



US Army Corps of Engineers
BUILDING STRONG.

Inland Waterways Users Board Meeting No. 99
Heinz History Center – Multipurpose Room
Pittsburgh, Pennsylvania

April 13, 2023

Minutes
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The following proceedings are of the 99th Meeting of the Inland Waterways Users Board held on the 13th of April 2023, commencing at 9:00 a.m. This is the first meeting of the Inland Waterways Users Board held in 2023. Mr. Damon Judd, Vice 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. DENNIS OAKLEY, Board Member, Bruce Oakley, Inc.

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 Chairman MR. W. SPENCER MURPHY, of Canal Barge Company, Inc. (CBC), joined virtually after the proceedings commenced.

Board Members not in attendance were MR. DAVID LOOMES of Continental Cement Company, 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:

The Honorable MR. MICHAEL L. CONNOR, 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. TRETHER 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.

MS. TIFFANY S. BURROUGHS, Chief, Navigation Operations, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

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, Institute for Water Resources, Inland Waterways Users Board Designated Federal Officer (DFO) and Executive Secretary.

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. Damon Judd, Vice Chairman, Inland Waterways Users Board, Marquette Transportation Company.

Ms. Tiffany S. Burroughs, U.S. Army Corps of Engineers, Headquarters, Operations Division, Chief, Navigation Section.

Mr. Michael Jacobs, U.S. Army Corps of Engineers, Chief, Center of Expertise for Cost Estimating.

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

Mr. Patrick A. Chambers, U.S. Army Corps of Engineers, Mississippi Valley Division, Chief, Operations and Regulatory Division.

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

Mr. Andrew J. Goodall, U.S. Army Corps of Engineers, Rock Island District, NESP Program Manager.

Ms. Kimberly Thomas, U.S. Army Corps of Engineers, Rock Island District, Deputy District Engineer.

Mr. John N. Peukert, U.S. Army Corps of Engineers, St. Louis District, Deputy District Engineer for Programs & Project Management.

Mr. Jose R. Lopez, U.S. Army Corps of Engineers, St. Louis District, NESP Mississippi River L&D #25 Program Manager.

LTC Joseph M. Sahl, U.S. Army Corps of Engineers, Nashville District, Commander.

Mr. Kevin L. Jasper, U.S. Army Corps of Engineers, Nashville District, Interim Chief, Integrated Project Office.

Mr. Orlando Ramos-Gines, U.S. Army Corps of Engineers, Galveston District, Project Manager for GIWW Colorado River Locks and Brazos River Floodgates Project.

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

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

There were no public comments made during the public comment period of the meeting, and no written public comments were submitted for the record.

PROCEEDINGS

MR. MARK POINTON. All right. And now that we've done the admin comments. By the way can you please silence your cell phones and such so that we don't have any interference with our audio visual?

I'd like to call this advisory committee meeting to order. My name is Mark Pointon. I'm the long time Designated Federal Officer for the Inland Waterways Users Board.

I'd like to welcome you to the 99th Meeting of this advisory board, here in Pittsburgh, Pennsylvania. The tour yesterday was fantastic. I thank the Pittsburgh staff profusely for the fabulous weather they arranged. I don't know how they did that, but I appreciate that.

We're obliged to read for the record that the Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. It provides for the Secretary of the Army and the Congress with recommendations on funding levels and priorities for the 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, is open to the public.

And we have a lot of public here today, which I greatly appreciate.

The Army Corps of Engineers (Corps or USACE) is a sponsor of the Board, and we provide for the executive director (indicating) the executive secretary, the DFO, and all normal operating activities of the Board.

There are currently no requests to make any public comments. So, if anybody wants to make a public comment, see me on a break or slip me a little note up here on the table. And there were no written comments submitted for record as well.

Proceedings are being recorded and they'll be available sometime after the meeting after we get the transcript back and we do the QA/QC on it.

I'm going to turn the mic over to the outgoing, is that correct, sir, the district commander from Pittsburgh District, Colonel Adam Czekanski.

Did I screw that up, sir?

COLONEL ADAM CZEKANSKI: Czekanski.

MR. POINTON: Czekanski. I was practicing all morning.

COLONEL CZEKANSKI: It's okay, it's the story of my life. (Laughter.)

So, I know that Lieutenant Colonel (LTC) Joe Sahl is in the audience, so I feel compelled to speak at least 20 minutes. (Laughter.)

So those who know Joe are laughing right now.

Secretary Connor, and General Graham, Mr. Judd, members of the Board, federal observers, and attendees, although most of you arrived in Pittsburgh promptly on Tuesday, a belated formal welcome to Pittsburgh and the headwaters district.

Here in Pittsburgh, as you know, is where the Monongahela and the Allegheny Rivers meet to form the Ohio. And it's those watersheds, the watersheds of those three rivers, that define our district.

The entirety of the Allegheny, the entirety of the Monongahela, and the upper portion of the Ohio. It's 260,000 square miles, we touch five different states, and we include 328 navigable miles of rivers.

Along those 328 navigable miles of rivers, we have the responsibility for the operations, the maintenance, and the general upkeep of 23 locks and dams, more than any other district in the U.S. Army Corps of Engineers.

We've made significant investment in that infrastructure from the time of construction to present to ensure safe and reliable navigation for both commercial and recreational purposes.

So, to kick us off and loosen up a little bit I have some navigation trivia. Are you ready?

Yesterday, as was mentioned, had a great tour of Charleroi as we are nearing completion on the newest lock on the Monongahela River. So, my question if anyone wants to take a stab and be brave.

In what year was the first lock constructed on the Monongahela River? And I'll share this, it was not built by the federal government. But what year was the first lock constructed on the Mon?

Any guesses?

MALE AUDIENCE MEMBER: 1870.

COLONEL CZEKANSKI: Got 1870, shooting high, too high.

FEMALE AUDIENCE MEMBER: 1906?

COLONEL CZEKANSKI: 1806?

FEMALE AUDIENCE MEMBER: 1906.

COLONEL CZEKANSKI: Got to go lower, got to go lower.

MALE AUDIENCE MEMBER: 1848.

MAJOR GENERAL BUTCH GRAHAM: Close enough, 1841.

1841, the first lock was constructed on the Mon.

COL CZEKANSKI: Second question, so most of you know General Graham. What you don't know about General Graham is when we're usually in an all USACE forum, with all district commanders, he is that high school teacher or the college professor that you know when you're in their class and the question is asked and you know you're tensing up because you don't know the question. He's the one that tends to hone in on you and put you on the spot in public forum. (Laughter.)

COL CZEKANSKI: Adam, tell me the answer. So, sir, role reversal. (Laughter.)

But you have a rich history with the Pittsburgh District and this area in general, so I have full confidence you're going to nail this.

MG GRAHAM: Full confidence.

COL CZEKANSKI: Full confidence. Well, sir, where was the first lock on the Ohio River constructed?

MG GRAHAM: Just down here (indicating) Davis Island.

COL CZEKANSKI: Bonus portion, sir, in what year?

MG GRAHAM: Oh, I think Steve Fritz told me 1908. But if that's wrong, it's on Steve. (Laughter.)

COL CZEKANSKI: It is on Steve, 1885. So, Davis Island, just up the street from Neville Island in Emsworth. And so, on the same token though of talking about old locks, back to the Mon. Well, actually I give away the answer.

Nationwide inland waterways, the oldest lock that is still in use today in our inland waterways system. Which lock is it?

MG GRAHAM: Elizabeth.

COL CZEKANSKI: It is Elizabeth. Elizabeth Lock and Dam. We were at Charleroi yesterday. If you keep going down the river the next stop would be Elizabeth and 1907 it went into operation. It will be removed next week. Colonel Melin will get to hit the plunger, as they remove the lock from the river.

And last question, where did the Lewis and Clark Expedition begin? This is a loaded question. It should be obvious.

Any guesses?

AUDIENCE MEMBER: Pittsburgh.

COL CZEKANSKI: In Pittsburgh, yes. So, most would say you know St. Louis, or somewhere else, but less than a quarter mile from here, on the banks of the Allegheny, on August 31, 1803, Meriwether Lewis boarded his 50 foot keel boat -- which was built here in Pittsburgh -- and began his journey, floated down stream, picked up his buddy Clark and the rest is history.

So, a bit of fun trivia.

Before we move forward, it was mentioned before, I do want to recognize our staff and I don't know how much of our staff is here. I see Michelle, we've got Elaine, anyone else?

Well, our staff worked hard, yeah, these events don't happen by themselves as you know, a lot goes into the planning and coordination and the executions of these events. Yes, we had a great day yesterday and a lot going on today and more tomorrow.

And I want to just give a little built of recognition for our team and they put a lot into this for the last you know weeks and months to provide an excellent event for all of you.

So, Elaine, if you don't mind coming forward. Elaine Lisk is our Strategic Engagements office chief. She's really the one who shepherded this entire thing. So, Elaine?

MG GRAHAM: So, Elaine's been doing the heavy lifting for a long, long time. And what you saw yesterday in addition to the color coded pipe wrenches that somebody had to clean the workbench down there in Charleroi, getting the buses here on time, getting all this set up takes an incredible amount of work.

So, Elaine, you made it look easy and I just want to say thank you from all of Headquarters in what you do to make Adam look good. (Applause.)

COL CZEKANSKI: And we've appreciate having the opportunity to host the Board this week. We really hope you've all enjoyed Pittsburgh. Thank you very much.

MR. POINTON: Thank you, sir.

Now that General Graham is back to his seat, he gets to make his opening comments.

MG GRAHAM: We will start with Mr. Connor. Sir.

MR. MICHAEL CONNOR: Thank you, General Graham. Thanks for the opportunity and the good cheer and good discussion we had last night. Which I feel like I will keep my comments fairly short. Since everything is picked up on the mic and I really have various... (Court report comment on audio difficulty.) (Laughter.)

How about those Penguins? Sorry, I'm a Caps fan.

How are we doing? Should I keep talking just to see if it's being picked up? (Court reporter clarification, audio is weird.)

MR. CONNOR: We'll go with weird. New, weird, and different is our theme for a lot of the stuff that the court does these days. (Laughter.)

So as I mentioned, it was great discussion last night, a good opportunity to get into details about priorities, challenges, and do a little strategizing about how we can work together to address some of the issues that we're all facing. I just will be relatively brief, for me. And as most know, I just want to reiterate, when I

came into this position about, I don't know, 15 months ago, and we did the initial round of Bipartisan of Infrastructure Law (BIL) funding, that was Priority One. And then I immediately turned to, how do I articulate the priorities for the Army Civil Works program in a manner that advances the President's priorities? And I think we hit on five priorities. I want to reiterate them really quick because a lot of times people keep changing the priorities, and folks are trying to catch up with what's new. But we will stick with these priorities because I think they work to encompass the President's overall vision to articulate a way that advance the mission that is familiar the Corps as we try to innovate with respect to that mission.

So, it resonates internally, and it resonates with our stakeholders, all of you, because particularly, those of you who care about inland waterways, it is fundamental to one of the priorities. And the first priority that I always articulate which is upgrading the nations ports and waterways to strengthen supply chains and foster the economic growth.

And continue to innovate climate and develop climate resilient infrastructure and protect communities and the environment. We want to modernize the Civil Works program to better serve economically disadvantaged communities.

We want to invest in the items in R&D (Research and Development) to develop water resource solutions.

And the no brainer, but which I think is incredibly important in particularly to the Corps, that we do not do any of this work ourselves, is to strengthen our communications and our relationships with our partners and the community at large, so that we can deliver water resource solutions. So most important, given that I'm part of Administration, I work for the President. I think the priorities that resonate most with the Administration. From that standpoint, I think we have been getting very good support, whether it's being able to move for a Regulatory initiative such as the WIFIA Program and we will soon release, hopefully by the end of this month or early next month, that would have been the high center for a quite long time.

