just based on the conversation we've just had is, we're trying to do this work while minimizing impacts and maximizing predictability to navigation and industry. In this particular case, for this project, as you can probably more clearly see on the screens, that intermediate wall, the 6-foot portion is on top of the current approach for the existing 600-foot lock. And so, back to again, the analogies of roadwork, we're taking a two lane country highway and we're trying to turn it into a four-lane interstate system while maintaining traffic going through that.

That is going to be challenging; that is going to require some shared sacrifice. You know, that is going to tax all of us, it's going to tax our construction contractors. And so, I'll speak to some of the mitigation techniques that we're going to be using to kind of help us work through that. But I want to highlight that piece of this particular

project. That's not necessarily, completely unique to the Corps portfolio, but here in Lock 25, there are some specific nuances to that are pretty significant.

So, I will admit, I tried my best to match up the formats that we were provided. They were a little bit more conducive to some of the projects were heavy in the construction. So, all our apologies there.

Mr. Hettel: Jose, Marty here. May I ask a question?

Mr. Lopez: Yes, Marty.

Mr. Hettel: This 600-foot extension of the existing lockwall, that's really the only timeframe that could possibly impact traffic, is that correct, navigation?

Mr. Lopez: Yes and no. So, the 600-foot is the most challenging piece as far as navigation traffic is concerned. Now, when we're building the river wall, you know, contractor's going to have floating plant out there fleeting. So, yes, that's probably going to cause congestion. But, you know, the more serious sort of impacts, if you will, are certainly because of the 600-foot extension.

Mr. Hettel: And that's the contract you've already awarded?

Mr. Lopez: No, sir.

Mr. Hettel: Okay.

Mr. Lopez: I can clarify that when I get into it a little bit more. But the contract we've awarded is for work that's occurring on the riverward side of that wall and so it's kind of out of the way.

Mr. Hettel: Just a recommendation, when you do get to this extending the 600-foot lockwall. When we did the bulkhead installation at LaGrange, we were restricted to 70-foot restriction, which was fine, we understand that. But we were still able to lock 15 barge tows through by doing three separate cuts to the lock chamber. What we don't want to see is limiting us to ten barges at a time because, as you can very well guess, that would add a 33 percent more towboats to move the same amount of barges. So, if you get to the point where you're at 70-foot restriction, please keep in mind, to allow us to have a helper boat there and locked 15 barges at a time through there in three separate cuts.

Mr. Lopez: Yeah. So, I'm glad you're bringing this up, Marty.

We actually have just started, in earnest, coordinating very closely with RIAC, River Industry Action Committee, just so we're tracking acronyms here. And the reason we're doing that, you know, we understand there's different levels, right; and coordination has to occur at all those levels. We're starting to, kind of, mind the operational side, right. You know, pilots, tow captains, that kind of level to give us some insights into, you know, what are the things that we can do out in the field when our contractors are out there in your guys way. And vice-a-versa, to ensure that we're hitting that sweet spot. Cause in order to build this, we're going to have to find that Goldilocks, you know, this is just right approach moment.

And so, we have just started those conversations. You know, a lot of the conversations have come and kind of aired out things about potential with restrictions and how that can work in practice. And we are about to award a relatively large AE contract to have our consultants, sort of, study a little bit what our methodology for that extension is, to see where we can squeeze it, make it tight, so that we can either fit with restrictions and minimize closures and all that, kind of, all those sort of alternatives. So, we're really moving forward with that. I

and the team recognize that specific challenge, and I'll get to that a little bit later, but you brought it up, Marty. So, it is one of the existential risks for this project, no question about it. You know, again, the analogy of a two-lane country highway turning into an interstate. Instead of going around with a new interstate, we're doing it right smack dab in the middle.

That's a critical thing to keep in mind.

MG Graham: Jose, go back to that picture if you could, back on the slide. So, where have we done this before, where we've extended the 600-foot lockwall, with the 600-foot chambers. Where have we done this before?

Mr. Lopez: So, to my knowledge and the Inland Navigation Design Center, INDC, you know, is involved in all these major projects, right. So, the technical muscle, they communicate constantly; they're talking about all these lessons learned and sharing this knowledge. And so, we've been in constant communication with the Upper Ohio team and the Soo Locks team, et cetera. You know, to my knowledge, we don't have the exact same thing in a lot of the other projects. As an example, in the Upper Ohio -- and I don't want to talk for Steve -- but, you know, in Montgomery, they're building the new 600-foot directly adjacent on the riverward side. And that just buys you some 30 or so feet maybe, or maybe more than that. That still matters. And so, in our case, we're going to have to have large platforms. Too large, not really. We're gonna have to have large platforms out here for the contractors to set the forms, and place the concrete, and all that. And for their workers to be safe, right. And so, we're basically in the way, you know. So, I probably owe you, sir, a kind of, more salient response when it comes to where we've done it as well. But, in this particular situation, we recognize that we're really tight.

Mr. Pointon: Okay, Steve.

Mr. Fritz: Yes. This is Steve Fritz with the Pittsburgh District. So, at Charleroi, it's not exactly analogous to this, because we have kept that landside chamber open while we're constructing the river chamber. And there has been some minor impacts there, but we're not directly in the footprint of the navigation industry as we're building that lock out there. So, it's similar to Upper Ohio in that way, is that chamber that we're building is riverward of the existing approach. There have been some slight impacts, you know, building the lower part of the guard wall, things like that. But nothing to the extent that I think Jose has explained at this point.

Mr. Lopez: And we talked to Chris Dening from your shop, Steve. You know, kind of sharing lessons learned is definitely something that, kind of, his eyes went, oh, wow, that's what you guys are doing. And so, there's some other factors to consider there, too. You know, the construction of that, or the extension of that wall is going to lead to us having to decommission the filling and emptying system that's in the river wall side. So, that also is going to affect filling and emptying times. And so, we are obviously prioritizing that, or de-prioritizing that. We're going to do that last, right, when we're building that high wall, to sort of make sure that we maximize the serviceability of it. But again, this goes back to, you know, we're trying to be cost effective in putting the new lock chamber where I, potential -- previous 360-foot lock chamber was, sort of, conceptualized back in the '30s because we're trying to take advantage of, you know, building some existing infrastructure there. But we're still adding 1800 feet of wall. And so, it's definitely going to come with some challenges. I'll speak to it again, one of the big mitigation strategies here shortly. Unless there's any other questions, I'm happy to answer -- I like the curveballs.

So, again, as I mentioned, we are, as far as the executive summary, we are pursuing a sort of innovative contracting strategies, routinely referred to as ECI, or Early Contractor Involvement. And we're sliding toward that, or tracking we'll award that contract in the spring of 2024.

Now, Early Contractor Involvement has some history from the post-Katrina days down in New Orleans for FRM projects, Flood Risk Management projects. I'm not familiar with it being heavily utilized in the inland nav

community, but we are pushing forward and moving out with this acquisition strategy. We are going through the agency process to get approval, and that has to go up to their Senior Contracting Official or the SCO. That person is the one that's going to, kind of, bless this acquisition strategy and let us know that we're good to use it. We have been in constant coordination with them, and we don't foresee any issues with receiving approval to use this strategy, but the reason we're using the strategy is what I just mentioned about impacts to navigation.

So, we are going to have a 35 percent level design, conceptual design, and we're going to get the contractor, the construction contractor in the room with the designers to help us figure out how does this sequence need to work so that we minimize impacts and maximize predictability to the users. There is no way that we would be able to do that with the traditional design bid-build-delivery method because we would go into a room, come up with a perfect design, and then construction industry would say, "you want us to do what?" And, you know, we would be in big trouble.

So, we need to get the contractor in the room early so we can have three people at the table. USACE, construction contractor, and Nav industry during design to make sure that we mitigate that risk that we just talked about. So, we are having those conversations with RIAC, Marty, as I mentioned early. With the hope that eventually we're going to have three people at the table during design. So, that's going to help facilitate and sort of manage some of those actual physical like constructability safety risks. But it's going to manage a lot of the schedule and a lot of the budget -- costs risks that this project could have due to those sort of uncertainties. The Corps of Engineers and the INDC, they're expert engineers, but they're not expert builders.

You know, our partners are you guys, the construction industry, and so we need that expertise in the room, particularly for this project. I will say, we did a lot of market research. We've had Industry Days where we had one on one interviews with the largest contractors that are likely to bid this project, and far and away ECI was there, sort of, recommendation for this specific project. And when we talked to them, you know, I went through detailed, this is what we're doing, this is what we're conceptualizing. You know, they all said you want to do ECI. That's the way to get that Goldilocks moment or approach, as far as working this out.

Mr. Murphy: Jose, just a quick comment, Spencer Murphy. I was a fairly close observer of the New Orleans Hurricane and Storm Damage Risk Reduction Construction Project.

And I just want to say, you know, Early Contractor Involvement, I think, was really key to a lot of that project's success. So, I'm always happy to see lessons learned from that project. I think that's one of the Corps' really great examples of being creative in different ways to build a massive project on a very, pretty speedy timeline. So, I think that makes a lot of sense.

Mr. Lopez: Yeah, I appreciate it. And I want to say too, I sometimes say, I'm the PM, but I'm also the expectations manager for the project. So, Early Contractor Involvement has the potential to also provide efficiencies to construction schedule. That is not necessarily the primary reason we're doing this, right. We're doing this because of the words, "early contractor involvement". We want them to tell us when we're conceptualizing something that's stupid, pardon my language. Or, you know, something that's not going to work, or something that's going to impact you guys. You know, the efficiencies that they can provide are going to come, because they're the experts. They're the ones that are going to tell us, hey, why don't you, you know, here's a piece of work that we can accelerate, get out of the critical path, and move along. So, that's —'sort of an added benefit to ECI, as we see it. So, just another kind of point there.

Mr. Lopez: A couple other points, we are pulling off some —as far as design is concerned -- some other packages. You know, we're advancing the design of the bulkhead supply contract. So, that's in the works. And there's also site access to that is needed to the site; the site is relatively remote. To those that have been out there, there's a state highway that is pretty rural, pretty narrow, and probably not adequate for the traffic that

we're expecting. So, we're working directly with the state agency responsible, the Missouri Department of Transportation (DOT), to see if we can enter an agreement with them to have them, sort of, do the work since they're the road experts and they own it. Right? And then, sort of put that out of the critical path, because if we put that on our contractor, they can do it, they're going to charge us.

And it's probably not going to be the best from a schedule standpoint. And so, that's why we're trying to pull that off to the side and have the Missouri DOT do that work. Obviously, we would finance it because it is a federal cost. We are the ones impacting the public road, and so it's part of what our requirements would be anyway.

The other thing I wanted to mention, we are leveraging ERDC, or the Engineering Research and Design Center with the navigation industry partners down there. We were down there about a month ago, three weeks ago and we had pilots from Ingram (Barge Company), Marquette (Transportation Company), and so, —the pilots were able to get us a simulation, tell us, hey, you know, this isn't looking good, as far as, you know, approaches. And so, we were able to really get feedback from the pilots to make sure that the features that we're going to put out there are not impacting or altering the river flows in a negative way. So, that was a very fruitful endeavor.

Some key activities—I do want to say, some of this data's stale because of when the slides were due and had to be put together. So, you know, I'll make sure to update those for the next Users Board meeting. What I want to highlight is that, the first construction contract for this project was awarded in September, which is six months after receipt of funds, which is what we had sort of said we were going to do. And the contractor for that is Massman Construction out of Kansas City. They were issued the notice to proceed in October. And so, they're working through the process. The work that's ongoing, as Marty had alluded to, and I mentioned, is essentially on the other side of this wall, on the riverward side, so it's out of the way. But certainly, work to prepare that side of the wall to eventually become the new 1200-foot chamber. And so, that's going to be very important work that's going on.

Already kind of hit on the bulkhead design, highway, and the use of Early Contractor Involvement.

So, the next slide, again, on the funding summary. I took some liberties with the status of funding up there. The project received $732 million out of the BIL. You know, that's at 100 percent federal. From that, the district itself has been allocated about $22 million. So, you know, those funds sort of reside at Headquarters and we have to go back every so often and say, hey, this is what we're going to do, please.

So, we've been allocated that $22 million and out of that, we've obligated about $15 or so million. These numbers aren't probably super up to date, but we're pretty close. You know, the majority of that obligation or execution was to award that Phase 1 contract and get that contractor going. So, we're continuing to work through the rest of the design. And as I said, working this procurement to use this innovative contracting mechanism.

I think this is my last slide. But so, you know, so as far as progress, challenges, and risks. I want to highlight that Phase 1 award. As I said, it was $10 million to Massman. You know, kudos to the team for accomplishing that in that 6-month window. It really speaks to the preparation in the lead up to receiving those funds and what occurred in FY 2020 and FY 2021.

So, you know, the team deserves a lot of credit and I want to give it to them. And then, the other two things I highlight here is the challenges, right. I already talked about minimizing impacts on navigation and we can talk for days about that.

The other thing I want to talk about, and it's probably not news, is the current market, right. So, that's definitely an impact for us. We are working through the agency process to update our costs. And so, that is definitely something that we're tracking pretty closely. We realize, as well, that Early Contractor Involvement will help us provide some certainty on costs, not a cost savings, but a cost-certainty degree to it. Because once we get that contractor on board at 35 percent, they will be able to tell us, yeah, you know, we're thinking what you've currently presented to us is about here. And so, we can do, you know, some adjusting and communicating if we need to, with regards to what we're really seeing. Because they're going to have a better handle on the pulse of the market, say, than we do. We have a lot of tools at our disposal, but there's certainly in the thick of it, right. So, that's one of the things that we are also hopeful will help with managing cost-risk.

And then, I wasn't planning to brief LaGrange. I know Andrew Goodall's on the phone, sir.

MG Graham: Yeah. I was trying to jump back up -- Jeff, before you do. So, to put a 1200-foot chamber beside a 600-foot chamber on a big river, right now we're saying that's going to cost $732 million?

Mr. Lopez: Sir, we are currently ongoing the cost update process.

MG Graham: It's ongoing. But right now, the number you put on the table is?

Mr. Lopez: That's the number we have right now, we'll say we are expecting that to increase.

MG Graham: So, Steph, how much for Kentucky Lock?

Ms. Stephanie Hall: Additional?

MG Graham: No, just total. The whole thing, our price tag, because they're paying for part of this.

Ms. Hall: I don't want to say this wrong, but $1.56 billion.

MG Graham: Okay. So, we're looking at those in total, I think that's healthy for the Board to understand this. We spread that out over many years and there's a whole bunch of other challenges that we are trying not to pull Jose in. But we're very mindful of, okay, that number's about double what Jose just said.

Okay. So, we're watching that closely. Jose's got an ironclad requirement to every year update and provide this Board a certified cost update, every year, non-negotiable, right? And that's the transparency we owe in this Board.

Mr. Lopez: Sir, if I may add and if you don't mind. And we are planning to actually update our current work and estimate as we move through the design, particularly because we're going to have the contractor on board. So, we'll be able to get some validation on that side. So, it may be a little bit more frequent than a year, but we're definitely shooting for --

MG Graham: More frequent is fine, less frequent, not fine. In that is going to be contingency time and contingency money. That's going to be baked into that estimate. So, we just heard the discussion, we kind of got a little too close to that on the consolidated closure on the Illinois (Waterway), and it cost us, collectively. So, and there's a method to what Jose's got to go through and it's under understanding what the risks are out there, in concrete terms and in putting contingency time and money towards those risks.

That's going to be the number that we put in.

One of the biggest risks out there right now is a big giant hole in the bottom of the river.

Mr. Lopez: That's correct, sir. So, if you wanted me to speak to that, sir, certainly I can address it.

MG Graham: Yes.

Mr. Lopez: Okay. I'll go back to the picture.

MG Graham: Please do.

Mr. Lopez: So, in 2012, there was a barge accident caused us to change some of the operations to the gates. The barges were lodged around this area, so we had to close all these gates. Water flowed this way and it kind of caused a large scour hole, right adjacent to the lock. In fact, we had to carry out emergency repairs to stabilize the existing lock chamber. So, we've got a large, very large, like Volkswagen Beetle sized rock in there right now, kind of buttressing that lock chamber. So, definitely a challenge and a cost.

You know, during our industry day engagements, industry didn't really balk at it, right. And said, yeah, we can do it, you're going to pay for it. So, it wasn't necessarily an existential risk like we thought, right, but it's certainly something that we consider, certainly something that is affecting our costs update.

MG Graham: Okay. So, to the Board, that hole didn't surprise us. This is not going to be a differing site condition; we know the hole's there.

Mr. Lopez: Correct.

MG Graham: All right. And we are putting the appropriate -- in the next update, we'll have some more fidelity on exactly what it's going to take to make sure that we can build this lock chamber and take care of that hole.

Mr. Lopez: Yes, sir.

MG Graham: So, that's risk Number One. Give me your other two top risks.

Mr. Lopez: The other two top risks, definitely the ability for us to maximize predictability, and maintain navigation, you know, minimize impacts. And then, I would say, you know, from a project cost growth standpoint, the unanticipated amount of inflation, right. Inflation is always anticipated. That's what happens. But the amount is where we're currently having a lot of challenges with, right. As everybody knows.

So, I would say definitely those three risks and I would put the last two I talked about over the scowl repair risk, the scowl repair risk is a technical risk that we are very good at designing our way out of it. The other one is a little bit more challenging, hence our need to utilize some different contracting techniques. So, in the old days, I said old days. If in the paradigm of Civil Works, I feel like contracting or procurement is a way to buy something, right. That's typically what people think. Really, contracting is a way to mitigate risk. If we do it right and we use the right techniques, we will be able to manage cost to schedule this a lot better if we leverage those different procurement alternatives.

MG Graham: So, two last points before we let Jose off the stage and bring Colonel Curry back on. First, Jose's not in this alone. We're drawn from the breadth of the enterprise because this is our future across this system. We're taking two-lane roads and turning them into four-lane roads. This is hard; it's much, much more difficult to do this than it is to do a greenfield site. So, Steve Fritz used to look like Jose 20 years ago. [Laughter amongst the members and audience.]

Mr. Lopez: I'm okay with that.

MG Graham: So, Jose, that's your future right there, brother. [Laughter amongst the members and audience.]

Mr. Murphy: We don't want that to happen.

Mr. Lopez: That's why I'm like, riding this wave right now. [Laughter amongst the members and audience.]

MG Graham: Okay. So, and the connective tissue between that is the Inland Nav Design Center (INDC), all right? To make sure we're sharing those lessons learned. And we just got a new leader, a new director from the Inland Nav Design Center and it's the DPM (Deputy for Program Management) from Pittsburgh District, Lena Hawkins. So, a lot of good cross-pollination that's taken place there. And absolutely delighted to hear and see all of that. Okay.

So, how can we better incorporate you into this is that final part of the question, Chairman. So, what Jose's working on, this is eight dimensional chess. So, Mr. Hettel's comments on, you know, if industry can push, say ten barges through.

Mr. Hettel: Or 15-barge tow.

MG Graham: I'm sorry, for 15-barge tow-through. Those kind of equities to make sure that's stitched in at this stage into how he's planning to build this thing.

Mr. Murphy: I think he just needs to talk to industry, need to talk to our industry on a regular basis. And certainly, ahead of any major work iterations, that okay, we plan to do this or that. Talk to us so we don't have a negative surprise.

MG Graham: So, the design you're actually doing and when you start putting together how you're going to build this with a contractor who's on early. Is industry going to be sitting at that table when you do that?

Mr. Lopez: Yes, sir, 100 percent. That's the sole reason, is to get them early with, you know, the folks that are actually wielding the hammers and, you know, placing the concrete.

Mr. Murphy: Early contractor involvement is great, as I said, but also, early industry involvement is equal important.

Mr. Lopez: Well, as far as at the working level operationally we work with RIAC (River Industry Action Committee) and we can go up if we need to more easily. That's why the ECI piece is sort of the linchpin, right. Because we don't typically coordinate with the construction industry until we have a contractor out there ready to go, right. And that's why we're wanting to do that early. So, that's, you know –

Mr. Murphy: Just to give you two; a negative and a positive example from the Hurricane and Storm Damage Risk Reduction project, which I've already said what it is, so I can, you know, there are two major gates, one on the East and one on the West, had two different project teams, two different core teams. On the East side, I think, the industry was not involved until it was much farther down the line, and there were a lot of challenges and a lot of complaints about the configuration of that feature. As opposed to the West side, where there was a lot more industry engagement on the very front end. So, that West closure complex is viewed as no big deal; on the East side, you know, it's a challenge. So, making sure that the industry is talking with you and your contractor as you're designing, I think is really valuable.

Mr. Lopez: And I'll --

Mr. Hettel: And, General, that entity is reactive -- is the co-chairman over there? And you've done great communication with them, Jose. You know that and we know that; so, we appreciate that. And let me make one more comment on the risk to inflation.

Jose, you really won't know what the risk to inflation is until you go out for a bid for a contract, right? You can estimate it all you want, but until you get that bid back from contractors, you don't know what it's going to be.

Is that a correct statement?

Mr. Lopez: That is a correct statement. And under the traditional design-bid-build paradigm, it's a critical issue, right? Because, again, you go in -- the engineers go into a smoke filled room, they come out with a perfect set of plans, and then the contractors get to see and tell us what it costs, in reality, right? And with ECI, we will be able to get, you know, a little bit of a peek, right, at what costs could actually be. Because the way that ECI contract is structured is we award the contract as a base for preconstruction services. Basically, a line item that is for some amount of involvement from their experts within our team.

And so, back to Mr. Murphy's point, the way we're writing that stuff for work right now is to have them co-located with us in the St. Louis District office and have them come to us for these types of meetings, these engagements. In fact, I've actually written parts of it to allow the contractor to, if necessary, come to the Users Board, come to other types of coordination meetings, and that kind of thing.

So, but back to your question, Marty. So, as far as inflation, as far as our process, we still have to forecast a midpoint of construction. We have to kind of figure out what we think is going to happen. And then, back to your point, sir, you know, we are using the CSRA, the cost and schedule risk analysis, to figure out, you know, what we think based on all kinds of different inflationary models. What we think it's going to be at that midpoint of construction. And that gets then baked into the contingency, as you alluded to for Mr. Murphy, sir.

MG Graham: Okay. And, in the past, we've been guilty of being way too optimistic in those estimates. And so, we're putting great pressure on the districts and their divisions to put realistic cost estimates out there, okay? And there's going to be some difficult conversations that we've got to come to you with. I'm going to guess, on some of these projects, were laid out in the investment strategy as we go through that process. We don't want to take that to extremes. There's a sweet spot, but we haven't been in that sweet spot yet. When they've gone back and run the tape on some of our recent construction projects, we've just been too optimistic in our estimates, walking into this.

We could have predicted that Russia would invade Ukraine. I got it. But there's some other aspects of those risks that go into that CSRA that we've been guilty of being too optimistic on. And often it is, how hard is it going to be to get a contractor to get to a remote area and build something? And so, what you're saying upfront with, hey, this is basically an island out the middle of a very rural area, that's going to be a challenge. So, we've got to acknowledge and price those challenges now; not surprise you later.

Mr. Lopez: I'll yield to Colonel Curry.

COL Curry: And once again, for the record, I'm Colonel Curry, Rock Island District Commander. And really, the purpose of this final slide and this part of the presentation was not to skip over the point of Lock and Dam 25 being the first major navigation feature within the navigation NESP program. And then, the next additional progress being made at the end of FY 2022 and continue to move forward. We wanted to highlight the award of

AE contract for that design of LaGrange (Lock) there at the end of the fiscal year. So, that is continuing to move forward. You can see that primary tasks that are included in the bid.

But again, we talked about Lock and Dam 25; it is that first major navigation feature within NESP. And we look at the future life of the overall program, we wanted to highlight that real quickly and deal with the questions, if there were potentially any, on LaGrange, or other parts of the program.

Yes, sir.

Mr. Hettel: Colonel, Marty here. Go back to our request to see what funding's been allocated to projects? LaGrange has already had some funding allocated to it or spent. So, can you give us a breakdown? I know Andrew (Goodall) is on the phone or listening. Give us a breakdown of what amount of dollar expenditures has been spent on LaGrange?

COL Curry: We absolutely can.

Mr. Hettel: Yeah.

COL Curry: And I think that first design contract was a major investment to get that started, but we will provide the full breakdown.

Mr. Hettel: Great, thank you.

Mr. Murphy: Colonel, can that include the capability funding for FY 2024?

COL Curry: Certainly FY 2023. When FY 2024 becomes – gets released -- we can put a pin in that one.

Mr. Murphy: And that's not just for this project, General, but FY 2024 capability numbers across these projects -- to the larger point we've been making about getting us information so that we can use it to help you get funding for projects, I'll say it here for LaGrange. But it applies really, across the whole suite of projects.

Mr. Judd: Damon Judd. Spencer, to add to that, from a timing standpoint, ideally, so that you can include those in our annual report. With as much capability and visibility as we have, it would be very helpful for the annual report.

MG Graham: Okay.

Mr. Judd: Does that make sense, sir?

MG Graham: The question does. I'm just trying to not get Mr. Pinkham too upset with me, so, I've got to figure that one out.

Mr. Smith: We'll have trouble providing all those numbers for your report, which is coming to closure here pretty quickly.

COL Curry: Thank you again.

Mr. Pointon: Wait, that's it? He gets off like that? Come on, Marty. All right.

Mr. Hettel: He's going to give us the numbers that I asked for, so I'm good.

MG Graham: Thanks, Colonel Curry.

Mr. Pointon: So, we're a little bit ahead of the break schedule, but only by ten minutes. So, we're going to take our break right now, and Jim is going to talk -- Jim Bodron from the Mississippi Valley Division -- is going to talk about the low water when we get back.

[Whereupon the meeting recessed for an extended break.]

Mr. Pointon: Welcome back everyone. Can you please take a seat so we can get restarted? Thanks.

Next up is Mr. Jim Bodron from the Mississippi Valley Division to talk about the low water situation on the inland waterways.

Mr. James Bodron: Good afternoon, everybody. My name is Jim Bodron.

I'm the Mississippi Valley Division Regional Business Director and I'm here to talk a little bit about the low water on the Mississippi River.

I wasn't aware that we had a ban on acronyms. So, I'd like to request 30 extra minutes [laughter] to get through these reports, or at least a few indulgences to some of the acronyms, because I probably don't really know what they stand for anyway like RIAC and those things.

So, I've got a lot of facts and figures and numbers and graphs, and it's easy to get lost in all that. And every time you cut numbers one way, there's always a slightly different way you can cut them. So, I'd like to start off with the key takeaways -- we do have a plan to keep the river open and we think we're able to do that through the next 28-days, which is the length of our forecast. So, we have plans to move dredges to put them in key areas and keep the river open.

The Regulating Works Project, which is in the St. Louis area river above Cairo and the Mississippi River and Tributaries (MR&T) Channel Improvement Project from Cairo down to Baton Rouge appear to be working. We are passing tows easier in drought conditions than we have in previous droughts in 2012, 1988, 1989. So, the projects, the investment that the nation has made in those projects, appear to be paying off. Dredging is still the key though because the system is so dynamic. Not only does the top of the river move, but the bottom of the river also moves.

And you all know that a lot better than I do, being in the towboat industry, that we have to be able to respond with dredges to key areas that are low and make sure that we can keep traffic moving. Even with the channel open, there have been severe economic losses. Normally the channel is 12-foot or greater 95 percent of the time, and with this low water period, shippers -- and you all know that a lot better and the economics of it. It's extremely complicated when you figure you've got to get all this product down and shipped out; and even to the farmers who are waiting in line longer at the granaries. And granaries sometimes get cut off from the channels. So, even with the channel being open, there's still severe economic losses. And communication and partnership has been the key to us being able to work to keep the channel open.

The coordination we've had with the Coast Guard, with the industry has enabled a lot of discussions and a lot of self- policing where industry knows what they can and can't ship. And we know where the hotspots are and we're able to work together and try to get everything knocked out.

So, first thing I'm going to show is the plan if this works [indicating towards the projector]. There it works.

As of today, we currently have seven dredges working instead of the eight shown up there, we had a dredge, a mechanical dredge, one of the small ones break down and so it's going to be replaced probably either today or tomorrow by a contract vessel as we get it repaired and ready to go.

We're concentrating our dredging resources up between St. Louis and Cairo. That includes two dustpan dredges, which are our most efficient way of keeping the channel open, so we'll have those up there. The dredges will cover the lower river with two other of our big dustpans and we're looking to add three more dredges, two for the harbors in Memphis and Vicksburg and one for the Red and Ouachita River, another tributary that has a fair amount of traffic on it.

So currently the stage in Memphis is, you know, just over 10 and its lowest was a minus 10 during this event and it was at minus five and a half today, that's in Memphis. I was looking at the wrong numbers. But we maintain a 9-foot channel from above Cairo with our Regulating Works project which uses dikes and dredging and with the Mississippi River and Tributaries (MR&T) Project below Cairo using revetments, dikes, and dredging.

So that's the channel that we use, but the dredges are key to making sure we can keep the channel open.

Yes, sir.

Mr. Hettel: Marty here. You mentioned maintaining a 9-foot channel, but the law authorize you guys to maintain Cairo to Baton Rouge at 12-feet?

Mr. Bodron: Yes, sir.

Mr. Hettel: Any reason why we're not maintaining at 12-feet?

Mr. Bodron: Well, it's never been funded to maintain to 12-feet. So, we maintain to 9-feet, now. But we've had a lot of talk in the office about what it would take to go to 12-feet. It would take some sort of analysis and investment decision and then funding for us to go to 12-feet, but you're absolutely right. It's authorized for 12-feet, but 9 feet is all that's ever been funded.

Mr. Hettel: Well 12-feet would certainly move more tonnage per barge which would keep the freight rates low for our farmers for export revenue.

Mr. Bodron: Yes, sir.

Mr. Hettel: I don't know if you look at that whole scenario. I know it costs more money to go to 12-foot versus 9-foot, but, man, we traded some freight in St. Louis at 3000 percent this year. That's very expensive to our grain shippers to get their grain export through the Gulf and that's basis of a 9-foot draft versus the 11-foot draft.

Mr. Bodron: And generally speaking, there's only a small part of the river that has to be modified. The dikes are spread out along and then there's only a very small part that's ever dredged. So, I know it would be a big economic improvement, but it's never been funded, and we would have to make sure that the economics work out on it.

Mr. Hettel: Certainly, I think would have worked out this year, but --

Mr. Bodron: Yes, sir. So, the stage at St. Louis is currently 1.26 feet. The lowest we've seen this year is 3.1 feet -- minus 3.1 feet. So, the bad news is -- the good news, we thought that was coming with the rainfall didn't really materialize. We're still looking at a minus 5.5 on the gauge in our 28-day forecast. But there's going to be a big freeze up in the St. Paul area and it's not going to necessarily freeze the river but freeze the water going into the river. So, we're looking at the potential for ice bite and that would be affecting about mid-December. The worst case on that would be a minus 6, and at minus 6, we still believe that we would be able to keep the channel open.

So, I'm going to talk just a little bit -- we'll get into the complex slides about what causes low flow conditions -- lack of rain, I think don't overcomplicate it from what I was told. But of 128 years of record that NOAA has, this is the 15th driest year nationally and we like to track how much of our water comes in from different places on the tributaries, and to put a little bit in context, Cairo is about 200,000 CFS now. Normally, it's in a flood 1.5-1.7 million CFS, that we're talking about 15 percent of our flood flow with the river flowing out. So, we have a lot of people who look at a lot of numbers and we've got the charts and we plot the charts on where we are at various locations in the river probably advance another one, but that's St. Louis. So, we're potentially -- you can see with the issue started. The blue line is the current and a couple others that we look at are 2012 and 1988. We also were looking at 2000 because of similar climatic conditions, but you see this year where the river really fell out and it stayed low, and it had a little bump like it has in the past, but it's expected to still drive to the bottom of the range and potentially set record lows mid-December, but because of the way that -- comparing the previous hydrographs, we expect and prepare to be dredging into the end of February.

So, we've got the same for Cairo and Memphis, and you'll notice the stages at Memphis are somewhat lower than and they set record lows in Memphis, and they are somewhat lower than what we've seen if you go farther down the river in Vicksburg. You can see it's not comparatively as low as Memphis, but the historical low flows records that had been set at Cairo and Memphis and that also indicates some of the effectiveness of our channel improvement program, because in 2012 in Memphis, we've had similar flows -- 2012 and 2022, we've had similar flows, but 2022 was carried a foot lower, but we've had fewer problems in the past in the traffic. So, again, record lows in Cairo and Memphis, and we're still expecting at the end of the 28-day forecast we could have issues in lower rivers and will continue to be prepared to respond to those issues. So, commodity --

Mr. Smith: I just wanted to make one point on that. Go back to one of the Vicksburg, or one of the curves. So, you were talking about keeping it simple. So, we've had the opportunity to talk about this on the Hill and to different leaders in the administration. And we're quick to focus on a data point compared to the past, but the bigger observation is the river is always dynamic, that it is not a highway that stays flat and straight or curve. It's always being managed in some sense. So, I just wanted the help you see that when we end up talking to some of the folks who have been supporting us from higher, they have to really get pretty basic with them because it's, I guess it's intuitive after you talk about it. But, you know, you said a million -- we get floods quite often, and a million and a half cubic feet per second, and you talked about 110,000 now -- I mean, that that's a dramatic variation all year, every year versus 150 years. So, some of that were 120 years.

Mr. Bodron: And up to a 60-feet difference in location, but I guess I didn't explain this. This is our record high, record low, and then we have what we call the maximum monthly mean and the minimum monthly mean and which, you know, there's a lot of different ways to average something. We think that gives a good outline of what the river should be at that time or what you would call normal. So, you can see the river is way out of normal for most of the years. Vicksburg being a lot better than Memphis, but it is tools that we use in our statistical analysis to try and simplify and explain things and gain some greater understanding.