We have a lot of money so we can finance private dams rehabilitation activities. We had not been able to deploy any of those resources that we have, because we have to have a program and rulemaking in place, so we will get that done. That is an example I think of the internal workings, but more visible is the fact that we have to just received a record budget request for the Army Civil Works program, \$7.4 billion. And in this goes two ways, I go up to Capitol Hill and I say we've got a record budget request because the President believes in infrastructure and believes in the Civil Works program. And folks turn around on me and say, how horrible, because you just proposed a very strongly significant reduction of the appropriation level in the prior year. I think there's a nice balance there where I get \$800 million of additional resources to prioritize as we think is necessary from the Army Civil Works perspective, and we give Congress plenty of space to do what they like to do, which is to fund specific projects and activities that they think should be priorities. I think it's all part of the process and I'm very proud of the fact that we've got that \$800 million in additional resources. We're not going back from there; we're just going to continue to build and I think that fosters opportunity for the Civil Works program in the future.

As part of that, we waited for the priorities, we've got a \$100 million R&D initiative. And that ranges from everything to the climate innovation, the engineering, the development activities. We are trying to innovate. But it gets into also how do we inspect and maintain our infrastructure, and more which is in a manner to everybody's benefit.

A lot of focus on how do we long term ensure that we're beneficially using dredged material and sediments that are important that we move to keep our ports, harbors and inland waterways operating at peak optimum levels. So, we're focusing that R&D initiative, and it's \$86 million of pure R&D and

another \$14 or \$15 million of applied use of the R&D we are developing. So, I think that we've got a good across the board uses and applications of that R&D funding in a way that is all elements of the Civil Works program, it's not just focused in one area.

As you know there is no Inland Waterways Trust Fund construction funding in the budget, and that's an issue. That's an issue partly because of very significant robust investments of capital that are ongoing, part of it is timing. We have waited due to the fact that we were still waiting on new cost estimates of additional needs capabilities that we had, which weren't there when we developed the budget, which now exceed \$400 million, that we've identified, and we have the appropriations subcommittee. And our commitment is to the very transparent and proactive in informing them of all the capabilities we do have for working in 2024. So, I think that's important to those members of Congress, they want that information. They wanted it as soon as possible as they develop the Appropriations bill, and we are committed to getting them that information. And I know we need to share that with you all because you're talking to those same folks all the time. But the last aspect of that is there are, continue to be, as we talk about that link last night, significant challenges with respect to our budget even as we increase base level. Even though we move forward the issue of cost increases really, significantly impacted our flexibility with respect to the budget.

Obviously, Soo Locks is not only a project that, because of the very significant cost increases it took the rest of the IIA (Infrastructure Investment and Jobs Act) ports and harbor funding. So, the \$1.5 billion we have now fully allocated in the last tranche to continue and do another contract option with respect to Soo Locks. And we've also got new high priority areas such as the \$350 million funding that we put in for a new Cape Cod bridges, because we are trying to, for the long term, make use of opportunities where we can offload some responsibilities that we have to operate and maintain bridges and do major, major rehabilitation when we have the opportunity to transfer those facilities, which are in very significant levels of disrepair, and we can transfer them off of our books and get them on to the state DOT (Department of Transportation) entity's books. And so that once again, very significant funding level, \$350 million in the 2024 budget that would require additional resources, but at least this is the most significant allocation we anticipate having to make in any one year.

Beyond that, there are ongoing very significant projects and floodwaters management as well as aquatic ecosystem restoration and things that compete overall with the requirements here that exist in the inland waterways system. But I would note the budget does have \$3.4 billion of that \$7.4 billion goes to navigation, so that's the most significant and highest program that gets funding in the budget.

So, you know there are, in addition to the new construction activities, there's obviously major rehabilitation. The Illinois Waterway system maintenance activities that we schedule with all of you that we are moving forward with funding with, in a good position not just to do the work but to coordinate with all of you.

And the one last thing I just did want to note, even as we meet the challenges of trying to address the challenges of the future funding levels, the one area that there is remaining from the Bipartisan Infrastructure Law is about \$115 million in the Inland Waterways account of the \$2.5 billion. So, we have done almost \$2.4 billion of allocations. We've got to figure out the best use of those remaining resources given that we know there are significant cost increases, we have to do more. There are other areas but I'm certainly open to thoughts where we used the Capital Investment Strategy as our guide, and that's with all of you putting it together. So, I like to think we're doing these allocations. We will probably do another

allocation, of IJA money, I anticipate some time before the end of this fiscal year. So, thoughts are welcome on that even as we have our own internal discussions.

Finally, and I would just also note just for the record, in addition to everything that we have in place now, which is a very significant backlog, but very significant resources, the very significant resources that we have at hand obviously stress our capabilities. To give you that example, right now we're executing about \$91 billion of work, and in the Civil Works and all the emergency work we do, FEMA's (Federal Emergency Management Agency) contractors, many of you are familiar, with about 38,000 employees which carry out that work. Just ten years ago, I think that the figure was something like \$35, \$38 billion, and the work that we are executing with 37,000 employees. So we've almost tripled that, if you count for the inflationary aspect, we've doubled the level of execution. So that's where we are status quo.

And then a long term in 2022, we got \$60 billion of new projects that are authorized. \$40 billion of that is federal funding, that is expected for those projects. So, no doubt that Army Civil Works is a popular program because of the needs that exist out there throughout the different program areas. We all understand those challenges. I just wanted to highlight those with some specific numbers for the record.

So lastly, this is what I wanted to turn to real quick is talking about the priorities and the issues that I heard last night that I think we need to work on together moving forward. Obviously, I think you stated this before, but it continues to be raised as an issue, our transparency and our ability to identify capabilities as early as possible, even if they're going to change, because of changing dynamics with respect to markets and costs, etc. but getting you that information, sharing that with you at the earliest possible opportunity, to help you strategize, not just the communications but on an ongoing basis with your elected, but also you know the long term planning and strategy that that allows. So, I recall General Graham taking lots of notes last night, particularly when we had this discussion, and figuring out why we've probably not been as optimum at providing that information as we have in the past year. We need to get back to doing that, so we understand. Cost increases, you know, figuring out our collective strategy to deal with those specific issue, we all understand that's an issue.

That's closely related to the desire and the need to complete what we start. And you know the early on, I joked about my highlighting you know his personal priorities with respect to helping getting resources in the budget and I can assure you that one was articulated at the top is finish what we started and that resonates with me. That's certainly a challenge, where we think we fully fund projects, whether it's inland waterways or other projects like them that we thought we had fully funded, and we get in the middle of it and we recognize we have significantly more costs to absorb, and the need to address that as quickly as possible so we don't add to the increase in cost by inefficiently funding the work that we do. Both the general and I are interested to hear more about that, I understand for the efficiency, I also think about where are we headed with respect to the extreme weather events, five, six months of drought and all the issues that we dealt with which, again, the silver lining of a very difficult situation the visibility that that gave to the inland waterways system across folks at the highest level of government who, you know, hadn't really paid attention to the importance of this particular economic driver. The official use of the waterways to transport goods, so that's the silver lining, it's all attention to that, and ultimately, the question that we got asked the most at the end of last fall was just, what do you need? What do you need? What do you all need in carrying out your capabilities to deal with the extent possible with these low water levels, and obviously that was work in the constant dredging. And as we're faced with more of this, you know, maintaining our channels and depths and even deeper in some places as a drought resilience strategy, as well as important to the economic efficiency.

I think telling the story, you all do a great job of telling the story of how this is a low carbon mode of moving cargo. We talk about the safety of the industry relative to other means of transportation and the importance of the ease of access to international markets that we can do that, the coasts and the ports, so those are really, really important. They're important overall, but more important to this Administration, so how we can consolidate that information and educate even more folks, that is important. And then I'll be interested, but I thought I would just put it on the table as I have some decisions to make too about priorities for all of you, so we are getting that going.

And I said I would be brief and I'm not sure I accomplished that. (Laughter.)

I apologize for that but we're back to the schedule and I'll turn it back to General Graham. (Laughter.)

MG GRAHAM: So, thank you for that, and thank you for your time last night. We know you've been burning through airports, planes and trains and automobiles to get here. And I want to say what's important that somebody if you want to understand it see where you spend their time. So thanks for spending the amount of time you have with our partners because it sends a loud message that this is important to you and the Administration. And I think we all recognize that and appreciate that.

So, he hit most of the points I was going to talk to today. And I just say transparency and accountability of this council, so that's what today's all about. So, we're going to bring the district commanders, some of their engineers and PMs up here and they're going to lay out where we are at. You know we just had Colonel Curry at the ribbon-cutting out there with you, is that right? So, when he gets up here, we'll see what's under it.

As Mr. Connor spoke to, we're going to pull some Band-Aids off today and it's going to hurt. We're going to show you some big numbers. That is what good partnerships are able to do is be honest with each other. Mr. Connor, we can't fix what we don't know about. So, the sooner we know about what these cost increases are, the sooner Mr. Connor and his team can work with you all to address what we spoke about tonight, just went inside, we have your better cost estimate, absolutely. I just looked at Mr. Joe Savage back there, about a year and a half ago, we were talking Soo Locks to take in, you know, we started five whys, why'd we get here, why'd we get here, why'd we get here. And I think it was about on the fourth why and Joe said, well, we have optimism bias. And I threw him out, I think I literally threw him out of my office. I'm looking for some hard engineering stuff, so he gives me, oh, we have an optimism bias. We are on the record still. (Laughter.)

He was right. He was right. It's because we live in the Government Accountability Office, Congress's investigatory arm, that's the building the Corps are in, in the GAO Building, and they have reams of reports of optimism bias in government cost estimates, usually with billion dollar airplanes that we don't own. So, what I'd like the Board members to do is as the districts come up here help us work through that optimism bias and question, right? We owe you that, we owe you that transparency. One of the questions I think, Matt (Woodruff), you raised yesterday during the tour was, hey our grandparents built this in two years and we're staring at the old Charleroi, and when the PM laid out Upper Ohio, it's going to take us eight to ten years to build the new facility. And then we kind of laid out some of the reasons why that is, why it's different now. One of those are, and I don't know if you saw it when we were leaving the site and went across that bridge, if you looked kind of on the left descending bank, you saw the old lock chamber down there. So, we built the new lock in a completely new location when we built Charleroi. We were able to work unencumbered, that's not what we're doing now. We aren't building a new house; we're renovating an old house. And for all of you who lived that dream you understand that that's rife with challenges. What you think is behind that wall, once you open that wall, it might not be. In different site

conditions are the scourge of most of the districts back here. That is our reality and we've got to get good at doing that, and we've got to get good at doing that as you heard from Steve Fritz while passing your traffic and minimizing the disruptions. As you heard from Beth (Schneller) yesterday when she laying out there looking forward to, let's get as much maintenance done as we can right now at Emsworth Dam down to Montgomery so that when we start tearing into the auxiliary chamber and this becomes a one lane highway, we know that that existing chamber can handle the load up until the new chamber comes online, all right? But it's things like that, if you think we're missing let us know.

And my final point is we've got Ms. Lenna Hawkins here? Okay. A lot of you know Lenna, she used to be the DPM (Deputy District Engineer for Program Management) here in Pittsburgh and Lenna just took on a new role for us. And she left LRD (the Great Lakes and Ohio River Division) and she joined the Mississippi Valley team and she is leading our new Nav Design Center. And what that is one of the recommendations that came from some of the Board's work here that we don't have each district design these locks on their own, because sometimes the district won't touch a new lock for five to ten years. So, it has some consolidation on how that engineering work is done.

You want to tell the Board how that works? You've been on the job for how many months now?

MS. LENNA HAWKINS: Not quite four months, a little over three and a half. I am pleased to say that the Inland Navigation Design Center stole the best and brightest the Corps has, so the reality is you've got the best working on these projects. And we are looking at strategies, and how have things changed. You know, five years ago, when the cost share changed before the BIL, you know, it was just one or two projects at a time. And right now, we're blessed with a lot of money, so we are really looking at different strategies that we can keep up with this and integrate all of the good things that are going on with standardization and looking at composites and seeing how that life cycle can be increased over the years. So, the best and brightest, three and half months in, and we are looking at the strategies to help out, to see, you know, upfront cost may be a little bit more, just saying, but life cycle, it will last a lot longer, and we won't have to do this as often.