So, this slide is illegible. So, I am not going to try and read it to you, but basically it shows that there are all different types of commodities that are moved on the river, not just the primary ones of agriculture or ag, and this is Cairo to the mouth of the Missouri area, and this is the lower river. And the product lines are similar, but

they're all different types of products, and they vary by time of the year. So, there's a lot of unknowns from our standpoint on what exactly is moving and when, but it's important that we keep the river open, just not for agriculture.

Then I also want to mention the saltwater wedge as low flows come in the Mississippi River. Saltwater from the Gulf migrates up the river, so we have to put a wedge in to offset the effects of the navigation channel down there to keep the saltwater from going up into water intakes. So, we have placed that this year. This is like the fourth or fifth time that we've done that, and it's placed low enough so navigation traffic can go over the saltwater wedge and then so what do we do and continue to do about it. We're monitoring, we're managing it with our water level -- our water management folks are talking across provisions and making sure that we are maximizing the use of available water within what are authorities allow for us to do. We have a little bit of flexibility, but not much. If we have some real low stages in St. Louis, we might be able to get a little bit of more water out, but not enough to impact things for very long.

We're working closely with all those acronyms up there, the industry, and that's worked out very well. We think and heard positive feedback on that, but it provides us and industry, and the Coast Guard the conditions and what we need to do to make sure that we're making the most of our available assets.

Channel marking, that's been brought up a couple of times. That's a Coast Guard responsibility, but we are -- we do have one vessel, one boat that is one of our survey boats that puts out Aid To Navigation while they are working on the river and continue to use our dredges. We dredge the shoaling areas, and one of the drawbacks of the dredging is sometimes it creates temporary impacts for navigation where we have a temporary closure and then open up to let traffic pass. So, it's not without impacts that we realize that. We try to minimize it.

So, a little bit about dredging, the type of dredge that works best on the lower Mississippi River is the dustpan dredge.

It's like a big vacuum cleaner. There is four of those on the Mississippi River and we have all four of them working or under contract on standby, about to start working, and then there's the cutterhead dredges, which we primarily use for harbors. And then in the upper river, we have a cutterhead dredge based in Rock Island.

So, a little bit about our Channel Improvement Project, that's what the river wants to do is meander and cut off and what we need to do is have a safe, stable alignment for both flood control and navigation. We do that with revetments, dredging, bendway weirs, and dikes. And that's put the river in a generally stable alignment. But it keeps seeking to move outside of that and move sediment quite a bit and then there's the illustration of the effectiveness of the project. It's how over the years our number of dredging cubic yards has dropped with the number of miles of dikes. Now, that's not a scientific gauge, but it's a good illustration of how the improvements in the channel have helped and the improvements have helped reduce the need for dredging, and dredging is the last resort. If we could get it to maintain itself, we would, but there's no way that it'll ever maintain itself without any additional input. You can see the level of dredging, and some of the higher drought years it was a lot more. Now this year we've had our dustpans working over 90 days, close to 100 days. Our two dustpans on the lower river, they normally work about 45 days. So, we've got twice the dredging we've already had in the lower river, and we expected that could be up to 200 days of dredging if the low water continues. Normally the dustpans, they also work the crossings in the deep draft channel, and that's where they get most of the work, but they will have spent a considerable amount of time out this year.

Mr. Judd: Jim, Damon Judd, from Marquette, just when I saw this chart, I thought this was super impressive. And we were talking last night about, you know, proactive versus reactive, and our team would echo everything you said that the investments the Corps has made, made our experience at the same water levels much better this go around than they were in 1988 and 2012. And I think that's a huge positive. And as you think about, Mr.

Pinkham, some of your comments around some of the administration's priorities around supply chain and resiliency with the face of -- in the face of climate change, I think these opportunities are where we can find proactive investment that enhances system consistency and also reduces operating costs because dredging is an expensive alternative are potential win-wins in the spectrum, but the work the Corps has done over the years is what kept us moving in the water condition we had this year, and we all appreciate that very much.

Mr. Bodron: Congress and the administration have made increased investments in the last few years through the Supplementals, and I think we've seen a marked improvement since 2012, and when we get the dredging numbers, it'll be interesting to see how much we actually dredged this year compared to what we get in 2012 when we had severe problems with keeping the channel open.

So, the Regulating Works is a project in the St. Louis District where they use about the same techniques as done in the lower river, but the big difference there are the pinnacles, the rock pinnacles that cover about five or six river miles up there, and they were a major problem in 2012. Since 2012, through that program we've knocked the top off the pinnacles, and we believe we're good to a minus seven in the St. Louis gauge. Before we were having issues at minus 4.8. So, it's been a big help to knock those things off and we continue to monitor the river levels, and if we get low, that we continue to monitor and make sure we believe that we still would be able to maintain traffic even at a shallower or at a narrower width through the rock pinnacle. Then again, it's only about a five- or six-mile stretch, and that's everything I wanted to present today.

Again, the major takeaway is we do have a plan, and we are working to keep the river open. That we're not out the woods yet. So, we're going to continue to monitor and do whatever we can to keep the river open.

Yes, sir?

Mr. Hettel: A general little clarification on your 9-foot channel -- when you say you're maintaining a 9-foot channel, we all know you can't get a 9-foot draft barge through a 9-foot channel, and the Coast Guard requires 12 inches of clearance between the bottom of the keel and the bottom of the river. So, when you're maintaining a 9-foot channel, are you actually dredging to 10-foot, so we can move a 9-foot draft?

Mr. Bodron: Well, when we dredge, we typically dredge enough that we won't have to come right back to that problem area. In the pinnacle removal back in 2012, that was a major issue, as you know, and we basically maintain 9-foot of water in the Regulating Works project. So, there is, you know, that difference there, but when we dredge, typically we don't dredge exactly to the spot because we'd have to turn right around and come back.

Mr. Hettel: Sure. Well, and I remember 2012, very well, and nowadays, we don't have many vessels that draw 8-foot of draft.

Mr. Bodron: Yes, sir.

Mr. Hettel: So, if we're down to a 9-foot channel, and again, the Coast Guard demands 12-foot [sic] of clearance from the bottom of the keel to the bottom of the river, I don't know how many barges we're going to be able to move between St. Louis and Cairo, because we don't have many vessels that can draft 8-foot.

Mr. Bodron: Yes, sir. I understand, and that is with the 12-foot channel most of the time, the lower river, it's kind of common practice to maintain the channel but beyond 9 feet, and so we have impacts even if you can still move and load only 9 feet, and then in the upper river with the pinnacles, if we do get down that low, it could be big issues.

Mr. Hettel: Well, the only point I'm making is if we come to the point of in St. Louis of a negative seven feet in a 9-foot channel, we're going to be pretty paralyzed. It would be nice to for you folks to give us a 10-foot channel, so we can move a 9-foot draft through.

Mr. Bodron: Yes. Understood.

MG Graham: If it's sand and muck, we can dredge, but if it's rock, it's different.

Mr. Hettel: Well, and as Jim stated, you did a good job removing the rock pinnacles down on Thebes and Dogtooth Bend from 2012. I understand there's still some down there, but they're outside the channel, so I don't think that's an issue for us nowadays.

Mr. Bodron: Well, the district surveys and knows where they are and I'm not exactly -- what I've been told was that we still have -- even if the lower we go, we'll have to narrow up before we can't get through there, but you sure wouldn't want to hit one.

Sir, that's all I've got, if there are any other questions?

MG Graham: Okay. So, we've been talking about this at length.

What else can we do?

Mr. Judd: I mean, you know, we keep talking about the access to othere water. You know, the upper river, Missouri, we've kind of talked at length about that and the complications there. Is there any water up in Wisconsin? I mean, it's going to be critical we get to St. Louis this winter to support it.

MG Graham: You're still sitting on a little bit of water in the two reservoirs on the Kaskaskia and Missouri River, right?

Mr. Bodron: Carlisle and Shelbyville.

MG Graham: Carlisle and Shelbyville, some but not a lot.

: So, you're holding on to that till mid-December, okay. So, the trigger is negative seven before you start releasing that water? I think probably around six and a half.

Mr. Bodron: Sir, and it would have a travel time of five or six days, I believe, to get down there and make an impact, and the way that we're looking at it is it would be more of a game time decision as conditions warrant. When it drops out again, and we constantly look back and analyze how good were our forecasts, and we haven't hit the 28 day forecast on the low side yet. So, we don't want to release water when we don't need to. So, we're going to continue to monitor, and if we run into problems, our ops guys will work with our water control guys and then we'll make a decision to release the water at the proper time. But we've only got one shot -- half a foot for 30 days. So, it's not a silver bullet.

MG Graham: And I commend you for that. I mean, that water, we should have dumped that out like a month ago, maybe. So, we saw this one coming and they had the authority to deviate, to hold that water with little risk. And, so, a half a foot for 30 days, I think that's a great example of how it might make the difference. So, we've got that.

Anything else the industry can think of? I mean, they're dredging unconstrained right now. Mr. Pinkham and his team has been great getting its access to available funds which is crucial. So, we thank you Mr. Pinkham for all of that.

Mr. Woodruff: This Matt Woodruff, just to emphasize what's already been said perhaps that, you know, right now we're talking about impacts. We're talking about costs. We're talking about degradation of the system, but if we get to the point where the boats can't get through, we're talking about a catastrophe, and so I think having the recognition of what the draft of the boats are, and the need to have a foot of under keel clearance, you know, if there is a ball you got to keep your eye on, it's that ball to keep the boats moving, because there will certainly be impacts and impairments and limitations on what we're going to do and there's going to be additional costs to our customers but there would be catastrophic impacts if we can't move the boats.

Mr. Hettel: General, you mentioned what we could do. We could have kept releasing flows out of Gavin's Point rather than shutting them off November 20th, and maybe not even just kind of stage it to where we shut off 3000 CFS for 10 days and then 3000 – to give mother nature a little bit more time to supplement the weather stages, rather than going minus 18,000 feet in one day.

MG Graham: So, acknowledged, but legally, Congress has not given me authority to do that.

Mr. Hettel: I know. I understand.

MG Graham: And if I were to try that, we would have been enjoined, and they would have figured out sometime in July. I think with the tools at our disposal, I think we're managing the -- that's the question to use. I understand Missouri, with the tools readily at our disposal, maybe I'll put it in the toolbox for the future.

Mr. Hettel: I understand. Just in these drastic low water conditions, that ought to be something we consider at least.

MG Graham: And then that might be something we go back to Congress with and say should there be some additional authority. There's already eight authorized purposes on the Missouri River.

Mr. Hettel: I understand. I understand everything you're facing up there.

MG Graham: We're throw in a ninth authorized purpose. With the federal family here anything else, certainly reach out to NOAA, anything else from the Coast Guard, they're moving buoys. We talked last night. We're helping them extend ATONs, I know the Electronic Inland Navigation charts, that system, we appreciate that.

If you want to attach a sensor to the front of something and it provides you some record waves for channel depth.

I'll go back and talk to Dr. Pittman. If there's something we can put on a pipe and bolt to a boat that might do something useful.

I'm game, and I guess the last point is, I plan to be out there on the river two weeks from now with the St. Louis team, Mr. Bodron's team, and I'm happy to link up with any of you if you want to be out there. I just want to say thanks to the dredging teams that have been working around the clock, because we're melting them down pretty good and they're rising to the occasion. So, I appreciate that leadership, Jim.

Mr. Bodron: Well, thank you, sir. And just a quick plug, our water control has an app, and I can get the links sent tomorrow if anybody is interested in that app where you can quickly pull up the gauges on your phone, thank you.

Mr. Pointon: Jim, all right, we're going to move into the other project updates as we go forward. Orlando is kind of under the weather so, Mr. Andrew Webber from the Galveston District is just going to grab onto the GIWW Brazos River Floodgates and Colorado River Locks project.

Mr. Andrew Webber: Good afternoon, General Graham, Chairman Murphy, Mr. Pinkham, my name is Andrew Webber. I am subbing in today for Orlando, and today I'll be updating you on the Brazos River Floodgates and the Colorado River Locks. Just a quick overview of both projects, they're located about an hour and a half drive from here and located at where the Gulf Intracoastal Waterway crosses the Brazos and Colorado Rivers. The project would realign and widen the channel at both locations, and would include a new gate, 125-foot gate, up from 75 feet at the Brazos. As well as new support buildings and environmental mitigation. The Colorado River is a similar setup. It doesn't have that 60-degree bend for the pilots to traverse, but a similar project at that site with new gates on both sides of the crossing.

The waterway is a high use waterway. During our tour yesterday, you all got to see a lot of the industry that's built up around it and the energy and petrochemical. All the existing infrastructure was built in the 1940s, thus, the 75-foot gate width. A lot of that was designed for back when tows were actually towing things instead of pushing them.

The purpose of this project is twofold. One, is to increase safety. While y'all we're out there, y'all heard the lockmaster state there's over 100 collisions a year at these sites. Some of them fairly significant as attested by some of the washouts that you all saw on site.

The other goal of this project is to increase navigational efficiency. We're going to do that by widening the channel, which will allow for more variation, more flexibility, and how tows and barges traverse those crossings. Right now, they're limited to one barge at a time. Based on the feasibility study, this will save the industry over $10 billion a year.

This has been a partnered effort. We've had significant engagement with industry, with GICA, which is the Gulf Intracoastal Canal Association, and with local governments. This project is a high BCR over 5, and it's currently authorized and awaiting construction funds.

Mr. Hettel: Andrew?

Mr. Webber: Yes, sir?

Mr. Hettel: I really appreciate you putting a benefit cost ratio in on your slides, and by request, Mr. Pointon is, can all of the other projects that we get updated on, include the current benefit to ratio and the remaining benefits of remaining balance/remaining cost ratio because if we ever get to a point with all these projects going on and the trust fund can't efficiently fund them, it'd probably be best to fund the ones that have the highest benefits remaining cost ratio.

Mr. Pointon: I believe that those numbers are out there. I know they're kind of subject to the cost estimates that they update regularly. I don't want to speak for Steve (Fritz) or Stephanie (Hall), but I believe those numbers are available.

Mr. Hettel: PJ Donovan told me, I spoke with him the other day, that he thinks he could have those updated numbers, some by the end of January.

Mr. Pointon: Okay, I'll check with PJ. So, PJ is the director of the Planning Center of Expertise for Inland Navigation.

Mr. Hettel: Thank you.

Mr. Pointon: Thanks, Marty.

Mr. Webber: Moving to the executive summary, this project's currently in the preconstruction engineering and design phase. It has been fully funded at 25-and-a-half-million dollars.

We currently have about one-and-a-half-million dollars left. We're currently at the 95 percent design stage, and only a few months from completing design and plants and specs for that first contract.

Some other key points are some of the H&H (Hydraulics and Hydrology) modeling, which I'll go into further detail has completed in October. That's new from the last update and looking forward to when we might see contract advertisement and contract award, we believe that we could get those in this fiscal year, but that's entirely dependent on appropriations and a new start for construction. The design of this project has included robust modeling. It's the basis for how we determine what the velocities are going to be in that channel, what the siltation is going to be, and we've approached this with multiple digital models, with physical modeling, and the results of all those models that we've been building on since feasibility really informs the ship simulations that we've done, and we've had captains come in and run those for us at the ERDC ship simulator.

We've run a variety of different scenarios. Well, one of the number one questions that I got yesterday is why only one gate at the breadth and our models inform our decision making, but the models also indicate that without a structure on the West End at the Brazos that navigation can make that and that the siltation that it's going to occur. Dredging occasionally is more cost effective than the investment in a new gate. The H&H models have been complete. So far, all of the results have supported that decision that was made during feasibility with the physical modeling wrapping up at the end of this year and into early January. We should be able to have our full data set and at the next Board meeting provide a definitive answer on one gate or if we have to open the door potentially for a second gate.

What you see now is a kind of a timeline for execution of this project. Again, recent activities include getting to the 95 percent design set. Those just were just recently submitted to the district. They're currently undergoing review on that submittal from the AE, and we've completed the numerical part of the modeling.

Looking ahead, we fully believe that final design will be complete in March, and if funding is received, that we will move to solicitation and potentially award of a contract in the next fiscal year. This is one project, two sites. As soon as construction at Brazos River is initiated, we'll begin to submit capability for design at Colorado River Locks. We expect the design process to be about two years and followed up by a construction period of about three years -- 1,200 days. That period of construction is similar at both sides.

Looking at our funding summary, again, we've been funded to completion for the preconstruction, engineering, and design phase. That's $23.5 million and we have about $1.3 million of that left. We have revised our FY 2023 capability to $260 million.

The increase there is largely driven by the increase in prices that we've seen for materials. You'll also see a to-be-determined on the slide. We're currently in an overall total project cost summary update. We expect to see

increase in costs for the Colorado River Locks site as well. We expect that update to be available and certified in January, and when that comes in, we will definitely keep an eye to where we are in relation to the 902 limit, and if we need to initiate a cost control or if there's issues with the 902 limit.

Mr. Hettel: Andrew, Marty here again. I apologize for all the questions, but back in the Walla Walla meeting, we passed a motion, the Board did, to break down the funding summary by project, not by authorization. So, in your next presentation on this, if we have one on the Brazos-Colorado, can you break those two down for us on the funding scenario separately, Colorado and Brazos, rather than lumping them all together on your authorization?

Mr. Webber: Yes, sir, and this new cost summary update will give us the confidence that we're providing valid numbers, valid and current numbers to the Board.

Mr. Hettel: Okay. Thank you.

Mr. Murphy: And on the funding capabilities, assuming that there is no funding in FY 2023, your FY 2024 capabilities, what would the impact be on FY 2024 capability?

Mr. Webber: You'd see a shift, a year-for-year shift. And the project issues, you know, where we are close to the end, for our design for this first contract.

We're not in the President's Budget. So, you know, will there or won't there be funding to initiate construction is kind of the big question. Really, the risk that in my perspective now is the implementation risk, and if funding isn't received, you know, we continue to see that that $10 million-a-year impact to industry, continue to see that the high collision rates at the gates and continue to have inflation impacts to the project. So that is my brief today, if there's any questions.

Mr. Woodruff: This is Matt Woodruff. Just a couple of comments on this project which is sort of near and dear to my heart as some of the folks around the table know. Right at the very beginning, this was identified as a high use project, which it is, and an energy project, which it is, but it's not just energy. I don't want people to think that the Brazos River Floodgates are just about moving molecules to be burned. Most of them or many of the molecules, I don't know about most, don't end up being turned into energy. They end up being turned into everything you see around us.

So even if we go through an energy transformation in this country and we stop burning hydrocarbons and putting CO2 in the air, we're still going to need to move the molecules. They get moved in those barges. They go through those floodgates and that lock to create the products upon which our society is based today from this tablecloth to the polycarbonate in my eyeglasses, and so even if we transition to other forms of energy, they're still going to have to be moved and moved in very large quantities. In fact, since the energy density of a lot of the alternatives we're looking at is less than the hydrocarbons they would replace, we may be looking at moving more rather than less in a carbon-free economy. If we go to hydrogen-based fuels or things of that sort.

So, I don't want anyone to get the idea that somehow if we have an energy transition, there is any less of a role for those projects than there is today. I think it could just, in fact, be the opposite.

The other thing I want to mention, I think is very important, there's some representatives of the Texas Department of Transportation here, and a few years back TxDOT, which is a local sponsor of the GIWW in Texas, asked the question recognizing how important the GIWW is to the state and the economy of the state.

What's the biggest bottleneck? What needs to be done, and they identified the Brazos River Floodgates as the Number One issue, and they didn't just complain about it. They brought money to the table to help jump-start the study that has brought us to where we are today. I don't think we would be where we are today if it weren't for the partnership and the investment that the state of Texas made on this project, and so I think they're worthy of recognition for that.

So, those are my comments on this project. We very much hope that we can find some money. We know we have money in the trust fund. We know that there's an allocated money from the Infrastructure Act, and while I'm a very mindful and a very strong proponent of finish what you start, and I know that we don't want to get too many projects going at once. This is such a critical project. It's such a safety issue, and it has such a high benefit cost ratio. It would just be a shame if we don't get this done as quickly as we can.

MG Graham: Thank you for that. The options to get a new start in front of us are?

Mr. Woodruff: Well, my appreciation is that if some money were allocated from the infrastructure money, some of that money that's yet to be allocated that that would have the equivalent effect of a new start. That any project that gets some of that money is considered a started project, and that would make it easier for future year funding to come from the trust fund or other sources to continue the construction. So, if there is a piece that the Galveston District could identify that could be done with some of the available funds and that pot of money in FY 2023 that would get started down a logical path to construction of that project. I would strongly encourage doing that, not that we want to stop and start or inefficient funding, but is there an efficient tranche of money that could be given to that project so that we can get started, and get past that new start hurdle, which so often holds up very worthy projects, and I would hate to see this project be one of those things.

The other alternative is simply to get Congress to give it a new start. We know that that's a challenge, especially when we get to these situations where we're looking at Continuing Resolutions and Omnibus bills and things of that sort, but, you know, just a traditional new start would be an alternative, and, you know, the third thing is that the President would put it in the budget, [laughter] and allocate some trust fund dollars towards it. Then we would get it going. So, those are the three alternative as I see it.

MG Graham: I feel the same way. [Laughter.]

Mr. Pointon: Thanks Andrew. I appreciate your presentation on the project. So, staying in the Southwestern Division area of responsibility, we're going to get Craig Pierce up here from Tulsa.

Mr. Craig Pierce: Little Rock.

Mr. Pointon: Little Rock, sorry, to talk about the McClellan-Kerr Arkansas River Navigation System, otherwise known as MKARNS. I think he's going to handle the Three Rivers Project as well as the Channel Deepening Project, sir?

MG Graham: Did he really say Tulsa?

Mr. Pierce: I'm going to take that as a compliment.

And in fact, to a degree, I'm representing Tulsa as well in this because we're a team -- teammates in terms of operating and executing mission on the MKARNS and certainly both of these projects.

So, good afternoon, General Graham, Mr. Pinkham, Chairman Murphy, and the members of the Board and the Federal observers.

Again, I'm Craig Pierce. I am the Deputy District Engineer. We also call it the Deputy for Program and Project Management for the Little Rock District, and I am briefing these projects, Three Rivers and the MKARNS Channel Deepening Projects on behalf of Little Rock, Tulsa, and the Southwestern Division, and my Commander, Colonel Damon Knarr is on the line listening grading my paper -- making sure I'm representing us well today. So, the purpose of the project is to preserve navigation on the system for Three Rivers, that's what I'll be briefing first.

Just as a reminder, there's a threat due to headcutting of losing the navigation pool in the White River Entrance Channel and the project is to prevent that from happening.

The project is in two phases. The first phase is modifying the historic cut-off closure structure, we're basically cutting a weir into that. That's going to be the relief valve for the system.

The second part is constructing a closure structure across the system. So, we're moving the weir from what used to be the Melinda Weir to the new closure, a weir, which is at the historic closure structure which we built many years ago, on purpose, but what we ended up doing was creating some head-cutting issues that we didn't anticipate at the time.

Okay, so we are--we've got a couple of yellow conditions to talk about. One is the schedule, and that really boils down to a protest on the Phase 1 contract. We have awarded that contract, but we in a protest scenario and that's delaying getting started.

And then the Phase 1 project, it cost more than what we anticipated. So, that's the reason for the two yellow lights there. We did award the Phase 1 contract in July of 2022. We're not really sure when the protests will be resolved, but we feel like we've got a good case and that is moving forward, but we're going through the process, and we will have to wait until that's resolved to be able to get the contractor moving.

Mr. Hettel: Sir, Marty here. Are you at liberty to tell us who's protesting the contract?

Mr. Pierce: No.

Mr. Hettel: Okay, I just had to ask.

Mr. Murphy: Sir, without naming names, what's the cost impact?

Mr. Pierce: So, we don't know yet, but we do expect some kind of a, you know, if we end being able to maintain our award, we would expect the awarded contractor to incur some delay costs because of some investment they had made to be prepared to start executing. So, they could submit a request for equitable adjustments, and we would have to look at that to see if there's merit to any cost increase that they would request. So, again I can't give you a specific answer, but there is risk there.

Mr. Murphy: So, roughly when do we expect to have clarity on the protest?

Mr. Pierce: I wish I could give you a good date. You know, the award was back in July. I think we expected way back then that the worst case might be February timeframe.

Mr. Murphy: So, first half, 2023, is that a fair range?

Mr. Pierce: So, yes. I would think so.

Mr. Murphy: Thanks.

Mr. Pierce: An issue there is that Phase 1 must be completed before we can complete Phase 2. Now, we haven't awarded Phase 2 yet, but that is an issue because Phase 1 is a design-build contract. So, the contractor that ends up getting the Phase 1 job they have to go through a design phase before they can start construction. The Phase 2, we're designing that, and so we're going to be ready to award Phase 2 before the Phase 1 design is complete. So, we've kind of lost a little bit of the gap in between Phase 1 and Phase 2 because of this protest. and we might have to wait on our expected award date for Phase 2 so that it doesn't get ahead of Phase 1 if that makes sense.

We are expecting a new certified cost this month for the complete project incorporating the Phase 1 actual cost into it, as well as, at this point, a risk of that potential equitable adjustment that we may have to face because of the delayed award, or the delayed start.

Again, the key activities are Phase 1 and Phase 2, so we'll go over that again. From a cost standpoint, our authorized cost was $184 million in 2018. The escalation of that, $232 million, in the 902 limit, $275 million. Again, for Phase 1, the Phase 1 contract was awarded for higher than what we had expected, and really what we had allocated for Phase 1. So, we do know there is a cost increase coming, but we will have to wait until we kind of get the certified cost completed before we have a better number to put out there.

A couple of the issues on this project it is a challenging condition. That area's frequently inundated, which is really why we have the issue down there in the first place.

Obviously, economic conditions that everyone's aware of. It's also a very remote location. So, contractors getting their crews out there and care and feeding of those crews and all those things, it's a cost issue and execution issue.

This is also a sensitive area from a cultural resource standpoint. It's got the Trail of Tears, a kind of historic history to it I should say.

That's all I had prepared for this. I left our project managers name up there as I am representing him today, but if there are any questions on Three Rivers, I can take those now before I jump into the 12-Foot Channel Project.

Mr. Pointon: Any questions for Craig? [Negative response.]

Mr. Pierce: Okay, the scope on this project is simple.

We're trying to deepen the system from nine to 12 feet. That deepening was authorized back in 2004. I will note that there was not a cost associated with that. The authorization was strictly to deepen, and we did not get -- there was not an associated cost with that authorization. In fact, our director's report from our feasibility study on this was published one year later.

From a status standpoint, we're just getting started. We kind of jumped from the last work really was the 2005 Feasibility Study, and we kind of jumped straight to construction funding this last year. And so, we've got a lot of pre-planning to do. We've got a lot of design to do. We do not have an overall project schedule yet. We're trying to be smart.

Last time I briefed this group, I explained kind of our methodology, what we're thinking about. I'll go through that again, but I think we're trying to be very smart in minimizing the cost of this project.

There's the chronology there. Again, that was authorized in '04. The director's report in '05. We did get a little bit of money in kind of between '06 and '11, owing them money to do some work here, but that work was limited to those things that benefited both the 9-foot and the 12-foot channel. A lot of it was mitigation kind of things, like dike-notching, building least tern islands, which should actually may not be as much of a requirement now because of the recommendation of Endangered Species changes but that work was done. Because of that work, WRDA of 2020, basically declared that we didn't need a new start for this.

So, we were able to kind of get moving from that standpoint. We got a little bit of money in '21 to go back and do some preliminary looks at cost and economics, start the supplemental NEPA (National Environmental Policy Act), and I'll say that that finishing the supplemental NEPA, which we are planning to finish in the summer of this next year timeframe, is really critical for us to finish the planning effort for this project, to figure out phasing and figure out our execution approach. So, we're just now getting into design. That design is somewhat contingent upon that NEPA update. We expect an updated certified cost in November of '23, and then a PACR (Post Authorization Change Report) to kind of get everything baselined in March of '24.

This is kind of an overall schedule for the first couple of phases. Our phases are designed, or are intended to do a couple of things. One is Phase 1, we want to take care of the known shoaling issues first. We'll do that with structures, and we are planning to dredge last. We don't want this to be a dredging project. We want to build structures, have it self-dredged, not spend a lot of money on dredging if we can help it. We do have some rock that we're going to have to excavate out of the channel in the Oklahoma reach. That's definitely going to happen, but that's going to be a little later because we've got to do a lot of work with dredge disposal sites and designing and construction of those sites.

Okay. So, what I'll say about these cost is that I don't think they reflect actual situations that escalated cost shown there from the 2005 study it is just using inflation factors from policy, no engineering, no updated quantities. There have been a lot of changes since then. We do expect the costs to go up. I think there's no question about that. We just don't have a number for you. It won't be until really that PACR is completed in March of '24, where we will have enough information to talk through that.

Mr. Judd: Damon Judd, a question on the numbers just to make sure I'm tracking. The IIJA money was the $92.6 million?

Mr. Pierce: Correct.

Mr. Judd: And so, what you're saying is without kind of going through the updated cost analysis, we're a $181 million roughly shortfall to that, so I guess just back to the kind of what money do we have to deploy based on the way the CIS report was run, my assumption is that kind of what's embedded in that project is just the $92.6 million because it didn't have funding associated with IIJA projects. So, the shortfall, you know, we've got at least a known shortfall here is $180 million. So, you're $113 million IIJA reserve is, you know, more than absorbed with this project or trust fund dollars that number is likely to grow based on what you're saying?

Is that, in terms of tracking the dollars between the different buckets, is that the right way for us, as a board to be thinking about where this funding impact sits?

MG Graham: I read it that way, Tom Smith?

Mr. Smith: Yes, I'm looking at the Capital Investment Strategy and I would ask the same question. The bottom line is, this one with footnotes, this strategy treats the information received by the Infrastructure Law as fact. It was $92 million. Did it say, did it indicate it was funded to complete?

Mr. Judd: No, it didn't.

Mr. Smith: Okay, so, your point, though, is we have at least a gap of to the previous estimated cost, and what Craig is saying is this engineering, the work that's going on now, there's going to be a larger funding requirement for this 12-foot deepening. Yes, I think the last time, Craig, at the last meeting, we talked a bit more about how the approach you're taking to kind of a way to value engineer your way to a better solution.

Mr. Pierce: Right.

Mr. Smith: And that's sort of the evolution since the 2004 estimate and other stuff. So that's probably one project that has more unknowns than other ones we've talked about. You know, even General Graham was talking about comparing the projects to, Kentucky Lock and other things. That's probably I would say, has more unknowns in it than that and so we'll have to wait till we get to that point.

Mr. Pierce: Yes, sir.

And even then, there will still be some unknowns, because the strategy that we're taking is to build what we can build, and what we know needs to be built. And then monitor the river some to see if additional structures are necessary for it to continue to self-dredge. We don't want to build structures just because we think they may be needed and then not necessarily need them later. So, there's a balance there between the cost of kind of extending the schedule to monitor versus the cost of trying to predict what the river is going to do and perhaps build structures that aren't necessarily really needed. But in the end, the real concept is we want the system to self-dredge and not spend a whole lot of money on dredging in this project.

And just a couple of points that kind of work that monitor what we've built -- see what impacts it has, that's kind of this adaptive design approach -- river engineering approach. We do also want to recognize this is a very culturally significant project, 18 recognized Federal tribes are involved in this. Two different State Historic Preservation Offices from Section 1 of 6. This whole system is potentially National Register of Historic Places. So, we've got some of those kinds of issues to deal with as well. Real estate will be a significant issue in terms of acquiring the additional land we need for dredged material disposal sites as well.

And that's all I have planned for you. Any additional questions?

Mr. Murphy: So, I have similar questions to the other projects, capability funding; it sounds like you don't quite know yet when you will really need money and how much is that --

Mr. Pierce: That is correct. What we have from the Bipartisan Infrastructure Law will take us a long way into design and perhaps even fund some initial construction into FY 2024.

Mr. Murphy: So, for FY 2024, then it may be zero given what you have, is that correct?

Mr. Pierce: It may be, yes.

Mr. Murphy: But we don't know yet?

Mr. Pierce: We don't know yet.

Mr. Murphy: Thank you.

Mr. Pointon: Any other questions for Craig? [Negative response.]

Thank you, sir. We appreciate you being here.

All right, moving on, we're heading out to the Ohio River and the Great Lakes and Ohio River Division projects, and we've got Miss Stephanie Hall here. She's going to address the Kentucky Lock Addition and the Chickamauga Lock. So, we're going to get a two for one from her, and then Steve Fritz is here for those Pittsburgh projects. So, we'll get a two for one from him as well. So, Stephanie it's all yours.

Ms. Stephanie Hall: Let's see if I can work the clicker.

Good afternoon, Major General Graham. Mr. Chairman, Mr. Pinkham, and other distinguished guests and Board members, Federal observers, I am Stephanie Hall, Deputy District Engineer for Nashville District and I'm going to brief Kentucky Lock and Chickamauga Lock today.

There are really no changes on this slide since the last meeting. This project is to construct 110-foot by a 1200-foot Lock addition, and it was originally authorized in 1996 and reauthorized in WRDA 2020. It's critical to know that the Kentucky Lock has some of the longest queuing for this system, and so when we're finished with this, we take that delay to queue-through from eight-to-10 hours, to very close to zero.

All right, so stoplight slide -- project safety and the project status summary metrics are both green. The dates and the project status summary original column are from the WRDA 2020 reauthorization. The current dates are taken from the certified FY 2022 total project cost and schedule update, which are the same dates as reported in the last week. So, on this slide, we're not seeing any changes to what you've already seen.