MG GRAHAM: Some math you get with some hard questions later, Lenna is our best bulwark, if we can do better than that we certainly will. But we want to iron out that optimism bias and make sure we aren't under delivering. And 80 percent confidence that we talked about last night is we're not going try to overshoot or undershoot, 80 percent confidence that the time arrives that we can put on the table, can deliver our process that's our standard 80 percent confidence. Okay thank you Lenna. Mark?

MR. POINTON: I'm going to introduce Damon Judd, he's our vice chairman. He's sitting in for Chairman Murphy who unfortunately couldn't be here with us today. So Damon, some comments from the chairmanship, please?

MR. JUDD: Thank you, Mark. Good morning, and as Mark said, I'm Damon Judd, Vice Chairman of the Board. Chairman Spencer Murphy is unable to be with us in person today. He is recovering from a knee injury, but he's with us online. So, with his physical absence, I'll be doing My best to fill in for him here today. Chairman Murphy and I would like to start by thanking the Assistant Secretary of the Army, General Graham, and the other Federal Observers for being here today. Their engagement with this Board speaks volumes to your commitment that we jointly work to establish priorities and develop solutions for the infrastructure challenges that are in the waterway space. As it relates to that engagement, just for your opening remarks, what's really impressive to me is you're listening. And for us to sit down after dinner last night and have the themes come back across from you is just something that is so important to us and

we appreciate that. Between the remarks that both you and General Graham made you're going to hear a fair amount of alignment with the formal remarks of the Board.

General Graham it's fitting that your last meeting with us of the Inland Waterways Users Board is in your old stomping grounds of Pittsburgh, and we'd like to reiterate the thanks to the Pittsburgh District for hosting us for a great lock tour yesterday. Our visit to Charleroi and the briefings on both the Upper Ohio program and Lower Mon program continue to be seen in nearly every lock visit that you had as a Board. Our Nation's Corps lock and dam infrastructure is aging and is in dire need of investment. Yesterday's presentations also highlighted once again the importance of efficient funding and aligning priorities to support our joint commitment of finishing what we start. Charleroi is a case study for everything that goes wrong when efficient funding is not provided. We heard yesterday that what should have been an eight to ten year project has basically become a 30 year project that could have been done with two contracts is up to 15 contracts, creating unnecessary waste. We appreciate what the Corps team has done to work through these challenges and adversity over the years, and we're very excited to see Charleroi operational by the year end.

So, stepping back to the macro level, I think it's without question that America's inland waterways are the envy of the world. The shipping arteries they create support critical domestic and global supply chains in the agricultural, industrial, and energy markets through what is the safest, cleanest, and most efficient mode of transportation by far. The work of the Corps and industry doing partnership through this Corps is critical to ensuring that America maintains or retains a reliable navigation program for the Board. We look back to just under a year ago, the Board held its first meeting since being reconstituted in New Orleans, that meeting with the Secretary and others was on the heels of significant project funding through the BIL Act. As we look at 2022, we feel that the Board, much was accomplished to the previous meetings we had and the efforts to update the Capital Investment Strategy, but the Board would also like to formally express our concerns on several items.

First, we look forward to Mr. Pointon's brief, but believe there is still some uncertainty regarding what the available balance is to spend in the Trust Fund. As we discussed through the 2022 meetings, this is an absolutely critical starting point for us.

Second, we remain without updated cost estimates on several key projects. This information is also critical to curing the lack of understanding the funding needs for the system and ensure we are aligned on the information we share with the Administration and Congress.

Next, we find the magnitude of the cost increases we've seen through today with the preview reading of the materials alarming and concerning as well as the time, the time slippages. General Graham, as you said and you understand, that we are where we are and we'll be ripping the Band-Aid off, but that some level of kind of retrospect and understanding of how we got here is probably a worthwhile endeavor. Plus contributing to how we think about driving our mission going forward. And as we discussed last night, and you hit in your opening statements, we were disappointed with the mixed signals and confusion on capabilities leading up to this year's budget, and you know that put us in a position of disadvantage in terms of delivering the message that we were trying to align on as it relates to our priorities.

The Board would also like to formally express our disappointment with the Administration's Fiscal Year 2024 Budget proposal that allocated zero funding for inland waterway construction projects. Each year the Administration and Congress have significant increases to the Corps overall budget, which is great. However, as that funding increases from the Administration, Congress' share of the overall energy and

water resources issue declines, making it more difficult for Congress to increase funding the Trust Fund projects post facto, which has kind of been the practice over the last several funding cycles.

We're also at risk of having to work through lock operations with the least schedule for this year, if we find ourselves in a Continuing Resolution, which seems like a very real perspective. From our perspective this is no way to manage such an important national resource as it relates to the infrastructure investments in our waterways system.

As outlined in our annual report to Congress, as Mr. Pointon will formally submit to the record here shortly, our number one priority is to see the dollars we pay to the Trust Fund used for their intended purpose. We need to spend these dollars on the projects that we've started on so we can start providing value to our nation. There is simply too much work that needs to be completed across the system and every year we don't make progress is a loss. A growing trust fund balance is simply not acceptable from the Board's perspective. As we look forward to 2023, it really represents a critical year for this Board. When we met in New Orleans, we believe that there was provided funding to completion for a number of key priority projects. We now know that many of these projects will need significant additional dollars to make extended timelines. We know the Corps is working to manage an expanded project list with limited resources and the inflationary pressures. But in order to ensure we can work together to establish the best priorities for the nation, it is critical that we get the pertinent information on project costs and capabilities in a timely manner so that we can incorporate that information into our annual update to the CIS, the Capital Investment Strategy this year.

We look forward to today's meeting and continuing to partnering with the Corps and ensure our Trust Fund dollars are used to provide the best value to the nation and to ensure that we make the investments required to preserve the gem of America's inland waterways system. Thank you.

MR. POINTON: Thank you, Damon. Appreciate it. I'm going to circle back. I think I mixed up on a few items on the agenda, but I'm going to circle back to our federal observers. I guess I'll just start at the end of the table and start with Mr. Richard Henderson from the Department of Agriculture.

I don't know if you guys are hearing him okay, come on up to the mic, so if anybody that wants to, feel free to head up to the podium and use the mic at the podium.

MR. RICHARD HENDERSON: Thank you Chairman Murphy, General Graham, Board members, other attendees that may be here. For the record, my name is Richard Henderson. I'm honored to be here today with my Federal colleagues, and we came in on behalf United States Department of Agriculture (USDA). The USDA continues to acknowledge the importance of barge transportation to facilitate export and domestic shipments of agriculture, the related products, and the need for continued construction and rehabilitation projects to maintain and continue transportation. As this group knows the barge and it's allied industries faced and led to overcome storm challenges before. Those have considerable effects on agriculture, from reducing shipping capacity in volume to record high rates. Barges on the Mississippi River moved 8.6 million tons of grain in the fourth quarter. That was down 11 percent in the fourth quarter in 2021 and 15 percent from the five year average, in part to low water issues experienced on the Mississippi River system. In the first quarter of 2023 over 7.2 million tons of grain have moved outbound in barges to the Gulf for export. That number is seven percent lower than last year and four percent lower than the five year average. Most of this decreasing is attributed to lower export sales of grain, but those have picked up last week. So far this year, except for a few weeks in late January, downbound grain barge rates have been below the 2022 rates and the five year average rates. The navigation system continues to provide agriculture producers a reliable and efficient and environmentally friendly options to move the

product from the farm to export market. Looking ahead at February, USDA used its first projections for crop exports for next year, but these are not locations – let’s just say USDA projects United States export 122 million tons of corn and soybeans from September 2023 to August of 2024, up 80 percent from the year before, and down six percent from the prior three year average. This estimate will be revised in May.

And USDA is currently working on three cooperative research projects at the universities covering inland waterways. Frankly, we are finishing a collaboration with the Ohio State University that develops operational framework to evaluate the unknown consequences of an inland waterways system failure, the Mississippi locks, and the five Illinois Waterway locks, LaGrange Lock. This study also looks at resilience options that can help agricultural transportation systems and related businesses in the supply chain recover more rapidly from disruptions.

Next, we are wrapping up a study with Washington State University that looks at the economic benefits of navigation on the Snake and Columbia River navigation system. This work evaluates total transportation costs and total economic impacts under a baseline as well as across three alternative operating scenarios using historical river value and transportation models of primary commodities. Finally, the USDA is working with the University of Arkansas to help review the data from the U.S. Army Corps of Engineers Lock Performance Monitoring System and waterborne commerce statistics. From that data we'll be able to put together maps and visualization tools analyzed for the U.S. Grain barge movements on our waterways.

Thank you again for the opportunity to participate in today's meeting and yesterday's tour of the Charleroi Lock project.

MR. POINTON: Thank you. Ms. Chromey here from the Maritime Administration.

MS. TRETHER CHROMEY: Thank you General Graham and Vice Chairman Judd and members of the Board. On behalf of the Secretary, Mr. Pete Buttigieg, and Administrator Ann Phillips, I'm very pleased to be joining you here today. The Assistant Administrator for Ports and Waterways, Bill Paape, was joining Administrator Phillips for another event and was unable to join you today and he sends his regards. For an introduction and for the record, I am Tretha Chromey, Deputy Associate Administrator For Ports and Waterways. I'm happy to join you again especially in the Commonwealth of Pennsylvania, my home state.

So, a little personal note here, it's hard to imagine that I'd be here discussing maritime transportation and more specifically inland waterways. I've been coming to this town since (indicating) I was six years old and remember watching Three Rivers Regatta. What an amazing confluence of waterways I thought. Who would know that this is where I would be today? So, I think about that and say this is that what this is all about, the federal, the local, and the private sector all coming together to make this nation's maritime system the best it could ever be.

At the Maritime Administration and the Department of Transportation, we are bringing every tool we have to deliver our programs. We are dedicating our resources to benefit domestic shipping through the U.S., United States Maritime Marine Highway Program, which provides funding to marine highway transportation projects that expand and promote marine highway transportation on our marine highways, a lot of marine highways, including navigable rivers and coastal waterways and our Great Lakes among others. The funding will help expand marine highway services in our nation's navigable waterways to reduce congestion, alleviate the supply chain bottlenecks and move goods more quickly from ship to shelf.

The MHP, which includes currently 29 marine highway routes in reaching 41 states, the District of Columbia, five U.S. territories, and spanning 19,541 miles, which covers 80 percent of the nation's navigable waterways.

In October the Department of Transportation Maritime Administration awarded nearly \$39 million in grants to 12 marine highway projects across the nation under this program. The investment included both FY 22 annual appropriations and \$25 million received from President Biden's Bipartisan Infrastructure Law. In addition, on February 28, 2023, Maritime Administration released the notice of funding opportunity for \$12.4 million, which included \$10 million in FY 23 appropriations. The notice of funding opportunity closes on April 28th.

Things that I want to note; the National Defense Authorization Act for FY 23 makes some significant changes to this program including renaming the program from the American Marine Highway Program to the U.S. Marine Highway Program, removing the project designation phase as a prerequisite for grant eligibility, the addition of bulk cargo, both loose and liquid. The ability to provide federal support for projects to and from Mexico and Canadian ports from a U.S. port to a marine highway route. And the law also allows for rural projects and tribal applicants to request an increase in federal share up to 100 percent. Recently the Maritime Administration received an application from the Port of Pittsburgh and the city of Morgantown, West Virginia to designate M79 marine highway route. This proposed new route designation would run parallel to Interstate 79, which is a primary thoroughfare through western Pennsylvania and West Virginia. This application is currently under review.

One of MARAD's other significant programs is the Port Infrastructure Development Program, of which the Bipartisan Infrastructure Law provided \$2.25 billion. Last year in 2022, the first round of PIDP projects funded through the Bipartisan Infrastructure Law was awarded. On top of that, \$234 million, was provided and from the FY 22 appropriations. All told, MARAD awarded more than \$700 million in PIDP grants last year, by far the largest single year funding in the history of this program.