The financial status summary showing is red due to the difference in the plan versus actual values driven by the delays in the onsite construction that we have previously discussed. High water impacts to previous contracts and the ability to award this last contract we needed. The financial information displayed is from July of 2022. We are currently updating the project baseline to reflect the revised cost and schedule estimates which is used to track earned value management metrics. The lock activation contract achieved substantial completion in October. The completion of this contract paves the way for the lock monolith contract which is on track to be completed in 2027.

The certified FY 22, total project cost update, and this was the big news last time estimated additional funding needed of $332 million to complete the project. The new project cost estimate is below the 902 limit, and the team is working to develop the contract that will bring the new lock online. That contract award is planned for FY 2025, and we are still working hard to see if there are any efficiencies that we can gain through acquisition or design that can move that to the left.

This sidetracks the award and completion dates for the project's major activities. Of note is the recent physical completion on item number 8 of the downstream lock excavation contract that we spoke about. The timeline for the last plan's contract lock operational is the follow-on contract, and that includes the remaining major scope items and is still in development. So, all the remaining work, the expectation right now is that should go in one contract, and as we are looking at those pieces and parts to bring this final contract on board, we are still looking to provide efficiencies in scheduling and how we're going to put that together to see if there's any possible way to move that more towards the left in the context of completion.

Kentucky Lock funding summary, this slide shows the project's allocation through time broken out by type of funds. The $465 million in BIL funds were received in FY 2022, brought the allocations to the FY 2020 total

project cost estimate, and as we recall at this last meeting, our recent total project cost and schedule update indicates that we will need an additional $332 million to finish the project.

I have also provided at the bottom the fiscal year funding capabilities. That's what we would otherwise call efficient funding. We believe we currently have on hand any money that we would need to award a contract. In the timeframe in 2025, and so we would need these if we would structure that contract.
We're thinking more baseline options. So that would enable us to have a funding stream to require the input of money as we see those actions taking place.

So, Kentucky Lock project progress and issues. The current contract that is ongoing, the lock monolith is going well. The contractor is ramping up activities on site. The contractor, a concrete batch plant and testing labs are complete, with the first permanent concrete placements that will prepare the foundations to receive lock monolith and concrete are scheduled to begin this December.

From a national team perspective, we are focused on developing the follow-on lock operational contract package to bring the new lock online as soon as possible, and the award for that contract is again still planned and on track for FY 2025.

Mr. Murphy: I have a quick question. Spencer Murphy here. On the lock operational contract, which is if I am reading correctly, that's the last piece to be done?

Ms. Hall: All of it.

Mr. Murphy: Does the $332 million that you believe is required, that is sort of your budget for the lock operational contracts, or those two numbers, does that number go with that contract?

Ms. Hall: That number does go with that contract, and the funds that we still have on hand to award that remaining scope.

So, the money that we got in the BIL enabled us to fully award a lot cheaper contracts at base, plus all options were awarded that left the remainder of funds that we still have on hand with Headquarters, but we will need that additional $332 million in the timeframe on the efficient funding profile on the previous page.

And that together enables us to finish the project.

And then this is a recent photo of the project site and pending any questions.

I see some thought in the room. Okay. All right, good. All right, I'm going to move on to Chickamauga Lock.

This project was originally authorized in 2003, and it was then reauthorized as part of the 2018 America's Infrastructure Act. Project scope includes construction of a new 110-by-600 lock to replace the existing lock that is suffering structural instabilities which limits long term operability of the existing structure.

Major project features include completed road, bridge, and relocations, and property under construction. Remaining and ongoing work includes the lock chamber, that's the large contract that's ongoing, approach walls, operations, building, and final site development.

The project overview depicts the major construction contracts required to complete the lock replacement project. This is a pictorial view of what's ongoing and what needs to follow on. We have two ongoing contracts right now. The upstream approach wall, and the lock chamber contract.

All right, the stop-light slide. Project safety metrics for both lock chamber and upstream approach wall contracts are currently green. The dates in the original and last columns are from the 2020 total project cost and schedule update and will not be cheap based on current progress on site. The lock chamber contractor is currently behind approximately two years, and that impacts all follow-on schedules and costs. The financial status summary contains earned value management data from July of 2022 that is based on FY 2020 total project cost. This information will be updated once our total project cost and schedule analysis is completed, which is currently being developed is complete. We are targeting having that complete early calendar year 2023.

My personal target to my team is February-March. If we can beat that, we will, but we're making sure that we're providing all the due diligence we need to do in this market space to take a critical look at what it's going to take to finish this project.

The schedule slide is similar to those shared previously with the Users Board. The follow-on contractor dates are listed as to be determined due to the uncertainty of the lock chamber completion date. The required completion date shown here is October of '23, and that will not be achieved of that were confident. As stated earlier, we're about two years behind in that lock chamber contract. We also have ongoing review of the contractors claim that is going into ADR (Alternative Dispute Resolution). That ADR timeline has moved since we've last spoken. The contractor has provided an update to their claim that took the end date that they had chosen to submit the initial claim to the current date of where they sit now, and the bulk of this claim is COVID impact, and we are waiting to see how that's going to work coming out of ADR.

As far as scope or other things with this claim, there is nothing from the scope perspective that has been added to this. It was just the additional timeline that they included on their impacts.

MG Graham: The contractor is asking for time, for money, or both?

Ms. Hall: The contractor is asking for both. Yes, they're asking for both.

Mr. Murphy: How much money are they asking for?

Mr. Hettel: $96 million.

Ms. Hall: So, the original number that I gave last one of these was in the $90 million, right. Their new submitted ADR claim roughly doubles that. I'm providing it in that context because there was an assumption that that was the amount of money I was asking for to finish the project. That is not the case. I'm not allowed to give you our position on what we think our risk is. I am allowed to tell you what they're asking for. So, I can tell you in addition to that is we have seen court cases with COVID impacts. Right now, the government for these types, generically speaking types, there may be areas that ADR may find, this isn't exactly correct, but that for these types of requests for funding, the government can give time and no dollars, and so what I will tell you as a group, is that's been consistent output of what we've seen in just a few cases that have actually started to come through the system.

Now, that doesn't mean there's not some merit in there and there's some stuff that we won't work in ADR, but I don't want this Board taking away that I'm asking for that much money, or I think that that's our risk. That is just what they've asked for.

Mr. Murphy: Sure, and the money they're asking for is based on we had to pay more for labor because of COVID and we had to go fly in a new contractor, I mean, is that their X cost?

Ms. Hall: It's very complex. It would cover all of the things you just spoke about, timeline delays as well because of less crew. I mean, everything you can extrapolate from what the world was going through, through COVID, right, and if the contracting mechanisms, as I understand it are clear. In as much of those areas, the government is allowed to give time and no dollars. There are some exceptions that were made. I'm not allowed to speak to those, but those have been clearly executed through our contracting and through the process. I see some puzzled looks, still. Are we good with this? [Affirmative response.] Okay.

All right. Sorry, it took me a minute to get back where I was. All right. So, no change to the allocations from the prior Users Board meeting in the slide. The project did not receive any allocations in FY 2022. However, we are included in the FY 2023 President's Budget for $39.3 million. Now, to make that a clearer statement, we were included for the $39.3 million because that number matches the estimated remaining total project costs balance from the 2020 total project cost, and we are updating the total project costs now. So, what I can be confident in telling you is that that number will change, but we were put in the President's Budget to fund it to completion based on the 2020, that is that number. We are ongoing the update and I will have that update hopefully no later than March, shooting for February, to provide that number. I believe it will change, or that number's at risk.

Mr. Judd: Stephanie, Damon Judd, just repeating that back to make sure I'm following, so the $39.3 million, if I flip to your prior page is basically the 2020 baseline for step 6 and 7, or contracts 6 and 7?

So, as we think about project risk from a funding standpoint, we've got general inflationary impacts from a $39.3 million plus whatever the resolution is on the roughly $180 million ask from the contractor under the ADR process, is that the right kind of bandwidth?

Ms. Hall: So, I would say, one, we're back to thinking that our big risk on the claim is what the contractor asks for.

I've provided the number because that's what they've asked for.

Mr. Judd: Our risk is between zero and they're asked on that bucket, on that piece is that?

Ms. Hall: That would, for ADR, that would be correct.

Right, the $39.3 million was the completion number to the estimate for the total project cost. What we've done between that total project cost and now, is we split out the upstream approach wall, and we awarded it, and we have experienced that cost. So, the work that we have left is the downstream approach wall, and the operational portions of this contract and site restoration.

So, that is all the scope that I have left. So, what I'm looking at for a total project cost and schedule is the risk that I have left on the current contract because I'm in a firm-fixed price contract with the lock chamber, right.

So, my risk is what would happen with a claim, right.

I'm in a firm-fixed price contract on the approach wall, and so the money that I have on hand, I've got some contingency that I think we're pretty good with, right.

So, the risk is the remaining work and the cost that that's going to take to finish this project when we award it. So, I'm also part of that exercise in this total project cost analysis is looking at how to best contract that, design it, and ensure that we're creating the most efficient and effective way to deliver it and to design it.

Mr. Judd: I think I follow it.

Ms. Hall: I didn't mean to muddy the water.

Mr. Judd: I know that you are restricted in what you can say on part of it, and I think I followed that, and I appreciate the response.

Ms. Hall: We can't see the end of this contract on this project, right, and so our risk is in the remaining scope, and what it's going to take to finish that.

MG Graham: But we don't know when you have to award that because the contract for the lock chamber is two years behind. You don't know exactly when they're going to get this thing done, so we can't tell exactly when we're going to award the remaining work, right?

Ms. Hall: We're leaning into that. The contractor has engaged in better placement. We have seen them consistently increase and consistently get better in that area, and as we move forward in that contract, their ability to maintain schedule improves. Not just because they're doing better with concrete placement, because the follow-on work takes less, is less dependent on those other items that have been a problem for their production, right.

So, that gets better and more predictable. They had brought their own schedule to the left. We've been working with them on an operational schedule of when they can finish. They have brought theirs to the left. So, they are improving, and we are starting to work our follow-on contract, looking at how we could go out sooner, bring that in, and mitigate risk. I think we're going to have to take on some risk but that's the critical thought process that's going on now between now and in March when we'll have that number. Because I think to do this right, we're going to have to lean a little bit in, we're going to have to work well with the ongoing contractor and see what we could really award and get started with maybe some contracting work like delayed notice to proceed in certain areas. I'm getting too technical here, but I think there's ways that we can lean into getting that contract awarded and getting that price assuredness locked in.

MG Graham: So, you're in the President's Budget and we're going to be able to put that money to use this year. That's our definition of capability?

Ms. Hall: We did not express a capability. We were put in the President's Budget, because to be put in the President's Budget, they could fund us, if you were a project they're willing to fund to completion, which is what we said in 2020. The number we needed to complete was the $39.3 million.

MG Graham: That's no longer the case.

Ms. Hall: That is no longer the case, and we have worked hard to be very candid on that is no longer the case. But that is, in fact why we're in the budget.

MG Graham: Step one, the lock chamber contractor, he's not moving out, or he's not moving out very fast, and we had to make some assumptions, so, those kind of are in conflict, right? We don't know if we can award anything in '23?

Ms. Hall: Correct.

MG Graham: Okay.

Ms. Hall: But I think we can lean into possibly something in 24, but that's what we're struggling as a team to make happen.

MG Graham: So, trying to be as transparent as we possibly can be.

Mr. Murphy: There was a cost estimate made in 2020 which was then funded in FY 2022.

MG Graham: Yeah, and those assumptions, since the original --

Mr. Murphy: And things have changed since then, ever since the original. I follow.

Mr. Judd: This feeds into some of this why it's hard to spend the trust fund down, right, because it's in the President's Budget, but it won't necessarily be used in 2022.

MG Graham: So, it's going to be carried over.

Mr. Judd: So, it will be carry-over and add complexity, going forward.

Ms. Hall: We've received that message. We are looking to qualified solutions that enable us to award the final contracts soon. We understand that that is where we need to be leaning in, and where we need to be engaged, but we need to do it smartly, and that's where our team is working really hard right now, and so we understand and I think we will find a solid solution that'll help us move that for a cost that's reasonable, and by pulling the end in, we're hoping to see the most efficient way to fund it as well, because it could finish sooner, right. That's the thought. So, progress on issues, I think we've really just gone over all of this again. We've put out the number. I'm going to stomp this one more time for the claim, that it's not money I need. That is not money I'm asking for. All right, and a picture of the job.

Mr. Pointon: No more questions for Stephanie, as she is quickly stepping away. [Laughter]. Oh, I threw you under the bus, my bad.

Mr. Pointon: All right, Mr. Fritz.

MG Graham: It wouldn't be an Inland Waterways Users Board without Steve Fritz talking.

Mr. Stephen Fritz: Without another bald guy standing up here.

Thank you, sir. General Graham, I see Mr. Murphy stepped away, Mr. Pinkham, Board members, Federal observers, thanks for letting me come today. Again, it's a privilege present to the Pittsburgh District's projects to the Board.

So first, I'll present the Lower Mon Project. The major features of work, and we've talked about this before, but I'll just go through them briefly. We've replaced the gate and dam, well, we replaced the fixed-crest dam at Braddock with the gated dam in 2004. We're constructing one of two of the lock chambers at Charleroi.

The second chamber is currently deferred. We're dredging a new navigation channel between Lock and Dam 3, Lock and Dam 4 Charleroi. We're removing Lock and Dam Number 3. That will create a 30-mile pool from Braddock all the way Charleroi without a lock.

We're constructing fish habitat, because of the removal of Lock and Dam 3 that takes away a lot of the good environment for fish to breed and live. So, we're building some fish reefs for that, and then there's some

shoreside facilities that we're relocating as part of the project costs, because we've impacted those particular municipal facilities with our project changes.

On the summary dashboard, I am going to change this here just a little bit. Overall, I feel that the project is making very good progress. The project safety has been very good, especially in the recent contracts that are going on Charleroi. All the work at Charleroi is progressing very well. About one year from today, we should have an operational chamber out there in Charleroi, a brand new operational chamber. I do want to make note of this change in the project schedule. We were planning on having the project operational, meaning 90 percent of the project benefits in June of 2024. We've consciously shifted that to the right by six months to avoid a fish spawn period, and to avoid the typical high water period for the Lower Mon.

So, what that that means to you is if we would have tried that work in the typical high-water period, it's likely it would have got pushed six months out anyhow. So, we're mitigating the risk of that by delaying a contract, or so we pushed that out. The cost performance index indicates that we are over budget, that's that yellow line, that yellow dot right there. However, that has no contingency associated with that, but what I do want to make sure that everybody understands is that the project is still $109 million below what we estimated in 2014. We may have to tap into that $109 million, because of the cost increases with inflation, and the work that we have to finish yet, but as of today, we are still $109 million allocated below the necessary project funding completion that we estimated in 2014.

Is there any questions on that because there appeared to be some questions last time. Yes, Marty?

Mr. Hettel: I'm confused Steve, on your funding summary you say the remaining balance is $109 million needed?

Mr. Fritz: That's correct.

Mr. Hettel: Well, you just said you don't need it, in essence, you don't know if you need it right now.

Mr. Fritz: That $109 million is based on -- I'll get to that slide here. So that $109 million is based on a cost estimate of $1.2 billion. We've been allocated $1.1 billion. So that $109 million shown right there is what has not been allocated to the project, but it's within the project cost estimate. So, we were funded to completion in 2020 with $111 million.

Mr. Hettel: Yeah.

Mr. Fritz: And at that time, we thought that $111 million would get us out of the project, and that would have kept us at that $109 million below what our estimate was. However, we may have to tap into that $109 million, still remaining below the $1.2 billion estimate that we put together back in 2012. Does that answer your question?

Mr. Hettel: No, it just confuses me when you say the remaining balance, you need a $109 million to complete the project.

Mr. Fritz: Well, that's the remaining balance from the project cost estimate.

Mr. Hettel: Yeah, I understand.

Mr. Fritz: Yeah, so that's not saying we need $109 million. That's what's saying that's what's left within the project cost estimate.

Mr. Hettel: When will you know if you need more funding?

Mr. Fritz: We are right now working on it. I'm looking at the remaining features of work and we'll have another certified cost estimate for this in spring of 2023. And at that point, we'll be able to assess what additional funds, if any, that we need.

Mr. Hettel: And you don't have a contract right now to remove Lock and Dam 3 do you?

Mr. Fritz: We do not, but we plan on awarding a contract for that in 2023, lands, inspect --

Mr. Hettel: As long as we don't need the other additional $109 million, right?

Mr. Fritz: No, the money we have in pocket right now is sufficient to award that contract. We don't have a concern about that.

Mr. Hettel: So maybe we just need to rename this remaining balance that looking at this, it looks to me like you need $109 million to finish the project. You're just stating your $109 million off your last most recent cost estimate. You're under by $109 million.

Mr. Fritz: We have been allocated to everything except $109 million for the project based on the 2014 cost estimate.

Mr. Hettel: So, unlike Chickamauga, your contractors aren't asking for more money. None of that. This is you just stating $109 million less than the total projected cost in 2018 as where you're at today?

Mr. Fritz: That's correct. What I'm saying is that I still expect the project to come in under budget.

Mr. Hettel: Under budget. Maybe that remaining balance just need to be relabeled somehow then.

Mr. Fritz: Okay. If we want to chat afterwards, maybe we come up with a better name for that.

Mr. Hettel: "Remaining balance" looks like, I need this much more money for funding.

MG Graham: That's just the difference of what it's going to cost now and how much it was in that initial estimate.

Mr. Fritz: That's correct, sir.

So, the bottom half of this slide just indicates some of the work that still has to be completed. The biggest items on that are the removal of Lock and Dam Number 3, and the closure of the Charleroi land chamber. The rest of things on there, I call them kind of ankle-biter things that have to happen, but we're making sure that they get done.

MG Graham: Okay, so, Steve, go back. So, the high water period and the fish spawning season didn't sneak up on us?

Mr. Fritz: That's correct, sir.

MG Graham: Right, so when it landed there originally, we should have said, "hey, it can't land here anyways because high water and fish spawning."

Mr. Fritz: Well, we've been watching that closely when and I've been reporting that all the users towards it; we've been watching closely how the work at Charleroi is completing, because that's tied directly to when we can remove Lock and Dam Number 3. So, guess that if the contractor wouldn't have accelerated at the lock and dam at Charleroi, there was a chance we could have got at the end a year sooner, but the work is just so linear there, we are unable to do that. And now that the contract is nearing completion, at least to get that chamber operational, we can see where it's going to go. So, I have been reporting that, you know, we're watching that closely to see how that's going to impact the overall project schedule. But I will point out that that's still five years below when we said we were going to finish the project. We said it would be done to 2029.

MG Graham: Okay. So, let me just think through a couple of things. So, a year from now, Charleroi is finished?

Mr. Fritz: No. The lock chamber in Charleroi is operational. There's still work that has to happen at Charleroi before we changed the pool elevation. They have to stabilize one of the walls. So, that's on the critical path of when we can take out Lock and Dam Number 3.

MG Graham: Okay, so when are we going to have raised the pools and tie back the gates at Elizabeth?

Mr. Fritz: I'm going to say we're going to push the plunger on that demolition on July 1st of 2024, and then the pools will start to equalize after that. And by December of 2024, we'll be achieving those 90 percent of the project benefits.

Mr. Murphy: And then on fiscal year capabilities, I don't want to get too down in the weeds again about $109 million, but what I heard you say is you are likely to need some of that but not all of it, but we don't have a number yet we can say “hey, this is our FY 2023, FY 2024 dollars?”

Mr. Fritz: That's correct, Mr. Murphy.

Mr. Murphy: Okay, yeah. It would be helpful to have some certainty around that, but sooner rather than later for all of it.

Mr. Fritz: I think the biggest elephant in the room for that is how or what we're going to do with that land chamber out there. We currently have about six or seven courses of action that we're looking at. One of those is associated with, you know, maybe doing nothing out there, leaving it as is. We've got to make sure it stays stable. It wouldn't be usable for navigation, but those are the kind of things that we're looking at. How can we keep that facility safe for the people that are operating out there, for the boats that are still going through the new river chamber, and still be able to do things like flush debris through there if we decide to leave it open.

Mr. Murphy: Thank you.

Mr. Fritz: Your Welcome.

The key activities in the last year, two major features have been completed. We've completed the dredging for Pool 3, and we've completed the stilling basin extension at Charleroi. Those are two big things that are now completed. That is what you see at the bottom half of the slide. We expect to award fishery's contract, and we expect to award the removal of Lock and Dam Number 3 both by FY 2023, and this kind of gets to your question about when Charleroi is going to be finished. Although expected to be fully operational this time next

year, it'll probably be the spring the 2024 before that contract actually wraps up physically complete. So that's just a few months ahead of when we're going to push that plunger on the dam removal.

Mr. Hettel: Steve, Marty here. That's because you can remove the fixed crest dam, and not remove the lock chambers and still have Charleroi operational, correct?

Mr. Fritz: That's correct.

Mr. Hettel: All right. So, the first thing to do is get rid of the dam, raise the pool level, your operational at Charleroi and then work on removing locks at Number 3?

Mr. Fritz: Yeah. So, it's not just raising the pool, it's equalizing the pool, so on the downstream side, the pools elevating at Lock 3 and it's coming down on the upstream side of that. So, we will equalize those pools after it gets blown up and then once the pools are equalized, which isn't expected to be a long period of time, maybe five to 10 days, maybe two weeks. At that time while the pools are equalizing, it might be pretty hazardous for navigation. So, we're working with the navigation community to make sure they understand.

There's a window in there that we have to hit so that it doesn't impact them as much as what it could. But once those pools equalize within a certain elevation of each other, then they're going to be free reign to use that land chamber to pass traffic the same way they would in the past. There will be no change to the locking procedures other than instead of being a 6-foot lift or an 8-foot lift. Now, it's going to be a 6-inch lift that they have to go through if that makes sense.

Mr. Hettel: Yeah.

Mr. Fritz: The funding slide, and we kind of talked about this already, I don't know if I need to get any more of this, but I just want to make sure everybody understands that we are below budget. We are under budget for the project as it currently stands. There's no misunderstanding about that. We do expect to have a new certified cost in the spring of 2023, and at that point, Mr. Murphy, we could probably inform what we believe is our needs for 2024.

Mr. Murphy: Got it.

MG Graham: For when?

Mr. Fritz: I'm sorry?

MG Graham: For what year?

Mr. Fritz: For 2024. So, We're not in the President's Budget, so it would have to be a work plan request for 2024.

MG Graham: Okay, just as long as we all understand that. It’s in the oven baking.

Mr. Fritz: That's right, sir.

All right. Excuse me, let me get a drink. Regarding challenges associated with the project. Right now, the biggest challenge that I'm concerned about is having sufficient funds on hand, in light of the recent inflation. The 2023 cost estimate will help us verify where we are with that.

Another concern is waiting on others that have to do work for us. So, working with a number of shoreside facility owners, municipalities, there's two, I think there's two critical relocations that have to be done before we make the full changes, and we're working with those communities right now. Sometimes it's tough work with these small communities. They don't have the resources to do the things that we would do in the federal government, but once they sign an agreement with us, they can move out knowing that they have money to pay for the work that they're doing, but we have to get that signed agreement first. We are working on those two critical ones now.

I mentioned there the probability of siltation in Pool 3 is a challenge or is a risk. That's a pretty low probability. The Lower Mon is pretty self-cleansing, if you will. I know there's a question about dredging in the past. Marty, you mentioned that 1-foot that the Coast Guard requires. So, when we did the dredging, we dredged to two additional feet. One for kind of the safety factor and then another foot for over-dredge. The contractor can't, you can't get exactly to that one foot mark. So, I think our navigation channel is 11-feet for an authorized depth of 9-feet.

Finally, for the Lower Mon and just sharing some pictures, and I hope you all get out there to see that next year because the work is actually phenomenal which what's going on inside that chamber. There's not a bit of that chamber, in the deep-water chamber, that work isn't happening. In the top left hand corner right there, they're working, you can see all the work that's ongoing inside of there. It's just completely packed.

There's people crawling over the top of each other safely. Extremely safely. That's represented by that first slide.

Mr. Pointon: Yeah, you got the green slide.

Mr. Fritz: Being safe. Here we're showing some work on the filling and emptying culverts. That's the bottom slab that's being placed in there. Over here on the bottom left in the foreground that's kind of got the shadow on it, that's the bulkhead sill on the upstream end. That's completed now. That's done.

In a little bit further in the background there, that's the miter sill and you can see the filling ports in that. There's three pieces of that that are going in, and I think that's somewhere about 75 percent complete, being done. Now, they've got to do the same thing on the downstream end. They have to put a miter sill in and a bulkhead sill, but the bulkhead or the miter sill seal on the downstream and doesn't have those ports in it because of the way the filling and emptying system works. So, it will be a little bit easier of a construction, and then this is one of the first lifts, and I think this is in the downstream right, I'm sorry, the far right hand miter sill over here. And I think with that, that really completes my briefing on the Lower Mon Project, unless there's some questions that I haven't answered.

MG Graham: How much? You said $109 million left in the budget-room, but how much are you going to need do you think? We won't hold you to it.

Mr. Fritz: I don't know the number for that exactly. I'll kind of give you your range. Maybe, say, $25 to $50 million, but I would really like to refine that number, because I don't have a good estimate yet.

MG Graham: We won't hold you to that, but I think it's useful for the Board to understand the rough order of magnitude of what this might be. Okay, thanks Steve.

Mr. Fritz: And that would still keep us below. [Laughter.]

Mr. Hettel: It'd be nice to keep this $25 to $50 million additionally below too.

Mr. Fritz: And you wonder why I lost all this hair. [Laughter.]

Mr. Hettel: Not due to me.

Mr. Fritz: No, not at all, sir.

The Upper Ohio project, I'll move into that right now.

It's condition-driven, just like Lower Mon was. It includes the three uppermost locks on the Ohio River: Emsworth, Dashields, and Montgomery. Each of the facilities right now are going to get a new 110-foot wide by 600-foot chamber adjacent to the existing 110 by 600-foot chamber, and that's going to be in the footprint of the existing auxiliary chamber. So, you can kind of see on the slides here how that works. So, that's the auxiliary chamber existing and the new, which is going to be the main chamber to the right. Each one of the three. The existing land chamber out there now will be in a fail-to-fix mode. So, it will have to fail first, and we'll have to fix it if something fails.

As far as the dashboard summary, there has been one construction contractor awarded to date that was the lock contract and that's nearing completion with no safety issues. It's completing on time. I think they're finishing up some chemical grouting now. It's scheduled to be finished here in December. And that's going to be achieved. The project is on schedule with respect to what we know.

You know, the Capital Investment Strategy will have a say in what we do for Emsworth and Dashields. Montgomery was considered fully funded by the Bipartisan Infrastructure Law, and we expected that at the time to be sufficient funds to get us out of that. However, with the recent inflation and the escalation, we don't know the answer to that yet. So, we're doing a couple of things there.

One, we're revisiting the cost estimate to include that.

Now, we've done so many cost estimates for this overall project. I have a list of probably 10 or 12 of them since we were authorized. So, we're looking at a revised cost estimate. We're going to have an independent architect engineering firm do a cost analysis for us to habitability and a constructability review for us. So that we have eyes on what we what they think might be our issues with our cost estimates. We have an independent party looking at these things.

For Emsworth, we received $77 million. That's enough for the design, real estate acquisition, and some preliminary engineering things like geotechnical investigations, maybe some modeling. So, we're starting that now. I think we have a geotechnical investigation scheduled for the spring after the water starts to drop out a little bit, and we've already funded the non-labor portion of the model construction down in ERDC, the Engineering Research and Development Center. We're getting quarterly allocations for the laborers associate. That's why I can't say that the labor is fully funded yet. As far as earned value is concerned, we haven't been tracking the earned value yet for this. We are going to start doing that in the spring and 2023 with the new certified cost estimate.

So, Marty, you might notice in the slide deck, this particular slide is an overall funding and then I have one broken up for each one of the facilities.

Mr. Hettel: I appreciate that.

Mr. Fritz: So, this slide represents the overall funding and some target dates for the design and construction for all the facilities. As I mentioned before, Emsworth of Dashields, the construction of those are highly dependent

on the Capital Investment Strategy. Even the design for Dashields is dependent on that, on the capital investments. So, I won't read any of these particular dates here unless you want to go through any of them. Overall, the project has received $75 million, but we've been appropriated $987 million.

So, you know, we didn't get all those BIL funds as soon as the appropriation was made for giving those to us gradually.

They're not on our project books. In case we come in under budget, we don't have to move that money out of the project. It's held at a higher level. So, it can be moved another project that needs it.

So, this is a funding table for the just the Montgomery Lock alone. You can see we've received $897 million. I'm sorry, that's not right. We received $857 million under the BIL, and we have received about $40 million previously. So that totals $897 million. What I want to say about this is we originally had planned to have an advance contract to construct a batch plant, a site development for a batch plant out there at Montgomery.

We ran into some real estate issues. We put those real estate issues behind us now, and I'm happy to say that we did just advertise for construction for that site development contract last week. We expect to have that awarded by the end of January of 2023. What's significant about that is if we would have to include that contract, that site development, in the main locks contract, that probably would have added about ten or 12 months to that particular bit of work because that's critical path work. So, now that lock contract can finish ten to 12 months sooner. Which means less money overhead and profit -- or not profit, but less overhead that we have to pay on that 12 months which can be pretty significant.

Mr. Hettel: Steve, don't leave Montgomery yet. Marty here. So, this remaining balance of $287,900,000, that's your estimate for inflation, is that correct?

Mr. Fritz: That's correct. So, we have an estimate right now for Montgomery, about $1.18 billion, I think it is.

Yeah, $1.18 billion. So that's what we estimate right now we could need to finish that.

Mr. Hettel: Due to your estimate on inflation and as we spoke at Lock 25, it looks like you're going to execute this contract some time on Montgomery in 23 or '4?

Mr. Fritz: FY 2024 and we're going to advertise in FY 2023 and award in FY 2024.

Mr. Hettel: So, you really won't know what that cost is until you get the award back from the contractor and the contractor gives you "this is how much it going to cost me to build it?"

Mr. Fritz: That's correct.

Mr. Hettel: Okay, just needed to clarify that, because that at $287,900,000 may or may not be there, right?

Mr. Fritz: That's correct.

Mr. Hettel: Depending on what the contractor comes back with his bid price?

Mr. Fritz: That's correct. So, there's something that we're doing to manage that particular risk. So, we don't break the contract into a base contract and maybe one or two options. The primary goal is to get that base contract awarded and that's going to be a significant piece of the work.

Mr. Hettel: Sure.

Mr. Fritz: So, we're trying now to determine where is that cut-off. Where do are we say were 90 percent sure or 95 percent sure that were going to be able to award that contract base and if that contract base is, you know, where we expected it to be, then we might be able to work both those options with the funding that we have on hand.

Mr. Hettel: Right.

Mr. Fritz: So that's our strategy for that.

Mr. Hettel: So, that timeframe is the middle of next year, did I hear you say?

Mr. Fritz: The award?

Mr. Hettel: Yeah.

Mr. Fritz: The award right now is shown as the spring of 2023. We're doing this best value acquisitions. We're working through the process there. That might push it further into 2023. It depends on the evaluation factors and how many contractors put in a proposal for that.

Mr. Hettel: Hopefully an update next Users Board meeting?

Mr. Fritz: Yes, sir.

Mr. Hettel: Thank you.

Mr. Fritz: Issues and challenges. The biggest challenge that I see, other than the funding part of it, if we have a failure out there prior to us recapitalizing this, you know, a failure of that middle wall would mean that the traffic stops at that particular point in the river. It will take us time to recover from that. So, to stay ahead of that, we're doing maintenance to try to keep the facility from falling apart. You know, we've actively went in and we've pinned the wall together in Montgomery, the middle wall, and that was the biggest concern we had because that wall was just going to split. We're continuing to do work out there. Some folks talked a little bit today with me about the closure that we have out there right now, and there's a maybe a four to eight to 10-day delay getting through there because got to put one barge through that chamber, the auxiliary chamber, as opposed to putting nine in the main chamber.

Another risk is real estate, and this is for the entire project. You know, being on the river, they're highly industrialized corridors. When we're acquiring property for these facilities, which is required by our regulations to make sure they have enough to build the project. We have to do an evaluation whether or not there's viability there with associated with contamination. So, we look at that and being an industrialized corridor, things that are already developed out there. You know, we had areas identified in the feasibility study which was done in 2014. Some of those areas now were developed that they weren't developed in the past, and there's contamination levels all over the place that we have to investigate. I'm not saying it's a bad thing. I'm just saying that that's something we have to look at, so we don't buy more risk than we want.

Mr. Hettel: Let me go back to the current closure you're on. You spoke about the one barge chamber. I've been keeping tabs of that. You know me. The first hundred tows through there, my cost estimate is it was $5 million. So, it's, I mean, you're at $51,000 cost per tow right now. The average delay on the first hundred tows through there's 84 hours. So, I understand, but when you say six to eight-days further of this closure, anything you can do

to minimize that to close, I think you're scheduled to be done with this December 16th, but I'm hearing it may take four or five more days?

Mr. Fritz: Yeah, unfortunately I don't have a good finger on the pulse of the O&M side of it, but I can get you more information. I know they are working to get done on schedule or ahead of schedule.

Mr. Hettel: Yeah. I understand. I just want to give you an idea what the delays are up there. It's pretty massive. I mean this morning we still had 17 tows on turn at an average 120.95 hours of delay.

MG Graham: How many hours of delay?

Mr. Hettel: 120 hours on 17 tows--over 4 days of delay. Sorry --

Mr. Fritz: No, no, and I think that's a very important thing to stress because folks don't know what the impacts are when something closes, and I think it's good that you keep track of that. We don't have the same visibility that you have, so I appreciate you inquiring.