For FY 23 more than \$662 million in Federal funding is available under the Port Infrastructure Development Program. Applications are also due Friday, April 28th. Through the funding that is provided to move these goods, through this funding to continue help to improve movement of goods to, through and around ports, it will help cut emissions near ports boosting electrification and investing in other low carbon technologies to reduce environmental impacts on neighboring communities. Inland waterways have been very highly competitive through this program.

In short, these are the latest changes to both programs, the Marine Highway Program, and the Port Infrastructure Development Program. These are excellent fits for the nation's inland waterways and for projects that you are interested in. Thank you for this opportunity to provide a short update. I am thrilled to be here and looking forward to today's discussion.

MR. POINTON: Thank you. Moving on, next at the table. Heather Gilbert here from the National Oceanic and Atmospheric Administration, NOAA.

MS. HEATHER GILBERT: That's the best way to do it. Thank you. Good morning General Graham, Chairman Murphy, Vice Chairman Judd, and members of the Board and fellow observers and staff. It's good to be here once again with you all. For the record, my name is Heather Gilbert. I'm here as a federal observer for the National Oceanic and Atmospheric Administration. Admiral Ben Evans had hoped to attend, but due to a family event, due to a family member, he was unable to attend and hopes to attend the next meeting.

Last month NOAA released its 2023 spring outlook. This outlook highlights the temperature and precipitation, drought and flood predictions for April through June to help the nation to prepare for potential weather and climate threats, climate threats to lives and livelihood. The abnormally wet winter is working to improve drought across much of the western U.S. as the snowpack melts in the coming months. This year's winter precipitation combined with recent storms wiped out the exceptional and extreme drought in California for the first time since 2020. The spring wet season should also help to improve drought conditions across the northern and central plains where some areas are currently experiencing severe to exceptional drought conditions.

NOAA forecasts with the National Weather Center in concert with the National Weather Service River Forecast Centers predict moderate to major flooding along the Mississippi River from Minneapolis, Minnesota to St. Louis this year. I will now provide you some updates on programs that can be of interest to you.

NOAA hydrographic ships, survey ships and our navigation response teams are preparing for the 2023 hydrographic survey season. The ships and survey vessels collect bathymetric data to support nautical charting, modeling, and research, but they also collect environmental data to support a variety of ecosystem sciences. NOAA considers the hydrographic survey requirements and requests from stakeholders such as marine pilots, local port authorities, the Coast Guard, the boating community, and also considers other hydrographic and NOAA science priorities to determining where to survey and when.

A few of the surveys that might be of interest to you for 2023 are, in the Pacific Northwest, a 147 mile stretch of the Colombia River from Bonneville to McNary Dams. This information will be used to identify fish habitats, monitor shoaling, and sedimentation, and model water flows from tributary rivers and update our nautical charts.

Going south to the Gulf of Mexico, the approaches to Galveston survey will cover approximately 880 square nautical miles between the Galveston entrance and the Sabine Bank channels. This update for this region, the last fully surveyed in 1963, will mitigate hazards, identify changes to the sea floor and resolve position uncertainty of unknown hazards for navigation.

Additional survey areas include the Mobile River, Neches River Texas, and the Mississippi Sound, Intracoastal Waterway.

In the support of our survey season, last month members from NOAA's Office of the Survey met with several members of the Mississippi River stakeholders in New Orleans, where they shared the key information on survey programs, products and services, such as our Precision Navigation Program, our rescheduled ENC's (electronic navigation charts), and the new version of the NOAA Custom Chart. They also identified several data issues on the river and outlined a plan to work with them through the U.S. Army Corps of Engineers and other stakeholders to address the data issues.

In keeping with hydrography, the NOAA office of Coast Survey, and the National Centers for Environmental Information and the International Hydrographic Organization and Aqua Map, a popular marine navigation app, have collaborated to allow the submission of depth data in real time from non-traditional sources for the International Hydrographic Organization Data Center for Digital Bathymetry. The collection will vastly increase the number of active crowd-sourced bathymetric contributors. It will improve the accuracy and timeliness of our nautical chart updates. OCS began this collaboration when they updated multiple intracoastal waterway charts using the information in the Aqua Map as 18,000 boating enthusiasts.

And finally, NOAA CO-OPS released the 2022 U.S. relative sea level trends update. CO-OPS calculates the transfer for 135 long-term water level stations in operation since 1960. Updated trends add to NOAA's understanding of regional changes in sea level rise and critical for coastal resiliency planning. This year many of the stations observed only minor trend changes. The eastern Gulf of Mexico Coastline from the Florida Keys to Mobile Bay show the largest overall trend increase, with the addition of 2022 observations. Within this region, observed increases were greater than +0.1 millimeter per year. The vast majority of the long-term trends along the U.S. coasts point to a persistent long-term level sea rise.

So, thank you again, General Graham, the Chairman, and the Board for the opportunity to provide these remarks. I look forward to the rest of the meeting and that concludes my remarks. Thank you.

MR. POINTON: Appreciate it. I am going to go up there, since I am next up eight times.

MG GRAHAM: Explain NOAA again?

MR. POINTON: Not doing good with acronyms so far today. And Colonel Curry will bring it up later, with you sir.

MG GRAHAM: If we can get him out of the noodle pit.

MR. POINTON: Anyway, Vice Chair Judd mentioned the annual report. We did go ahead and that was prepared primarily through January. So, we went back and forth a few times, Damon and Spencer and I, so we fine-tuned it, if you will. That report was prepared and it was transmitted to Capitol Hill, the Administration, and the senior staff of the Corps of Engineers on the 6th of March.

And we waited two weeks, then we posted it to the Users Board website. So, anybody who's interested in the 34th Annual Report of the Inland Waterways Users Board for 2022, it is posted on the Users Board website. There's a separate tab there for annual reports. So, it is available and it's been transmitted to all the usual suspects, if you will.

Next on the program, we need to approve the minutes of the last meeting held on December 1st, that being Users Board Meeting No. 98. So, I would ask a member to offer a motion to approve the minutes. I got up here so I could see you all.

Alright, Lance Rase, and Dennis Oakley seconds it. All in favor say aye? (Chorus of ayes.)

MR. POINTON: Any nays? (No response.)

MR. POINTON: Great. Minutes are approved.

Another reason I walked up here, I'm going to talk about the (Inland Waterways) Trust Fund. I have a couple presentations on the Trust Fund. And I think I'm going to be an easier target up here than I am kind of hiding behind that pillar right there. Although I would recognize that Marty is sitting next to me so he literally could reach out and grab me if he wanted to. So let me start with the regular Trust Fund update.

The original presentation that I sent out was through February. That Treasury statement was released through March 31st, last Friday. So, I went ahead and updated that and I pushed that out to all the participants. So, the numbers you see here -- that's the wrong one -- are through March 31st. I think Steven's going to try to pull that up, although not much has changed. I believe there are about \$10 million in fuel tax revenues, and the current balance is about \$247 million off the top of my head. And I know

there are no transfers that have been reported to date. We will get into that with my next go around with this.

So, right now the revenues are lagging behind the last several years. I can't explain that because everything I hear from you guys is your business is booming. You got a lot of traffic moving, you're doing a lot of business. So, I can't explain that at the moment. We will get into how reporting of the revenues and transfers. It is the next presentation and we'll get into that a little bit.

MG GRAHAM: That is what was reported that the Department of Agricultural was --

MR. POINTON: Yes.

MG GRAHAM: -- so at least those two data points.

MR. POINTON: Yeah, I didn't hear that until about ten minutes ago, so.

MR. JUDD: With the reduced capacity in the water, we were using more fuel to push --

MG GRAHAM: Yes.

MR. JUDD: -- correct, that triggers the payments in. I don't know if that's necessarily an explanation.

MR. POINTON: Okay. Yeah. There's all these different data points that kind of conflict -- maybe not conflict but they don't jive with each other, right.

MS. CRYSTAL TAYLOR: Mr. Pointon, Crystal Taylor, while you're on this slide and the know the one we have is the more updated one, it says \$247 million, and as Vice Chair Judd mentioned, we really need information about what's available to spend and as we understand that that's the balance to date.

MR. POINTON: Yes.

MS. TAYLOR: So maybe if you can share more information about that.

MR. POINTON: Sure, sure, like she said. I set myself up, I do have an answer here. So, I have been working and coordinating with WCI (Waterways Council, Inc.), literal since the last meeting in December we kind of got our heads together starting in January and looked into this. I went back for the last nine years, I believe, of Inland Waterways Trust Fund projects and I pulled out from all the all the appropriations documents how much they were appropriated and the project allocation amounts that went into the projects. And I mapped that out and of that \$247 million or so there's about a \$100 million bogey from the prior year budget obligations that will hit against that. So, of the \$247 million you probably have about \$147 million that's available. You can, if you extract out the \$20 million minimum balance we agreed to keep in there, you can see how much is going to be available in 2023, in conjunction with whatever the revenues that are generated through FY 23.

MS. TAYLOR: Is that something you can share with the Board following the meeting about project?

MR. POINTON: By project? Not today.

MS. TAYLOR: You can tell us.

MR. POINTON: Yeah, I can probably back into that, yeah.

MS. TAYLOR: Thank you.

MR. JUDD: Mark, at the recent Energy and Water hearing, General Spellmon (Chief of Engineers, Lieutenant General Scott A. Spellmon) was using the number of approximately \$180 million, so if I'm following this statement correctly, we should be more focused that, net of the \$20 million, is more like \$130 million as a starting point?

MR. POINTON: The number I believe you heard also included a conservative estimate for the revenue that would have been generated in the fiscal year. So, it was approximately \$200 million was the number with the \$20 million backed out, that's where the \$180 million came from. So, I think what you were hearing jives with what I was coming up with as well. It's just, different numbers were being added in. The numbers I'm reporting here don't include an estimate of approximately \$120 million revenues that would be generated in the fiscal year.

MG GRAHAM: Okay. So, we got to sort of clean this up so we're all talking off the same sheet of music. Any suggestion on how we can do this better? (No audible response.)

We'll take a stab with sharing with the Board how we can be more consistent. I think that we probably have to update this quarterly. Is that sufficient for the Board, quarterly? Just so at least, it's a dynamic process as you all know from your own businesses, but the quarterly it would maybe anchor us a little bit more.

MR. JUDD: General Graham, I think quarterly is probably the right interval. And I guess, you know, this is something we can take off-line and if you think of some sort of a role for this account, where we track the beginning balance, what's been obligated against that, so available balance and then update every quarter on what's collected versus what's been obligated, you know, during that quarter. Hopefully that will put us in a position where we all can confidently think we are talking about the same sheet.

MR. POINTON: Okay. Whether we all have numbers in the same ballpark.

MR. JUDD: So perhaps we can take as a do out, collectively working with Mr. Pointon's team on establishing that, going forward.

MG GRAHAM: Okay. And then the first report we will put out in July, meaning August?

MR. POINTON: Yeah, July sounds about right. That'll be the start of the fourth quarter, so we'll be through the third quarter at that point, which we are already approaching or in. That sounds right, sir.

MG GRAHAM: Okay. Beginning the fourth quarter fiscal. Matt?

MR. WOODRUFF: Quarterly sounds good but I think we should also be mindful of the dates of the Board meeting. So, if the quarterly report is due a week after the Board meeting, we should move it up to that we have good numbers for the Board meeting.

MR. POINTON: Yeah, yeah. That was in the back of my mind that as we cycle through the summer meeting it would probably be late July or August, so I'm thinking exactly the same thing. Appreciate that.

MR. WOODRUFF: The other thing is that when we look at this number, I'm just wondering if we should also have what's available. So, it says, available balance, but is that really the available to spend balance? You know is their cushion?

MR. POINTON: I actually toyed with the idea of having the real balance and then having the available balance and putting them up there, and I just ran out of time, trying to get everything cycled through to you all. So, we have some type of procedure, so I didn't just pop it up to right in front of you.

MR. WOODRUFF: I think that would be a good number to have.