The last thing I want to talk about is how we're going to reduce risk associated with resource competition. You know, there's a lot of work out there with the BIL money going on, and so, what we're doing is we're engaging the construction contractor and the labor unions to say, "this is the work that we have coming". We've had already one industry day out there. We'll have more, so the construction contractors and the labor industry and the material suppliers, they all know this is coming. So, it's not going to be a surprise to them. So, they have their pulse on it, and we have our finger on their pulse. So, that can help inform our cost estimates as well.

This is the slide specifically for Emsworth funding. We got $77 million in the BIL. The hardcore design for Emsworth is not going to begin until we finish the design for Montgomery, and that's going to be late Fiscal Year 2023, but some of that design work is starting now. So, we're going to start to look at the geotechnical investigation. Like I said, we're going to go out there, going to start doing some Geotech investigations at Emsworth in the spring. We're able to start looking at real estate right now. We're starting the modeling right now. And that real estate, it's such a small price tag for the project, but it's one of the biggest risks that we have because of the industrial corridor.

I think it's important to note that there's a lot of similarities between the designs of these particular facilities. So, we're going to have an economy of repetition that we've been able to employ for each. Now, that doesn't mean that all the walls are going to be the same, because there's different pool elevations, but the electrical mechanical systems are all going to be kind of the same when we can beg, borrow, and steal from a prior design to make that -- to make those things functional. And we have started some preliminary real estate investigations for Emsworth, and what we found is that one of the sites that was identified, there's already some significant construction on that site. So, you know, we have to decide what our best course of action is for that.

Mr. Hettel: And, Steve, just for knowledge in this room, you're doing Dashields and then you're jumping up and doing Emsworth and then come in the middle and doing Montgomery, Emsworth, and Dashields. Is that because the risk of failure at Emsworth is higher than the risk of failure than Dashields?

Mr. Fritz: That's. Correct.

Mr. Hettel: Okay, thank you.

Mr. Fritz: Some of the challenges at Emsworth are the same as at Montgomery. We're expected the potential for failure before we get to recapitalize, and the real estate is all also a challenge. We received the $77 million in

the Infrastructure Act, but that's not enough to do the construction. That will get us the design for sure. It will get us the modeling. It will get us our real estate, but, you know, we might be able to get a small amount construction, but it's not enough to build the lock. The timing of the major Emsworth Lock construction is really dependent on the Capital Investment Strategy, and I'll need to touch base a little bit more with David about where we fit in that.

Okay, the last one here is Dashields. The key activities -- so this shows what we've received for Dashields. So, in FY 2022, we received $12.8 million total of CG and IWTF funds. Half of that was for Emsworth, and half of that was for Dashields. So, I show half of it here on the Dashields slide. We're going to start looking at the geotechnical work and the environmental aspects of, you know, acquiring these different properties out there so that we can support real estate construction, and that's going to fall on the heels of the same work that we're doing at Emsworth.

Issues and challenges, same as at Montgomery, and at Emsworth. Real estate -- similar, again, that's a highly industrialized area. The geography there is pretty daunting, you know, we were impacted by a railroad on one side and there's a community on the other side of the river.

And I think that completes my briefing for the Upper Ohio, unless there is questions that I haven't answered.

MG Graham: Steve, before Marty brings out that, there is a number -- so, Steph said Kentucky has a million 5, a billion 5?

Ms. Hall: Kentucky, yes.

MG Graham: Okay, that's spread out over time, kind of exactly how we don't want to build piece by piece by piece over decades, those kind of things. You heard Lock and Dam 25, when Jose got up here, say a 1200-foot chamber, $732 million. The slide you just said for a chamber half that size, $857 million today.

Mr. Fritz: The current estimate I said is like $1.18 billion including all the escalations.

MG Graham: Okay.

Mr. Fritz: The $897 million was prior to the escalation. I'd rather stick with the $897 million.

MG Graham: We will stay with that for now because we don’t want to compare apples to apples here. So, so we know that that math doesn't work, all right? Mr. Smith and Mr. Perez, our Chief of Engineering, they know we've got to provide a bit more guidance to the PM’s out there as we're putting these estimates together, because you should be confused, right?

I just told you it was going to take less money to build a larger chamber in a more rural area. Okay, and, you know, that little red flag, you should be throwing it out there.

Mr. Hettel: You didn't have to tell me that, General, I was aware of that.

MG Graham: Okay. So, we've got some ground-truthing to do on all of this. So, that's one piece. Are you doing an Early Contractor Involvement?

Mr. Fritz: Not to the degree that they are for Jose's project. We are engaging the construction industry. So, Early Contractor Involvement does have some positives. But I think there's also some cons associated with that,

you know, you are stuck with that one contractor at that point, and if you can't reach an agreement with that contractor, then what do you do next?

My preference is always invitation for bid, but we are going to go best value for this.

MG Graham: So, that should raise another questions, which is why is St. Louis doing it one way and Pittsburgh doing it another? We give wide latitude for the professionals down at the districts to understand their unique circumstances and apply a unique answer to that, but when I got an apple and an orange and they're both doing the same thing, they get my full attention and they should have your full attention, too. So, we're accountable to that, on explaining why those differences are out there, and I think Steve did a pretty good job of laying that out, but we're just caught scrutinizing those decisions that the districts are making closely and we're accountable to you because this is your money, too.

Mr. Hettel: I am going to stick up a little bit for Steve, believe it or not, but the Lock 25, General, remember, they already had a space there for that new lock.

MG Graham: Yeah.

Mr. Hettel: And Steve, he's taking part of a dam out to build another chamber outside the current chamber, so --

MG Graham: It's different. That's not --

Mr. Hettel: So, that's a big difference. It's not an "apples and oranges". So, you can't say $732 million for a 1200’ and $897 million for a 600’, because they're two totally different construction areas, right?

Mr. Fritz: That's a fair statement.

MG Graham: Marty's helping out Steve. [Laughter.]

Mr. Hettel: I think what I'd really like to see is some kind of comparison, and this is really off topic, but some kind of comparison between all these different types of contracting methods and what really gets us the best value. Is it invitation for bid, is it best value, is it Early Contractor Involvement, or some other type of method?

I think there's got to be some kind of a come-to-Jesus moment on those things.

MG Graham: I agree, and I'm also not looking for to try to stuff everything into a cookie cutter mold because every place is different.

Mr. Fritz: That's correct.

MG Graham: Yeah, I just want to acknowledge that.

Mr. Murphy: I agree, and I was cheerleading for Early Contractor Involvement earlier, but I fully recognize that one size doesn't fit all for any of these projects, whether it's how you contract it, or how you design it, or how you manage process. So, I would definitely encourage the team to be open to alternate modes of contracting or alternate modes of design because you can't do it like we did in the ‘30s or the ‘40s or ‘50s. You know, we should be open to understanding new ways and learn from our successes and our failures.

Mr. Woodruff: Sir, if I could comment, this is Matt Woodruff, again. Probably, 10 years ago sitting around this table, we talked a lot about the opportunities to modularize some aspects of lock and dam construction, and we had differences between LRD and the Mississippi Valley Division, and I think there was a center of expertise.

Mr. Hettel: There was.

Mr. Woodruff: And the idea was that we were for like valves and actuators, try to get some standardization, so that every time something broke, we weren't getting a bunch of machinists together to fabricate a new part that we could to have, you know, spare parts.

MG Graham: A commonality in components and commonality in design.

Mr. Woodruff: And where are we on that?

Mr. Pointon: Can you speak to that?

Mr. Fritz: I can certainly tap dance and speak for our directors that have given me that direction -- it's not my lane but what I can say is there has been a big emphasis on commonality and standardization for components. There's people within INDC that are specific to that. That's their role. They're taking the lead in that and working with all those different projects to identify those pieces and parts. So, I know there's been some tremendous spreadsheets put together and a lot of work done. So, it was definitely on our radar.

MG Graham: Alright Steve, is Pittsburgh designing this or is the INDC and I'll explain INDC further.

Mr. Fritz: The Inland Navigation Design Center is the lead designer for it.

MG Graham: So, what we did is we pulled out the folks who were designing and we pulled them together, and in this case, the Inland Navigation Design Center is a concept, not a physical place, and it's kind of split between Pittsburgh and Rock Island right now. They draw from folks across the enterprise, but they have oversight of the design of all these new locks.

What does that really mean, is they assign the design engineer. Those come out of this set pool, and so that's where we'll get the least commonality of thought, and then they own the design standards, so that we are not to have Rock Island designing different arrangements of gates and valves, grab-able logic controllers are the same, the sector gear should be similar as much as you can. So, hopefully that answers your question. We did evolve and the districts hate anytime you take something from them, from the operation, so there's always some drama associated with that, but we're committed to that, those economies of scale.

Does that answer your question?

Mr. Woodruff: Yes. Yes, absolutely. Thank you. It's good to know all of them.

Mr. Hettel: And General, Marty here. For Steve's project at the Upper Ohio, you're basically building three chambers that are going to be the same, right, other than miter gates might be taller or shorter?

Mr. Fritz: The walls might be different. Yeah, so the filling and emptying system is going to be pretty much the same, but tailored, to fit.

Mr. Hettel: The filling and emptying valves are going to be all the same on all three locks. So, there is going to be some commonality that they're doing in the Upper Ohio Nav study that Matt is referencing.

Mr. Fritz: I don't want to say that that's going to be true for every particular feature like the filling valves, but there are going to be commonalities between those, that's correct.

Then Early Contractor Involvement, just one more thing. We are involving contractors very early. I think we had four or five prime contractors out there that looked at the plans and specs on our Industry Day, and we had one on one feedback with them in individual sessions. So, we're skinning that cat a little bit different. If there's no other questions?

MG Graham: Those are enough [laughter].

Thank you, Steve.

Mr. Fritz: Thank you, all.

Mr. Pointon: Well, Steve, I think by total chance and coincidence you nailed right on the schedule, the agenda. So, thank you so much. No more questions, right.

All right, we've got one last presentation that's on our Lock Performance Monitoring System, LPMS. We've been modernizing that system, and we've deployed it, and I don't want to steal too much of Steven Riley's thunder. He's the project manager for the Lock Performance Monitoring System. I think Marty has been our conscience as we went out with this. So, Steve, give us some updates on the improvements that we've made.

Mr. Steven Riley: Thank you, Mark.

Good afternoon, Major General Graham, ladies and gentlemen of the Board, and our Federal observers. I'm Steven Riley with the Institute for Water Resources, Navigation and Civil Works Decision Support Center. So, no, acronyms there, but that is IWR and NDC respectively. I am Steven Riley, the program manager for our information systems there at NDC, and in particular to this venue, I am the Alternate Designated Federal Officer (ADFO).

Mr. Pointon: So, if I get run over by a bus, he's sitting here.

Mr. Riley: Yeah, and this is why Mark's never retiring, so that I don't have to take his place.

So today I want to take just a few moments to identify ongoing and future changes to our information systems and how that impacts data quality and timeliness of data dissemination that you and the industry and us on the federal side need. We are talking about IT infrastructure instead of physical infrastructure, but this is still useful and important on our inland side, on our inland system, as well as our coastal system.

In the interest of time and allowing those of you in the room that I know I am the last presentation between you and a flight out, I will keep this brief. I have two main points that I hope to get across today. And one, are those ongoing and future changes to the Lock Performance Monitoring System, LPMS, and the other is that we are undergoing a large effort in FY 2023 to improve reporting. We're actually creating new data services and reporting applications for the public and internal to the Corps. So, information, including dredging, Notices to Navigation Interests, locks, LPMS, and our Waterborne Commerce Statistics Center data center.

Very quickly, some background here that gives us the mission of collecting this lock data. So that's the Rivers and Harbors Act as later amended and codified by 33 CFR Section 207, part 800, and 33 USC section 555. Not super important, but what is important about that is that calls out our data collection as a set of engineering

forms, which we need to continuously recertify through OMB once every three years. So, this is me saying once again if you all in the industry have any need for us to change our data collection, what we are collecting, that's the mechanism through which we do it. I believe last time we recertified that, we did come to the Board and ask if there were any comments or changes needed. We are about on schedule for another one of those recertifications. So again, if there are any changes needed to the data we're collecting within LPMS, that's our mechanism to do so.

So, there was a purpose for me citing those.

Mr. Hettel: Steven, Marty here.

Mr. Riley: Yes.

Mr. Hettel: When you state here on there today, budget development parentheses tonnage, it's an estimate of tonnage on every barge going through a lock. Why don't we reconcile between the VOR reports (Vessel Operating Reports) and the LPMS data to get the actual tonnage through a lock?

Mr. Riley: I will get to that later in the presentation as we get to the differences between our Waterborne Commerce Statistics data set and our locks data set.

Mr. Hettel: I apologize.

Mr. Riley: No problem.

Mr. Hettel: I didn't read your presentation clear enough, but that would give you a better idea of the actual tonnage through probably.

Mr. Riley: And that is primarily what's used, except for instances where the segment of the waterway might not be able to allow us to distinguish it. So, there are very few of those, but we do supplement the information between the two systems, Marty.

So yeah, just not to get too far ahead of myself here, LPMS is the authoritative data system used to collect and report data on vessels traversing locks. It is an estimate, as Marty mentioned, of tonnages and commodities going through those locks. The authoritative data system for the commodities and tonnage comes through a different mechanism, that is our VOR reports. Those get sent to the Waterborne Commerce Statistics Center, the WCSC in New Orleans. That data is the precise data we use for the budget formulation, but there's lots of QA/QC between the two and they're sometimes used in place of one another where necessary.

A little bit of our dirty laundry here, this was LPMS, as of about six months ago. It was created and deployed originally in the year 2000. So, this is just illustrative that, you know, while we kept things running, there was not a lot of innovation. We weren't able to nimbly change to meet your needs or our needs. We have completely redesigned the system with a focus on built in error checking and the capability to include real time QA/QC. In addition to the real time checks, we've also got a much more robust after-the-fact set of quality controls. So again, how does this relate back to you as a user group?

When you are looking at your data, we should be giving it to you more reliably and with better information, and I say this knowing that there are always improvements. Marty is probably one of our most vocal stakeholders, and we appreciate your feedback. I've already got my homework for this week, and Marty, I know we've got a couple of things to fix with this, especially with regards to -- [interrupted].

Mr. Hettel: Steven, my only frustration with LPMS, and I think you've done a great job, is it's difficult to go back and look at historical data. You've got a time frame in there. You say put the minutes in and when I try to figure out the minutes for 30 days' worth of lockages, it boots me out and says I can't do it.

Mr. Riley: I understand, and you're stealing a little bit of my thunder. I know a lot of this is just me speaking to the slides, but one of the major changes that we're going to implement with that data services and data reporting application, is that there will not be a set 30-day timeframe of data that's available. We're going to parameterize it so that you can say, give me the start date, give me the end date, and it will pull everything.

Mr. Hettel: The old OMNI (Operations and Maintenance of Navigation Installations) system used to do it.

Mr. Riley: Very similar, yes.

MG Graham: So, we're going back to the old system we got rid of?

Mr. Riley: Well, no. We're improving upon all of the systems, sir.

MG Graham: Just checking.

Mr. Pointon: So, Marty's got to bring a box of donuts at the next meeting as well.

Mr. Riley: What does OMNI stand for?

Mr. Pointon: Only we old guys know what OMNI means, Marty.

MG Graham: Seasoned, well-seasoned.

Mr. Pointon: I can't even say white hair because Marty doesn't have white hair like me.

Mr. Riley: So, continuing on, our old Corps Locks public website was designed in 2013. We've also given it a bit of a facelift. This, again, will be replaced by that reporting application, which is going to take our Notices to Navigation Interests system, the waterborne commerce data system, and this will give your one-stop shop for all that information. Sort of give you the designation between what's the Corps project, what is maybe the port that's in the area, the statistical port that is defined by local legislation, give you maps of what those areas might look like so you can tell what the distinctions are. Sometimes I readily admit it's confusing between what we publish as the Corps project and what the ports might want to know, and that's really just because these are similar but not the same geographic areas, right.

So, we're going to make that all readily apparent through use of maps, have nice shapes that identify what these things are.

Mr. Hettel: Steven.

Mr. Riley: Yes, sir.

Mr. Hettel: On your lock status report, why is the GIWW not listed?

Mr. Riley: Lock status report, I believe, not to bring up this again, but I believe that's actually a report that was inherited from OMNI when the two systems were combined in the year 2012. So, any part of the country that did not already collect gauge information inside of LPMS or OMNI was not included in that report. We could

work with the district to see if they were willing to collect that information, but that is the rationale. It was not a region of the country that was collecting information required to build that report.

Mr. Hettel: So, you're aware that you're GIWW is not in there.

Mr. Riley: Correct, and I also, offhand, believe that the Columbia-Snake is not in that report as well.

Mr. Hettel: That very well could be. I have never looked at that one [laughter].

Mr. Riley: Again. We would have to work with the districts to have them inherit that additional data collection, make sure that they're okay with that, but technology-wise, it's something we could do. I'm reticent to volunteer the districts to enter any additional information, but it's possible. So, we'll check in with that.