MR. POINTON: I think we already did that last year. Actually, it was January 2021 the last time we did that, before you got suspended, that I had done that, but I think that this is actually the available balance is a legacy label of that balance there, because I left it there since back then. It's not right though, it's the actual true balance.

MR. WOODRUFF: The true balance not the spendable balance?

MR. POINTON: Right, right.

MR. MARTIN HETTEL: Marty here.

MR. POINTON: Yes Marty?

MR. HETTEL: Well, this whole process of managing the Trust Fund is drive through General Treasury, correct?

MR. POINTON: Treasury manages the Trust Fund, yes, sir.

MR. HETTEL: We've asked several times to have somebody from the General Treasury here to explain how they manage the Trust Fund, and we've never had them attend the meeting. What are the opportunities to have somebody come here and explain how they truly manage our Trust Fund?

MR. POINTON: I think there is opportunity. Let me do the next presentation first and go through that where I talk about the revenue flows and the transfers and maybe we'll pick that up. I actually asked them to come to this meeting and they said, well, let us know how it goes in that meeting and then we'll maybe come to a future meeting.

MG GRAHAM: We'll ask stronger.

MR. POINTON: So, with General Graham here now and Mr. Connor, I'm thinking to elevate it to the major league and see what we can get out of that, you know? He's cycling to the other end of the building to become the Deputy Chief, so you know, I'm going to take advantage of his ability while he's still sitting as the Deputy. I like that, I just assigned my boss's boss's boss something to do.

MG GRAHAM: You just circled around.

MR. POINTON: Is that all right, Marty, we're going to go through that and then see if -- I did talk with them about that before.

MR. HETTEL: Yes.

MR. POINTON: So, let's go ahead and again, I already mentioned that the revenues are all lagging behind the last several years I would put up here. So, it's not readily obvious to me why they're so far behind. The last two years were record revenues.

MR. JUDD: Really, since the December number, the rest were around \$10 million, so that December number is just about \$1.5 million.

MR. HETTEL: To add to Mr. Judd's comments, during low water, we have more horsepower out moving the same amount of loads, so we burn more fuel. And this does not reflect that.

MR. POINTON: Right, and you guys can rehash that if you want when I go through how the revenues are reported, because there is more than one federal agency involved here besides the Treasury. So, you are all paying fuel taxes, so there's a whole other agency that is communicating with Treasury; the IRS (Internal Revenue Service) is communicating with Treasury on the front end versus the Corps of Engineers on the back end.

Again, this demonstrates the same thing. You can see December, January, and February, and we actually have January, February, March, but it's the same thing. It has not changed. And I think you have that, and you all are seeing current numbers.

MR. JUDD: Mark, Damon Judd.

MR. POINTON: Yes.

MR. JUDD: I guess jumping on the pile on this, so if I look at the February number, that's a 20 percent plus decrease. What you're hearing, I think from every single operator at this table is, we don't believe there's anyway that's real. So, we know there's more in estimate in the process. But I think, the important thing for the record is we think about what we have to spend. From an operational perspective we all expect that the industry will be paying more fuel tax this year than we did last year. So, there's a big disconnect here and we don't know what drives it. But in terms of how we think about the funding source, there's no way these numbers are accurate. Or if they're accurate, then the prior year is not accurate. Something's off.

MR. POINTON: Yeah, and I want to get to that next presentation, you'll see how the Treasury is handling what the input they're getting to post their revenues. I'm not saying that you shouldn't have concern there, but. And I don't think I've got anything else.

The next slide is this would just be a little more of our Inland Waterways Trust Fund related, so anything that was fully funded in IJA, or the Bipartisan Infrastructure Law (BIL) is not the amount reflected here, these are just the ones that are included here within the Inland Waterways Trust Fund.

So, we updated that for the FY 2023 Work Plan. Okay, I could probably have updated for the FY 24 President's Budget, because it's pretty easy, zeros across the board, unfortunately.

So, as you can see you've got the dollar amounts that we received for the NESP (Navigation and Ecosystem Sustainability Program), and we've also got the \$10 million that we received for the 12 foot deepening for the MKARNS, the McClellan-Kerr Arkansas River Navigation System. We'll have presentations on those later on in the agenda.

MR. HETTEL: Marty.

MR. POINTON: Yes, Marty?

MR. HETTEL: Just to make sure we're on the same page, this presentation we just gave you as the first one you sent out?

MR. POINTON: Yeah, there's an updated one.

MR. HETTEL: We need to pay attention to the updated one you sent out.

MR. POINTON: Excuse me?

MR. HETTEL: We need to pay attention to the updated one.

MR. POINTON: Yes, absolutely sir.

Again, like I said, there's about \$10 million more in revenues that they reported from tax revenues and there's zero transfers being reported. Again, why don't we move on to the next one.

So, this is the reporting and the processing of data through the Inland Waterways Trust Fund. I ended up having many, many conversations with the Treasury Department to get to the right people who could report out on the Trust Fund, as well as through our Resource Management office and our Finance Center -- the Corps USACE Finance Center (UFC).

And so, this is the front end coming in, the revenues that are coming through the excise taxes. So, the Funds Management Branch posts information twice a month as they receive it from IRS. So, there's an estimation that their tax office, their office of tax analysis prepares and then when they get the real information from the IRS, they reconcile it and make an adjustment.

There's this whole other agency that I have yet to crack that nut to be able to talk to how that works, and that's the Internal Revenue Service. And so, there's a little more digging there to be done to be figure out how they are transmitting it. The Treasury told me how they get the information from the IRS. And so, they basically do their estimates, and they do an adjustment to reconcile either up or down, but they receive it as real revenues that are provided from the Treasury.

MR. JEFF WEBB: So, they're between the estimate and the actual, do you feel like --

MR. POINTON: Repeat that?

MR. WEBB: So, you originally did an estimate and then you did an actual?

MR. POINTON: Yes.

MR. WEBB: Did the actual -- I mean did you get that within a month of -- would you --

MR. POINTON: They said they get it when they get it, that's essentially the answer that they gave me. So that's why they did the estimate, then they get it when they get it from IRS. That's not exactly what they said but that's what the gist of it was.

MG GRAHAM: The time frame on that, within a month, within a quarter?

MR. POINTON: They said it could be quarterly to six months. So, there's potentially a six month lag on when they get the actuals. And what they'll do is when they get the actuals in, they'd go in and do an adjustment. So, if it's done each quarter, any plus or minus between the difference of what they're projecting and what the actuals are would be a lot less than if it's six months. And back to what Damon has brought up and you guys, and I'm sitting there hoping that the IRS hasn't provided real numbers for a bit here and we're going to see a huge adjustment upwards. But that's just me sitting here and hoping with fingers crossed. But that's what I've seen in previous years, that when real dollars come in, the amounts end up getting -- we get an adjustment upward not an adjustment downwards. Yes, Marty?

MR. HETTEL: So, every quarter we send a check to the IRS on our waterway fuel tax.

MR. POINTON: I take your word at that, Marty.

MR. HETTEL: Trust me, I do say that on the record. Why is that so difficult to reconcile? Why don't they just do it on a quarterly basis on the actual receipts? I think this whole process just seems convoluted.

MR. POINTON: In theory that is what the IRS is theoretically doing, that quarterly they're providing it. But it's not really quarterly. And I don't have enough details to say how much lag it might be. So, you know, I haven't drilled in enough with the IRS. I couldn't even find the right body to talk to. So, I was pretty happy talking to Treasury and figuring out some of the actuals at Treasury. You know, who does manage all the trust funds, not just the Inland Waterways Trust Fund.

MR. HETTEL: And I can tell you how much a quarter we sent, and how much sent in every quarter.

MR. POINTON: Yeah, that's proprietary information and I don't have a right to know is kind of where we're sitting right now.

MR. HETTEL: What about the industry over all? If we're contributing to the IRS at the end of every quarter that number should be there.

MR. JUDD: Well, what it might be though is if the Treasury knows where they actually have real numbers from IRS, if they can tell us that. So, yeah, are we trued up through December right now or --

MR. POINTON: Yeah, I think I can get that number.

MR. JUDD: That might be helpful.

MR. POINTON: Let me write that down so I don't forget, but the time we leave here today. So, I'll do that.

MS. TAYLOR: That would be help, to have on the future reporting, which numbers are actual.

MR. DENNIS OAKLEY: Maybe we can start paying the IRS, instead of quarterly every six months.

MR. POINTON: I'm not sure exactly what Dennis said but I would not recommend you not pay your quarterly taxes. (Laughter.)

MR. OAKLEY: Just seems like that would be fair.

MG GRAHAM: The overall thing is we want to put your money to work as soon as possible, so we need an accurate accounting of what's flowing in so we can program the wise investing of that, of those funds. So, we will keep working towards that.

MR. POINTON: Yeah, actually if we go to the next slide. I have already stolen the thunder from the next slide. So, this is what I just mentioned is it can be anywhere from six months to more. They would not give me a firm answer -- I tried to nail them down to something kind of more firm time frame and I couldn't get it, so.

MG GRAHAM: It was previously a \$120 million buffer that we said.

MR. POINTON: Yes.

MG GRAHAM: Would a six month earnings in that be greater than that \$120 million usually, maybe?

MR. POINTON: Yeah.

MG GRAHAM: I mean, you're looking at -- I don't want to do public math -- but we get the intent to get your money to invest it as efficiently as we can. And the accounting of what you're paying in got to assist in that, not hold us back. Okay.

MR. WEBB: And the unintended consequence of looking at that number and saying, hey, well we're going to have \$100 million in the Trust Fund --

MG GRAHAM: Right.

MR. WEBB: And we start to throttle back --

MG GRAHAM: Right.

MR. WEBB: -- that next fiscal year based on bad projections.

MR. POINTON: Right. And that's a fringe benefit of having to get into this. I have phone numbers and emails of everybody I need to talk to immediately to find out what you're asking me. I think that's a fairly easy conversation I can have, actually probably tomorrow when I'm back in the office.

MR. JUDD: Damon Judd. The reason we're so focused on this is it's not just that gap, these are the 35 percent dollars.

MG GRAHAM: Right.

MR. JUDD: So, if you think about the effect on funding your programs, there's a multiplier effect, so.

MG GRAHAM: Absolutely, absolutely.

MR. POINTON: We're on the right slide now. So, this is the follow on of how the excise taxes are reported. I think maybe I've covered most of this, maybe not the with the exact details of the acronyms of the offices that are doing it. They'll kind of, more formal way of saying what I just said, that Treasury gets information from the IRS, and they get the actuals when they get them, and it can be six months behind. And then they make adjustments to the reported Treasury revenues at that point.

Any questions on the revenues? I know this is a little not exactly a happy moment for you all, how your revenues are reported. (No audible response.)

MR. POINTON: So, reporting of transfers. Our Finance Center handles all the actual reporting that is done, so what the Finance Center does is they go into our financial management system, and they query the system on the trust fund accounts 96X8861, that means it's the Inland Waterways Trust Fund. And they go in and they check for obligations that are going against the Trust Fund projects based on the funding authorization documents. And then they request that to Treasury, that the transfers in that particular reporting cycle. So, the transfers come from obligations that are included in CEFMS which is our financial management system. And what they basically do is, is they go in and all the money's invested and in this case, the Inland Waterways Trust Fund they're all invested in either one-day or short-term Treasury notes. So, what they do is, whatever is available for that day's sale of Treasury investments, they will net the difference. This is Mark making numbers up, if we need to transfer \$100 million and they have revenues of \$25 million from the sale of those Treasury notes from the Inland Waterways Trust Fund for that day they will go out and sell \$75 million more worth of the most current notes, the ones coming due the soonest, to net the difference. So, they would sell \$75 million of Treasury notes to get to the \$100 million to in turn, that gets reported as a transfer, and it gets sent over to the Corps of Engineers. Yes, Marty?

MR. HETTEL: So, your Finance Center provides the amount transferred from the Inland Waterways Trust Fund. I take it that also includes the General Treasury match of 65 percent.

MR. POINTON: Yes.

MR. HETTEL: So total that we're requesting is the 65/35 combined. If they ask for \$100 million from the Trust Fund, then the 65 percent from the General Treasury on top of that \$100 million is then transferred?

MR. POINTON: Yes.

MR. HETTEL: Okay.

MR. POINTON: There's another slide coming up that I'll get into this. But yeah, all the money will be transferred over that equates to the cost sharing match for whatever that project is for whatever that fiscal year is. And I say that because we know that Chick Lock and some others had annual changes to their cost sharing, right? Did I answer your question? I think I did.

MR. HETTEL: Yeah.

MR. POINTON: Currently they're all 65/35 percent.

MR. HETTEL: Just want to make sure the Corps is getting the money from the General Treasury also.

MR. POINTON: Yes.

So, the next slide we've got what we call FADs but they're Funding Authorization Documents, and that's how we request the funds actually be transferred into the Corps of Engineers financial accounts. The point I think I wanted to make here is -- I don't want to throw any project under the bus or anything -- but if the Inland Waterways Trust Fund project is going to request \$100 million on September 28th, those records will probably not be reflected in that fiscal year's action because it's past when the books are closed out. And depending on what it is on the revenues, of the revenue side, Treasury will go back, the statements that are done the first week in the following month, they'll go back and post-date those, so the revenues are going to get reported at the end of that fiscal year. But they can't do it for the transfers out and the obligations because the books are essentially closed at that point. So, there may be, depending on end of year requests and obligations there may be some overlap and that will carry over into the next fiscal year.

Let me put it in maybe more simple layman's terms, if it was done in September, but the books are already closed, it will be reflected in the first quarter of the next FY. I can't say October, but in the first quarter of the next fiscal year. So, there is a latent lag if they wait until the end of the fiscal year to go ahead and request an obligation. And that's the way the Federal Government's financial books are. They close before 11:59 on September 30th.

And a lot of this was put in place when the Trust Fund only had about \$30 or \$40 million. So, a lot of the process that was put in place was when there was a cash flow concern. And the obligations were done quarterly instead of annually because there wasn't enough value in the balance of the Trust Fund to go ahead and obligate it all. We were waiting for the revenues to come in monthly. So, this process we put in place when we were going month-to-month to match the obligations with the revenues as they were coming into the Trust Fund.

That is not the case at the moment right now, as we've just talked about there's \$240 million sitting in the Trust Fund, \$247 million sitting in the Trust Fund. Even if there's prior commitments against that you still have over \$100 million that's available in that Trust Fund plus the annual revenues -- the monthly revenues that are coming in during the year. So, I think there's probably some fertile ground there to go ahead and make some process improvements, or at least initiate those and see if can go ahead and streamline that and maybe answer a lot of the questions that you all have about how transfers are being reflected in the Trust Fund statements.

And that's all I have I believe. Oh, no, I have one more slide. There you go. So, Marty, I think you asked this question. Those are the transfers from FY 2022 matched up, and I don't think that's what you asked me, but those are the numbers that were allocated, transferred out, and matched up to those Inland Waterways Trust Fund projects that received them. And it comes down to that \$146.7 million that were recognized as transfers.

MR. HETTEL: So, here's a question, on Mr. Fritz' break down of allocations, that shows nothing for FY 22. You're telling us the Lower Mon received \$16,689,000?

MR. POINTON: I'm telling you the Lower Mon requested transfers from obligations reflected in their books in FY 22, so they were using prior year budget authority.

MR. STEVEN RILEY: And to note, this could include transfers that happened in FY 2021 that did not get reported until FY 2022, that's two slides back.

MR. POINTON: The lag at the end of the year on transfers.

MR. HETTEL: Even in Mr. Fritz's report, it shows no allocations for 2021 on Lower Mon.

MR. POINTON: Not allocations, transfers. So, the transfers are based on the obligations. The obligations are available from prior year budget authority that he received -- I'm sure it's the \$111 million.

MR. HETTEL: So, if it's transferred or spend on Lower Mon, is it not allocated to not be reported in this report?

MR. POINTON: Now.

MR. HETTEL: The Lower Mon funding summary should not have the \$16.8 million that were transferred in 2021 and 2022.

MR. POINTON: He is reporting what's being appropriated and thus allocated to the project. In the last case with the Lower Mon, it was \$111 million. So, let's say he has a pocket with \$111 million in it. And as he spending it out, he's spending money as he's going through the fiscal year and executing work, he puts an obligation into our finance system. The Finance Center then says, oh, they put in an obligation. They have an obligation for \$16 million, so now we have to ask the Treasury to provide us the \$16 million from the Trust Fund. That's what you are seeing in your FY 22 number there.

MR. HETTEL: Okay. So, I'm still confused. So, the \$16.8 million is part of the \$111 million from FY 20 allocations?

MR. POINTON: That would be my speculation that that's where that's coming from.

MR. HETTEL: Speculation, can we verify that?

MR. POINTON: Yeah, that's what she was asking, yeah, right.

MR. STEPHEN FRITZ: That would also be from prior years. (Simultaneous speaking.)

MR. POINTON: That's what I'm not sure, if you're working on it. So, as I said before, all of this is no year money. So he may be executing a contract that was awarded with allocations that he got in 2019 or 2016, so it may go back to that. So that's a lot harder thing to determine, that's why I said I got to get back to you on that to drill down into all the existing authorities that they have and remaining budgets and then match that with the obligations. Right.

So, Steve Fritz and I are going to have a really intense conversation in the next couple of weeks or so.

MR. JUDD: Damon Judd. Maybe I'd suggest that in the interest of time, given everything we've got on the agenda, you've clearly done a lot of work to start peeling back the onion here, we appreciate that. But there is still obviously some work to be done.

MR. POINTON: Yeah.

MR. JUDD: So, we take this as part of the due outs and try to move forward?

MR. POINTON: Yeah. I had already assigned that to myself to do for the next time. Yeah, this is still an ongoing work in progress to go ahead and get to the bottom of this. And I think the harder nut to crack is going to be trying to put some light, illuminate what the IRS process is and how Treasury deals with them. That wasn't going anywhere before this meeting unfortunately. I would say if there are any more questions, but I think we've probably, like you said, Damon, time to move on.

So next up is Tiffany Burroughs, who's our Chief of Navigation at the Corps Headquarters. And she's going to be talking about the funding, the FY 23 funding, and the actual work plan for navigation in general and also some highlights of FY 24 and also, she's got a little special follow on for you. I'm not going to give away her thunder.

MS. TIFFANY BURROUGHS: Nice way to describe it, Mark. Good morning, Mr. Vice Chairman, the entire Board, General Graham, and Mr. Connor, and to all the participants. My name is Tiffany Burroughs and I'll be giving you guys the Nav Funding overview.

So, the Corps budget is on a three year execution cycle with year-round efforts. For FY 22, obviously that is concluded but we are in the midst of fiscally closing out contracts, and then we're in the midst of FY 2023 execution right now. The 2023 Appropriations bill was signed in December of 2022, after which we immediately began the FY 23 Work Plan development while also defending the FY 24 program and developing the FY 25 budget. I like to point out that throughout this cycle there are various opportunities for stakeholder engagement.

Next, most of you have seen this slide before. It gives you the top line dollar amount for the entire Civil Works budget. As you can see, since 2013, the appropriations, which is the blue line, has routinely been above our budget. In Fiscal Years 2021 and 2022, we saw our budget increase about one billion each year, so we're trending in the right direction. There was a slight dip in FY 2023, however, we don't know if this is going to be a trend or if it's probably due to the historic amount of money we received in the Bipartisan Infrastructure Law (BIL). The Fiscal Year 2023 Budget request was \$6.6 billion and appropriations of \$8.3 billion, which was about a 26 percent increase. The Fiscal Year 2024 President's Budget was \$7.4 billion.

The next slide shows the FY 2023 President's Budget on the left and the FY 23 Appropriations on the right, both are broken out by the different Appropriations accounts. As you can see the biggest winners are O&M (Operation and Maintenance) and Construction. O&M received approximately \$780 million in additional appropriations above the budget, and Construction received about \$550 million additional. Our Mississippi Rivers and Tributaries (MR&T) account received about \$140 million in additional funding above the President's Budget.

This slide shows the breakdown of coastal and inland navigation and current trends. I do like to point out that the tall bar in the middle is Fiscal Year 2022, and it shows the historic BIL infrastructure funding we received. For inland navigation in 2023 there was approximately \$1.4 billion in total appropriations, and

for coastal, it was approximately \$3 billion. Since 2018 there has been over \$11 billion invested in our inland waterways system and over \$19 billion invested in our coastal navigation system.

So, to put 2023 into perspective our total appropriations minus our supplemental and BIL, navigation received \$4.2 billion, which is a little over 50 percent of the Civil Works budget. Lastly for the FY 2024 President's Budget we received about \$1.1 billion in inland nav and \$2.1 billion in coastal nav.

So, to break down our appropriations for Fiscal Year 2023 a little further, this gives you the Investigations account trend. It includes the regular Appropriations Act as well as the President's Budget. The orange bars are indicative of inland navigation, blue are for coastal, and then green is for the President's Budget. So in Fiscal Year 2023 we received about \$8.2 million for inland Investigations and about \$10 million for coastal Investigations. In the FY 2024 President's Budget we received \$6 million for inland nav and \$13 million for coastal nav. The trend for inland navigation in the Investigations account has been kind of declining but we think that's more indicative of a lot of projects in inland being in their Preconstruction, Engineering and Design (PED) phase and a lot of those shifted from being in Investigations to Construction. So they've received some level of PED, it's just not in the Investigations account.

Next slide is the Construction account, have the same color coding as the previous slide. Fiscal Year 2023 included \$109 million for inland Construction and \$585 million for coastal Construction. The Fiscal Year 2024 President's Budget included \$5 million for inland Construction and \$388 million for coastal Construction. And then please note there were a significant amount of investments as you can see in the middle in orange and blue for the 2022 Bipartisan Infrastructure Law (BIL).

MG GRAHAM: Would it be fair to say that the 2022 Bipartisan Infrastructure Law, we got about five years' worth of additional funding shot in the arm in that one year?

MS. BURROUGHS: In that one year, correct. Next is our Operation and Maintenance account, as I said earlier, O&M was a large winner. In Fiscal Year 2023, we received about \$1.1 billion for inland O&M and about \$2.2 billion for coastal O&M. There's definitely been a steady increase as far as O&M funding trends. From 2022 to 2023, we received about a 6.2 percent increase in O&M, on the inland side, and then on the coastal side we received about 15 percent increase. So, we're headed in the right direction for O&M, for sure.

Next, this slide these are just some of the highlights of some of the projects that were funded in inland navigation for Investigations, so I won't read all those off for you. But I'll just say that these are general disposition studies, dredged material management plans, as well as feasibility studies.

MR. HETTEL: Can you tell us whether the work at John Day and Bonneville is on the locks or the dams, the studies?

MS. BURROUGHS: I can't say that it's specific to the lock or the dam. I mean, generally all of our studies are going to cover whatever the necessary work is at the project, so there usually isn't a separate feasibility study for the lock or for the dam.

MR. HETTEL: Okay.

MG GRAHAM: Rob, you might?

MR. ROBERT RICH: The question that you had there because when I saw that it was a point of interest for us to know. So, if we could have an opportunity to hear back at some point on what those are, we would appreciate that.

MS. BURROUGHS: Yeah, I know for John Day that's initiating a feasibility study related to tribal housing, but I can get you further explanation on that.

MR. RICH: Thank you very much.

MR. HETTEL: Second question, on the Tennessee-Tombigbee-Black Warrior deepening study, as you've heard or will have today, we have so many other ongoing construction projects that are going to require funding, is that a Trust Fund supported study? I just don't see we should use Trust Fund dollars for that, that we have higher priority projects that we need to be funded.

MS. BURROUGHS: So, in Investigations, there is no Trust Fund distribution until it gets into PED phase, so in feasibility stage there is no Trust Fund share for any investigation, right.

MR. POINTON: In Investigations.

MR. HETTEL: Until it goes to construction then it's --

MS. BURROUGHS: Correct, right. And before that happens obviously, we have to get the new start authority and all that.