MG Graham: The data is useful to you, and we'll certainly entertain that, absolutely. Tom?

Mr. Riley: And it might also be something that we can work with our CWMS, the Civil Works, the Corps Water Management System, so we can work with our CWMS partners to maybe not have duplicative entry and just use some of their data to build up that same information.

Upcoming changes. We don't currently have a mechanism for folks to capture lock information offline, say the internet goes out, my server goes down, except for them to enter that information on a piece paper. We are going to be changing that so that they can enter information off-line and much more quickly feed it back to us.

So, Marty, not to pick on you too much, but I know oftentimes you'll see the website and realize that, you know, we're missing a chunk of time because, perhaps the internet's gone down at one of our Gulf Coast locks where we've got a lot of storms and you won't see information from there for a period of four or five days and that's because they're busy getting back into working order. This should help reduce that time. It's not going to completely negate that time because the internet will be out, but as soon as they're back online, it should help.

These next two bullet points are important we're going to be building out these two new applications, one for data services. So, to get nerdy for just a second, if the rest of this wasn't nerdy enough, that's going to be for folks in your logistics departments to just get these data and build out applications of your own based off of our data, right? So, that that's a nerdy thing that's very helpful to both our federal partners and hopefully to you as well.

The reporting application is where we're going to come to the Board and ask you, solicit some feedback. We want to make sure that as stakeholders of the system, we hear all of your needs. So, over the next 12 months or so, we will be soliciting some feedback, making sure we get the information to you.

I think the next couple of slides here will break out the difference again of the lock data that we collect, Marty, and the Waterborne Commerce Statistics data. We have some static websites here for the Navigation and Civil Works Decision Support Center, which collect the types of reports, identified key locks for those locks on confluences of the systems, statistics by river district in a division, and so on and so forth. And then we have our Waterborne Commerce Statistics Center website which really captures that low level commodity movement data. These two will be replaced and or supplemented by this product that we're trying to put out over the next 12 months. And if I did that briefly enough, we're still way ahead of schedule and that that's the end of the presentation.

You'll see on there that we've got the LPMS mailbox instead of my personal email. It's not because I don't want you to have it. I am very willing to give it to you, but that also gets seen by a few more folks. So, if you have a

problem with Corps Locks, please give that email, in addition to myself, if you already got mine, my email address, and we will try to address any issues you've got as quickly as possible. Any questions?

Mr. Hettel: Just a comment. When you get finished with all of these updates, will you have lessons for people that utilize LPMS, kind of a presentation to say this is how you use LPMS?

Mr. Riley: I think that's something we can do if that's something the Board would like to see. I can give a more entertaining version of that presentation here, or I can provide it online for you to seek out yourself.

Mr. Hettel: A live option once you get all these updates done, and I don't know how many people utilize LPMS. I do on a daily basis. So, if all this data is going to be in one place, it would be nice to know how to use it.

Mr. Riley: Absolutely. We'll have to work to find the appropriate venue for that, but that's something we can absolutely do.

All right, with that, thank you.

Mr. Pointon: Any questions for Steve? [Negative response.]

At this point, we're going to move on to the public comment period I believe. I don't think there's any more formal presentations. I think we have two that want to make public comments. I'm going to do it in chronological order. I believe we have Geir, and probably I'm going to screw up your name, we have Geir Kalhagen, he's the Director of the Maritime Division of Texas DOT.

Mr. Geir Kalhagen: Chairman Murphy, General Graham, Mr. Pointon, members of the Board, and Federal observers, I greatly appreciate the opportunity to provide these public comments. For the record, I am Geir Kalhagen, the Director of Maritime for the Texas Department of Transportation. The Texas Department of Transportation has served as a non-federal sponsor for the Texas segment of the Gulf Intracoastal Waterway since 1975, and this is an important responsibility that we take seriously. Our duty to collaborate with the United States Army Corps of Engineers to improve the conditions on the GIWW. In 2017, we partnered with the Corps to develop an integrated feasibility report and EIS study to study the opportunities to improve navigation at the Brazos River Floodgates and the Colorado River Locks. We are excited that the Chief's report was issued in 2019 and actively involved the preconstruction engineering and design phase for the Brazos River Floodgates project.

These two structures are the most difficult and dangerous areas to transit on the GIWW. Despite this, about 30 million tons of freight, valued at approximately $117 billion pass through these structures each and every year. It is clear to TxDOT that the modifications to alleviate delays, accidents, and navigational difficulties on both structures are imperative.

Neither structure has been improved since the 1950s, and they are no longer fit for modern barge sizes or tow configurations.

Tripping alone at the floodgates and the locks cost the industry more than $10 million per year, while the total cost of impacts -- tripping, queueing, and closures is close to nearly $30 million per year.

Moreover, at the feasibility study, there was a combined average of 64 collisions at these two structures annually, and as I heard in the update today, that number has gone up significantly already, and these accidents caused damage to both barge and to structures. Now, since most of the commodities moved through these

facilities are petrochemical products, the potential of hazardous spills and environmental damage is significant. So, TxDOT fully supports the Corps efforts on those projects and looks forward to construction of the Brazos River Floodgates and preconstruction, engineering, and design (PED) of the Colorado River Locks. Thank you.

Mr. Pointon: Thank you. We appreciate your being here today.

Next up, we've got Paul Dittman, I believe he's the President of the Gulf Intracoastal Canal Association (GICA), and while he is working his way up there, I'd like to personally thank him and GICA for their hospitality yesterday evening. Thank you, sir.

Mr. Paul Dittman: Your welcome. Well, good afternoon, my name is Paul Dittman, and I am President of the Gulf Intracoastal Canal Association, or GICA for short. GICA is a 117-year old trade association representing over 160 members throughout the 1200 miles of the Gulf Intracoastal Waterway between Brownsville, Texas and St. Marks, Florida. GICA is committed to facilitating commerce by ensuring safe, reliable, and efficient Gulf Coast waterways.

During the previous Inland Waterways Users Board meeting last April, I commented on the importance of the Bayou Sorrel and Inner Harbor Navigation Canal Locks. Today, I want to thank the Inland Waterways Users Board for visiting the Brazos River Floodgates on November 30th. This structure and its sister facility, the Colorado River Locks, are critical to the continued viability of the Gulf Intracoastal Waterway. The Gulf Intracoastal Waterway is the nation's third busiest inland waterway, with the Texas portion handling 63 percent of all Gulf Intracoastal Waterway traffic. In Texas, 91 percent of the cargoes carried on the Gulf Intracoastal Waterway are petrochemical-related products. The barge movements facilitated by the Gulf Intracoastal Waterway reduce congestion on the rail and federal highway systems and minimizes hazardous material movements through populated communities, reducing risk and increasing public safety. The Brazos River Floodgates and Colorado River Locks facilitate inland commerce to all ports west of Freeport, Texas, providing direct access to our nation's vast, inland marine transportation system, including the Mississippi River and tributaries.

This provides Texas shippers access to markets and supply chains as far away as St. Paul, Minnesota, and Pittsburgh, Pennsylvania, and all points in between. The Gulf Intracoastal Waterway in Texas is an essential component of the nation's transportation network and relies heavily on the Brazos River Floodgates and Colorado River Locks to facilitate the safe and efficient barge transportation along the Texas Gulf Coast. Texas DOT identified the Brazos River Floodgates and Colorado River Locks as the greatest navigational challenges in terms of safety and efficiency along the entire Gulf Intercoastal Waterway in Texas.

Navigation on the GIWW is constrained at the Brazos River Floodgates and Colorado River Locks due to their antiquated design with the Brazos River Floodgates constructed in 1943 and the Colorado River Locks in 1951.

The outdated engineering, early 20th century design and construction, leads to mechanical failures, and neither structure can adequately support 21st century maritime transportation demands.

These structures were not designed to support modern tank barge operations and that some of the highest vessel impact rates of any U.S. Army Corps of Engineer structures in the nation. To mitigate the risk, many towing companies have adopted a single barge passage policy, shifting the risk from navigation safety to personnel safety, considering the labor required to make and break a tow, creating unnecessary risk and fatigue for the vessel crews. As a result, inland towing vessels must routinely break tow and shuttle barges through these antiquated structures thus being able to transit as a single unit, extending a 15-minute transit and to three to four hours or more delays. This creates tremendous inefficiencies negatively impacted critical supply chains and the economy.

GICA has worked collaboratively with the U.S. Army Corps of Engineers for over two years during the preliminary engineering and design phase of the Brazos River Floodgates Replacement Project. GICA members have participated in numerous modeling and ship simulations with the U.S. Army Corps of Engineers at industry's expense to ensure the future of the Brazos River Floodgates replacement structure takes into consideration the needs of the mariners who will use these structures for the next 80 to 100 years once complete.

GICA looks forward to the continued close collaboration with the U.S. Army Corps of Engineers to bring the Brazos River Floodgates Replacement Project to completion and initiate a similar level of cooperation to replace the Colorado River Locks as soon as possible. Thank you.

Mr. Pointon: We're going to move on to the closing comments from the Executive Director and the Chairman. I'd like to thank Tracy Zea and the Waterways Council, Inc. for our lunch today. Thank you so much. We appreciate that.

And Colonel Blackmon from the Galveston District is here, so I would like to thank him again, and his staff. I am going to name Karl Brown, but I know there are plenty of people helping them pull this meeting off.

A lot of kudos to the Galveston District staff. I wasn't worrying about this meeting because they have done an outstanding job.

Lastly, thanks to the Kirby Corporation and Matt Woodruff for providing our floating vessel yesterday. That provides such a different perspective of these projects that we're out there on the water and seeing what it looks like from a different angle. So, I appreciate that as well.

That's it, sir. Turning it over to you for your closing comments.

MG Graham: We will have a press conference for the FY 2024 President's Budget, for Headquarters and the Assistant Secretary's office. We will invite the Board members to that when it's scheduled.

Mr. Connor's top priorities include five things: supply chains, climate resiliency, better serve the under-served by broadening benefits, partnerships and communications, research and development (R&D) for water resources.

I want to talk a little about that. We need to invent the future today. Cradle to cradle. For example, Montgomery Lock will be here for the next 200 years. The Assistant Secretary Connor and Lieutenant General Spellmon have put a premium on R&D. We need to noodle out way through it now.

Ms. Chromey: We don't have dedicated funding, there is no dedicated funding like on the highway-side. We need to try and partner with other agencies.

What about the port-side? The waterside to the landside to the rail-side. Who do we work with for that?

Mr. Pinkham: As we roll out the budget, we need to connect the dots. I was on the boat with Campbell Transportation, and I went to ERDC after and heard they worked on Montgomery Lock.

It's the politics of scarcity.

Mr. Pointon: Mr. Chairman, do you have closing comments?

Mr. Murphy: Here are the due outs I have. For MRERs, Starved Rock and Dresden and their components.

We want the capability numbers for all projects, for the 2022 annual report.

Clarity on accounting of the IWTF, why Treasury is different than the Corps. It's our joint bank account and we need to know what we have to spend.

It was a long agenda today with a lunch break, but there was no wasted time or energy.

Not long ago, all the IWTF was being sucked up by one project. Now we have IIJA. We have $200 million in the IWTF. Maybe. We need to be good stewards of our trust fund. I agree we need to finish what we started, but Brazos River Floodgates is as ready-made as any project can be.

We are waiting for more information for many projects, projects in the CIS, but we want to aggressively use the IWTF while we wait for it. We need to be forward leaning.

Thant's all I have, Mark.

Mr. Judd: Damon Judd, for the record I want to have a big thank you for USACE responsiveness during the low water on the Mississippi River. The Corps has been agile. I also want to be sure to thank the staff on the dredges.

Mr. Woodruff: I want to thank you all for coming here, as the representative for this region.

Mr. Pointon: Any other members wish to make closing comments? [Negative responses from other members.]

Can we have a motion to adjourn?

Mr. Murphy: So moved.

Mr. Rase: second.

Mr. Pointon: All in favor? [All members vote affirmative.]

This meeting is adjourned. I hope everyone has a safe journey home. A little early, but happy holidays.

[Whereupon the meeting adjourned at 3:10 p.m.]

Inland Waterways Users Board Meeting No. 98
Galveston, Texas
December 1, 2022
List of Participants

Last Name	First Name	Affiliation
Acevedo	Omar	USACE, Nashville District
Ashoff	Ms. Trisha L.	USACE, St. Louis District
Black	Travis	U.S. Dept. of Transportation, Maritime Administration (MARAD)
Blackmon	COL Rhett A.	USACE, Galveston District
Bodron	James A.	USACE, Mississippi Valley Division
Bronson	Ms. Candida K.	USACE, South Atlantic Division
Brown	Karl B.	USACE, Galveston District
Burroughs	Ms. Tiffany S.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Chromey	Ms. Tretha	U.S. Dept. of Transportation, Maritime Administration (MARAD)
Clouse	Paul D.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Coleman	Wesley E., Jr.	USACE, Southwestern Division
Curry	COL Jesse T.	USACE, Rock Island District
Dauenhauer	Rob M.	USACE, Inland Navigation Design Center (INDC)
Davidson	Dustin H.	Waterways Council, Inc. (WCI)
Dickens	Justin	Crounse Corporation
Dirks	Bryan J.	USACE, Inland Navigation Design Center (INDC)
Dittman	Paul	Gulf Intracoastal Canal Association (GICA)
Doyle	John S., Jr.	Jones Walker LLC
El-Naggar	Kareem S.	USACE, Great Lakes and Ohio River Division
Frabotta	Christopher C.	USACE, Galveston District
Frantz	David A.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Fritz	Stephen R.	USACE, Pittsburgh District
Gilbert	Ms. Heather	National Oceanic and Atmospheric Administration (NOAA), Office of Coast Survey

Gillip	Jonathan A.	USACE, Little Rock District
Goodall	Andrew J.	USACE, Rock Island District
Graham	MG William "Butch"	USACE, Headquarters, Civil Works Executive Office
Greenberg	Ms. Elisa	Texas Department of Transportation
Grett	Ms. Angela	Ingram Barge Company
Hall	Ms. Stephanie L.	USACE, Nashville District
Harshman	Scott	Port of Pittsburgh Commission
Haussener	James M. "Jim"	California Marine Affairs and Navigation Conference (CMANC)
Henderson	Richard	U.S. Department of Agriculture (USDA), Transportation Ser Div
Hettel	Martin T.	American Commercial Barge Line LLC (ACBL)
Heyman	Ms. Alexis	U.S. Department of Agriculture (USDA)
Horgan	Tom	SCF Marine, Inc.
Howe	Edmund M.	USACE, Little Rock District
James	Jamie G.	USACE, Nashville District
Judd	Damon S.	Marquette Transportation Company
Kalhagen	Geir-Eilif	Texas Department of Transportation
Kreider	Richard C.	Campbell Transportation Company
Leese	Ms. Catherine "Kate"	USACE, St. Louis District
Lichtman	Kenneth E.	Private Citizen
Lopez	Jose R.	USACE, St. Louis District
Lovett	David P.	USACE, Inland Navigation Design Center (INDC)
Mahoney	Matthew	Texas Department of Transportation
Marcey	CAPT Daniel L.	USACE, Headquarters, Civil Works Executive Office
Murphy	W. Spencer	Canal Barge Company
Newby	Ray	Texas Department of Transportation
Norton	Jarod K.	USACE, Northwest Division
Olson	Ms. Patty	Schimmick Construction
Peukert	John N.	USACE, St. Louis District

Pierce	Craig R.	USACE, Little Rock District
Pinkham	Jaime A.	HQDA, Ofc of Assistant Secretary of Army for Civil Works
Pointon	Mark R.	USACE, Institute for Water Resources
Pyne	Ms. Cameron "Cami"	Kirby Corporation
Ramos-Gines	Orlando	USACE, Galveston District
Rase	Lance M.	CGB Enterprises, Inc.
Rich	Robert D. "Rob"	Shaver Transportation Company
Riley	Steven D.	USACE, Institute for Water Resources
Rodriguez	Federico	Texas Department of Transportation
Rodriguez	Zackary	U.S. Army
Rohde	Paul	Waterways Council, Inc. (WCI)
Smith	Thomas P.	USACE, HQ Operations & Regulatory Division
Stubbs	Dr. Quentin	National Oceanic and Atmospheric Administration (NOAA)
Taylor	Ms. Crystal D.	Ingram Barge Company
Thomas	Ms. Kimberly S.	USACE, Rock Island District
Thomas	Robert C. "Rob" Jr.	USACE, Galveston District
Turner	Richard C.	USACE, Southwestern Division
Walker	Adam	USACE, Nashville District
Webb	Jeff	Cargill, Inc.
Weber	Andrew	USACE, Galveston District
Williams	Byron D.	USACE, Galveston District
Winters	Robert L.	USACE, Nashville District
Woodruff	W. Matthew "Matt"	Kirby Corporation
Ybarra	Ms. Tina	USACE, Galveston District
Zea	Tracy	Waterways Council, Inc. (WCI)
Ziino	Ms. Julie A.	USACE, Southwestern Division