MR. HETTEL: The authorization and all that, thank you.

MS. BURROUGHS: Correct. All right, so on the next slide those are just some of the highlights for our Investigations account for coastal nav.

The next slide these are just the highlights for our Construction. We've made significant progress here as we stated in the previous slide with the injection of Bipartisan Infrastructure Law funding. And I won't read all of these off for you guys, but you can see where we've made significant progress in the Construction account as well in 2023. These represent all of the projects funded in 2023 and 2024 for construction. Some of these are Inland Waterways Trust Fund funded projects, and then some of them are inland projects that are not funded from the IWTF, just for clarity.

All right, this next slide just gives you some of our O&M highlights. Obviously, there are a lot of projects funded in the O&M account, so I just broke it out by some of the major work that we achieved there, some of the major maintenance work. We got routine maintenance, operations, and then dredging. So, I won't read those off for you guys, but you can see that, like I said earlier, we are making a lot of headway in O&M and we're trending in the right direction there.

All right, I think that was my last slide. Let's see, it's the last one on that.

MR. JUDD: Do you mind going back to slide 3? Secretary Connor, one of your comments in the opening statement about the Congress' desire to control where some of the numbers go, I just wanted to kind of explain some of our concern on the crowding out of that. So, what we're hearing is, you know, this desire by Congress to flatline spending, so if you carry that blue line across and think about what's been allocated through the President's Budget, I think there's only about a \$900 million gap then of what Congress could then determine. So, as you think about General Spellmon's (Lieutenant General Scott A. Spellmon) comment that we have, and General Graham's comment this morning, over \$400 million of capability. That means we'd have to consume around 45 percent of that gap on our projects. And so, if you think about competing interests with Congress for other community funded projects, our concern is, you know, we're dealing with a smaller pie that can be allocated and we're running the risk that we lose consistent funding on the projects that are important to our history.

MR. CONNOR: Got it.

MS. BURROUGHS: So, I guess any last questions on that before I transition?

MG GRAHAM: Just one point in looking at the slides. There were two bridges that were mentioned on there. This is dovetailing with Mr. Connor's comment on the Cape Cod bridges, that both of these are in the Atlantic Intracoastal Waterway. But similar to the Cape Cod bridges, our plan is to upgrade them to current highway standards and then give them to somebody else, so that they will then be off the rolls of something that industry has to invest in. So that's the plan and right now I think Virginia Beach is who we're divesting those bridges to. So good news story, it's just going to take us a little while to get there.

MS. BURROUGHS: All right. So, I know there's been a lot of conversation about inflation and construction cost increases, so I'm going to cover some results of an analysis that we conducted at USACE Headquarters. I'm going to give the disclaimer I was not part of the PDT (project delivery team), that I am just simply giving the information on behalf of the Engineering and Construction (E&C) team. So, we do have them on the line for those who have questions and want a more in-depth kind of explanation.

So, with that I will cover a few slides to kind of give you where we are with this. This first slide kind of just explains some of the things that we are putting in place to help address some of the market concerns. Some of the things that we're doing is we offered official guidance as of last year to our estimators on how to incorporate and communication issues of risk and market conditions and inflation into our budget and cost estimates. So, we give them direct kind of official policy that this is how you try to address that in your estimates. And we've been keeping high emphasis on making sure we have our cost estimates up to date because we realize it's critical that when something does get funding that it has an accurate estimate. So that's kind of highlighted in the first two bullets, things we're kind of trying to do to address that market change and put that information into our cost estimates.

And then the last bullet kind of goes over what I'm going to highlight for you guys today, which was the market survey we conducted essentially reviewing our supplemental dollars that were executed. So, the BBA team, which was the Bipartisan Budget Act -- I want to make sure I get that right -- DRSA (Disaster Relief Supplemental Appropriations Act) and our last three supplementals, the IJA or BIL. We reviewed those looking at labor availability and then also material availability and then looking at the construction market, how it's impacted by government policy and private and local kind of plans for their execution, so how does their work kind of impact what we're doing.

All right, so we are awarded a task order in July of 2022, and this kind of highlights for you the scope of what that looked at. Like I said, we're looking at how government policy, how private and public spending impact resource availability, because we realize obviously the market has a certain capacity. After you get over that capacity, you're going to kind of get into the supply and demand type of situation and obviously we have a limit. There's a limit to how much we can execute.

All right, so the study was conducted, and we found out that there was significant labor shortages across the nation, and those were impacting project duration causing overhead to increase proportionately based on the size and scope of projects. And then we also did a regional analysis. Unfortunately, that came back inconclusive as far as the cost of construction materials were concerned. So, there weren't any trends in certain area in other words. What we found was that availability and price of construction materials are highly dependent on project location. So, if something is a long lead item it's going to be a long lead item everywhere.

Next, some of the good news that we found out is that logistics and shipping improvements are helping with material availability. Some markets will still continue to see supply side issues, but these are being taken into consideration before projects are solicited in attempt to control project costs. And then alternatives are being considered for long lead items. We're having a PDT analyze how to optimize cost and schedule.

With that, Steve (Riley), I'm hoping we've unmuted the E&C team. I know that they wanted to say a few things and then they also are available to answer any specific questions on the market analysis.

MR. RILEY: We have Michael Jacobs on the line and I'm requesting that you unmute now if you'd like to speak, but he's still showing as muted on our end. There we go.

MR. MICHAEL JACOBS: Good morning, this is Mike Jacobs, appreciate the opportunity of the members of the Board and General Graham to be here again.

So, our biggest concern coming out of this was really the labor availability, that was not looking good just due to national labor. That's probably our biggest concern we're watching as we move forward.

Materials have been real spotty, with some things going up and some things have returned to normal, it looks like some of the bigger things we're concerned about, shortages of cement have eased quite a bit, but we're also seeing widely varying pricing on steel. And unfortunately for our industry, large structures like our nav lock gates, container valves, et cetera, we are seeing 30 to 50 percent price increases on quotes on those items, and lead times that typically would be a year are extending out to two or three years. So, generally not a lot of good things in those materials.

And that, really, when you talk to some of our suppliers, even though we see steel on the stock exchange, the prices are decreasing, I've had reports in the last couple of weeks a lot of the mills have actually raised their prices on the steel we use in our business line 15 percent across the board. So even though it appears indicators are indicating it's going down, our suppliers are actually seeing 15 percent price increases.

And then they're also hampered with significant labor shortages. A lot of the manufacturers on the west coast have also been inundated with a lot of orders for other items from other federal agencies. We have most of the major steel manufacturers on the west coast are building boats for the Navy right now and they're telling us our work is taking a second fiddle. So, we've got some challenges in the future.

I'm look forward with that availability and the timelines on our delivery. And we've got our eye on it, we're watching it, and we're trying to incorporate those cost increase to the estimate. But the bad news is that's probably going to result in increased cost and schedule delays, just like the study summary said.

Well, if there's any questions or anything, I don't want to be doom and gloom, but I'm just trying to, you know, we are watching it very closely and communicating across the portal to cost estimators to make sure we've all got the message and we're making sure our estimates are as accurate as possible.

MG GRAHAM: We're trying to raise our game, but I don't think anything that Mike said is a surprise to you. You're seeing that certainly in your businesses, labor shortages. Good to see that some of the commodity prices are starting to stabilize. I think some of you might be helping in that, for all you aggregate shippers out there, that are starting to move the pieces of concrete around or the component parts, so we thank you for that. Three percent unemployment right now in this country, that's going to be really hard to overcome. So, I think that's going to be with us for a while but let me go to the experts.

Lenna (Hawkins), what do you think, how long you think -- so it's good to see the supply chain. I think we're in a glut of computer chips right now, for all of you trying to get new Chevy pickup trucks out there. But steel is going to be on a rollercoaster I would imagine.

Where do you see this going, Mike? Let me look into your crystal ball?

MR. JACOBS: Yes, sir. I'm thinking we're going to see this, that whipsaw effect of all the commodities industries, for another two to three years, and then hopefully it will stabilize out. I just don't see the prices going back to pre-COVID again though. I just, with our supply chain and the fundamental changes in some of the global markets, I think a lot of the price increases are here to stay. And I think some of the capability of the manufacturing will ease up and I think we'll see those lead times shorten, but it's still going to take three to four years.

MG GRAHAM: So, in aggregate, just let me put to you a final thing, I will put you on the spot. Let's say a 1200 foot lock chamber that we were building five years ago, versus a 1200 foot lock chamber that we're going to build next year -- and this is just a big swag -- how much is that cost going up based on what you're seeing? Just rough order of magnitude, 10 percent, 50 percent, 80 percent, what do you think?

MR. JACOBS: Well, sir, that's a good question, I wish I could predict that. I would see that we're, you know, looking back at our history, we just re-spun the numbers from 2021 to 2022. We saw actually a 12 percent increase in pricing from 2021 to 2022 across all of our business lines. I would expect that we're going to probably see that extent for a year or two. So, I would expect to see a 10 to 15 percent price increase in general.

But the other side of the concern is, and that was one of the things that highlighted in this report is, we'll probably see our schedules stretch out two to three years longer, minimum. And then that schedule extension could easily add another 10 percent to the cost.

MG GRAHAM: And that schedule extension is just based on labor shortages, which aren't allowing us to get to the efficient?

MR. JACOBS: Yes, sir.

Labor shortages and the inefficiency and the inability to get the manpower to build, to do the work.

MG GRAHAM: Okay. Is that not in concord with what you're seeing in any of your businesses? Anybody have any thoughts on that?

MR. JUDD: It's Damon Judd. I think we all are seeing the labor challenges and I think we're all seeing, you know, inflationary pressure on cost and supply chain. I think depending on the component of the supply chain some of that is eased but some of that is still challenging. Yeah, I guess one comment or observation I'd make, and just a concern I think we have as a Board, you know clearly the Fed is taking an aggressive option here to try to curb inflation, and really back general to your kind of principle around, you know, how do we make sure we stay at the 80 percent confidence level?

And as we move with these annual updates, what would be a really bad outcome I think in terms of our ability to manage the programs is to let the pendulum to swing too far on the cost estimate because we're trying to be overly conservative as inflation starts coming back in. So, I guess one area of interest for me would be is working through annual cost updates, you know, how much of this information will be kind of at your fingertips so that we're kind of correct with the market versus making a conservative guess. And then, also for Michael or the team, just as we've worked through the Band-Aid ripping you described

for today, is this kind of factored into the Band-Aid ripping, or is what Michael's describing, you know, incremental exposure beyond the numbers that we're going to see?

MG GRAHAM: We're going to find out when the districts get up here to brief, just so you know John Peukert.

MR. LANCE RASE: Lance Rase. One more comment added to what Damon said. That's some of the theme here of finish what we started type of things here, with the information we just heard about the one, two, three year delays, price increases, yes, we're all seeing that. And that drives back to what's available in the Trust Fund. You know, if these certain projects have A, B, C, D, E, and F, is there a way to do say land mitigation, some of these other things, to do them well before or concurrently, not fishing behind the net on how projects are run? But just we're trying to come up with any type of ideas to reduce the 10 to 20 to 30 percent cost and time is it a major theme.

MG GRAHAM: Get things off the critical path to get them done sooner and cheaper.

MR. RASE: Yes.

MR. WOODRUFF: This is Matt Woodruff. Just something that I know the Corps is looking at, but I think it could be very helpful as we're moving forward, and that's the potential application of Artificial Intelligence to some of those cost estimates. We have and we are seeing the ability to use big data that's updated almost instantaneously to process cost estimates, look at labor, look at all these different factors, and almost on a real time basis tell us how the cost of a project has changed. And I think setting up the data the right way the first time will allow those updates to be made through the Artificial Intelligence tools that are out there. So maybe as we're doing this, if we're thinking about instead of building a static spreadsheet that here's where we are today, but instead of putting a number in that cell put a formula in that cell that knows how to reach out and go grab and updated number, so that we keep this stuff viable. Because I think that's one of the biggest problems that we faced and where we've had the biggest disconnect over the last few years is, we look at a number and think it's a good number but find out, well that was really a 2007 number and hasn't been properly updated. And so, I think we have an opportunity now to at least try to take advantage of the tools that are out there to have some real time updates.

MG GRAHAM: And I couldn't agree with you more. And we'll certainly try to work towards that, absolutely.

MS. BURROUGHS: I'm going to hand it over to David Frantz for remote ops.

MR. POINTON: All right. Thank you, Tiffany. We've got David Frantz, who is the senior Navigation program manager in Headquarters for Inland Waterways, so he's going to give us an update on the remote lock operations.

MR. DAVID FRANTZ: Not CIS this time.

MR. POINTON: Well, lock operations, remote lock operations.

MR. FRANTZ: Good morning Secretary Connor, General Graham, Vice Chairman, Board members, and federal observers. For the record I am David Frantz, I serve as the Inland Navigation Program Manager. And today I'd like to give the Board a quick update on the Corps remote lock operation assessment effort. This topic was originally reported on at the 96th Users Board Meeting held in New Orleans on April 20, 2022.

As previously reported the bottom line up front is to safely modernize the Corps infrastructure and help provide resiliency and continuity of operations. We're addressing the challenges of cyber security, recreational lockages, and lifecycle cost of upgrading equipment. We are looking also at the opportunities for synergizing across the business lines, such as remotely operating the dam gates or hydropower in conjunction with the lock operations.

We also discuss the guiding principles of remote lock operations. We're examining all the critical parts of the enterprise strategy for remote lock operations, but five items are of the highest priority. Assessing and mitigating risk, shifting from local to remote operations presents a sweeping change in how we do our operations. All operational changes will include a risk assessment that identifies risk and measures to avoid, minimize, or mitigate those identified risks. We are all about ensuring safety. This effort will include a thorough examination of all the safety risks and mitigative measures associated with remote lock operations. We want to ensure cyber security, ensuring that remote lock operations is secure and reliable is key. Engaging stakeholders in the work force. Remote lock ops will affect our work force, our commercial partners, and our recreational users. We want to take all of that into account. And finally, we want to add value to the nation. A sound business case is being developed that will document the value to the nation and identify those locks that are best suited for remote operation conversion, as we realize currently not all of the locks in our portfolio are designed to support remote operations.

As reported, the Corps is committed to focusing on people and maintaining stability in our work force. The transition to remote lock operations would be achieved over time without involving separations or involuntary geographic moves. Future staffing studies would help inform the planning and execution of work force development and changing transition strategies. Any transitions will be done in cooperation and involvement with all of the employees. We will be proactively implementing work force shaping tools, and any transition would also be done in close collaboration with all of the unions.

This next slide shows just kind of visual example of initial parametric cost avoidance that would occur from moving say six locks to a local control center. The cost avoidance are from reshaping the operational staff, but you know we still plan on having full maintenance staff at all of our sites. In this representation, there are a lot of things that it doesn't take into account. Right now, this particular graph doesn't show the capital cost for upgrading our equipment, and it doesn't take into account things like overhead for staffing and things like that. And when applied, the cost avoidance is really greatest when we look at our Level One Levels of Service (LoS) locking on our key critical nodes for the main transportation arteries.

Okay. When we made this presentation last year, we were just kind of halfway through developing our national framework report, which was a 30,000 foot view that looked at the good, the bad, and the ugly regarding what implementing lock operations would take. Since that time, we have completed the framework report. We've conducted site validation, site visits to validate our operational and technical assumptions. And now we're finalizing the enterprise level implementation plan that identifies potential courses of action. We will be presenting our findings and recommendations to General Graham and senior leaders in the mid-May timeframe for their consideration. What we're currently doing now is working on what the organizational structures would be needed to review and update policies, guidelines, authorities, standardize designs.

The next step is Phase Two, and that would require the development of a detailed regional implementation plans based on, you know, specific river systems, a cost associated with those river systems, and individual business cases for those particular river systems. And I'll get into more specifics in a few more slides.

And in Phase Three, once we have the regional implementation plans that are prepared at the districts and the MSCs (Major Subordinate Command), the district and the MSCs would then build their budget packages to support their conversions of their particular locks that they have identified. And then we'd start getting those work packages worked into the budget on an annual cycle.

Next, as part of the implementation plan, we analyzed the entire portfolio of 192 lock sites. We establish alternatives and then combined the different alternatives into courses of action, or COAs. We developed six potential courses of action with number one being do nothing to number six, you know, converting an entire portfolio of 192 locks, as I mentioned earlier that's years and years and years down the road. This picture here is just kind of a typical COA and what it looks like. And what we did is we start with the construction projects that are lined with the Capital Investment Strategy, and then we start adding adjacent locks to those, you know, the adjacent locks are the ones under construction. And from there we start building out to adjacent locks until we start filling river systems.

Marty, did you have a question?

MR. HETTEL: No, I don't.

MR. FRANTZ: Oh, okay, sorry. Okay, thank you. And then, as we go through the capital investment projects, then we start looking at the adjacent locks and that's where we start looking at using O&M dollars to add capacity to those existing structures.

Okay, next slide, as I mentioned, the regional analysis part of the implementation plan calls for the development of regional implementation plans generated by the MSCs and districts and approved at the Headquarters level. These plans will develop the detailed original specific business cases, solutions for specific operational challenges in those areas. We'd look at the local staffing plans for those MSCs and those regions. They'll include the cost estimates, the implementation schedule, and the individual budget requests that align with the ideas that are captured in the regional implementation reports.

And I just wanted to close, in summary the implementation of remote lock operations will be a long journey, but we've begun taking the first steps. The transition to remote lock and dam operations will be based on sound business cases and will be a deliberate and thoughtful process with lessons learned applied for future projects. The Corps is committed to ensuring safe and reliability lock operations and remote operation's a proven technology that can help modernize the Corps' inland navigation structure, improve reliability and continuity of operations.

Pending any questions that concludes my brief update on where we are for remote lock operation assessment. If there's no questions -- oh, Marty.

MR. HETTEL: David, Marty Hettel. Just a quick question, a couple of quick questions. What's going to change for our professional mariners when you go to remote lock operations?

MR. FRANTZ: That is going to be part of our discussions with industry and our partners. We will have conversations with you to see if there is anything that you need to change. Right now, we have not really identified anything that would need to be changed from your industry perspective. But that's still something that, as we get into the regional plan and we start working with our local partners, we'll find out what concerns you may have, and we can help address those with you.

MR. HETTEL: Well, you've mentioned one in essence, safety. Our concern is the safety of our professional mariners with this change. So, yes, please keep us involved in moving forward. You mentioned that this will be O&M dollars spent to do this?

MR. FRANTZ: Yes, sir. As a part, when we're doing the construction, as we talked yesterday, we were out at Charleroi. So, they're already using construction dollars for part of their construction tower and for upgrading their electronics. So, as we go to the projects that are in the Capital Investment Strategy, we're doing the Montgomery's, the Dashields, the Emworths, those will have remote capabilities built into them. But as we start going to the other projects, say Braddock or some of the others, those would be O&M dollars that would be used to upgrade the infrastructure at those facilities.

MR. HETTEL: So, it's a correct statement to state Inland Waterways Trust Fund dollars would be utilized on new facilities being built.

MR. FRANTZ: New constructions, but not for adjacent existing infrastructure, which would be O&M dollars.

MR. HETTEL: Okay, last question. You mentioned in your slide shows one person handling six locks.

MR. FRANTZ: Correct, as an example.

MR. HETTEL: That example alone, some of these locks pass 16 vessels in a 24-hour period.

MR. FRANTZ: Correct.

MR. HETTEL: You take that times six locks that's 96 lockages, and I'm assuming your man will work eight hours a day.

MR. FRANTZ: Correct.

MR. HETTEL: But that could be four lockages per hour for him to keep tabs on. That seems a little bit --

MR. FRANTZ: Understood, but those are some of the details that is part of the staffing we will study. There are instances where you may have two controllers working on the same shift and they're going to, you know, they would divide up, you're going to work these top three locks, you're going to work these bottom three locks. So those are still some of the details that we're kind of working through. But that's what we envision, you're not going to have just one person sitting by themselves in a building. You could, but chances are you're going to have one or two, you're going to have overlap. If you're doing 24/7, you're going to have three shifts of operators coming through.

MR. HETTEL: One lockmaster right now under this situation, every vessel that passes through, he's got a visual about what's going on.

MR. FRANTZ: Right.

MR. HETTEL: You start having one person trying to control four different lockages, he's not going to have that visual just to make sure this tow is transiting safely. I'm just concerned on how many locks you're going to request one person to try to manage.

MR. FRANTZ: Okay. And those are still details to be worked out. That was just kind of an example, if you were to take six combine down to one. Chances are it could be less than that. You know some of our systems, like, just for example the Ouchita, you have four locks on that system. So, if that system were to convert to remote, you'd have a control tower with one person watching those four locks and looking at the traffic along those. But if you had a LoS Level One where you have as many tows as you were describing, you could easily have two operators working there, recognizing the fact that with that much traffic it would hard for one person to watch six different locks. So, you may decide that the best and

safest course of action is to have two operators, each person in charge of three different locks, so person's watching one, two, three, the next person sitting next to them is watching four, five, six.

MR. HETTEL: Okay. One last question, when we go through a lock on the lower stages, we have loads, you could still have people at the lock.

MR. FRANTZ: Yes, sir.

MR. HETTEL: And our crew has your guys help us take the line and tie it on the top of the bit or end of the lockwall, that will still take place, you're not going to require our deck crew or whatever to crawl up a ladder and put a line over bit or end on the top of the lockwall, you'll still have people who assist us getting through the lock?

MR. FRANTZ: I believe that is what we are striving for, yes.

MR. HETTEL: I feel more comfortable if you said, yes, we will.

MR. FRANTZ: Yeah, okay, yes, we will. And that's the thing, we have no intention of having a lock with nobody on it. That has never been our goal, it's never been our intention. And that's not how anybody does it; that's not how the folks in Europe do it, not how the folks in Canada do it. You're still going have your maintenance crews, you're still going to have folks there to help, but the person is actually running the controls, and it's just like Charleroi, that person is up in a tower. So, you have folks down on the wall that are helping, but the person that is operating is not standing right there in the shack any more on lockwall. We are already moving folks to towers where they're doing a lot of their observations through monitors, through cameras, through you know a lot of the sensors and equipment that we have. You're going to be doing the same thing only this person may be, instead of a tower on the wall, they're on a tower across the river or upstream.

MR. HETTEL: All right, if you're got a lock chamber that's got floating mooring bits, total a different issue, but if you're got a chamber that doesn't have floating mooring bits, I'd hate to see our people having to crawl up a lock ladder --

MG GRAHAM: I don't see this being feasible without floating mooring bits.

MR. HETTEL: I don't either.

MR. GRAHAM: All right. So, we're going to do this in concord with you all, but just like your businesses we've got to make sure we're efficiently using labor. And for the McAlpine's in this world where they're locking boats all the time, probably that's not where we're going to put it. It's where you get maybe four boats a day on some of these parts of the system. But I've got them in some instances crewed 24/7, it's just not an efficient use of labor. And we're going to take care of our people, but the more of that money we can plow to maintenance versus labor, that's just not being used at that time and the lockmasters don't let anybody sit out there, they'll have them do maintenance work, et cetera. But at some point, they're only locking four boats a day, that's going to be a challenge.

MR. HETTEL: Well that certainly makes sense. Again, my concern is the safety of our professional mariners transiting a lock, that nothing changes for them in what they're used to have been doing for X amount of years. Thank you.

MG GRAHAM: Yeah, I agree. And then there's sorts of permutations that the team working on, what happens when it's foggy, what happens when it's ice conditions. And in some instances, we'll work through with you and we'll iterate what that looks like. But we are going to need your help and input to

make sure that we are efficiently using labor. I'm sure you have done that. Can you go to your picture before in the last presentation on the lock automation, I think it might have been the first one. Okay, back or forward one. Okay. So, there's Marty right there back on the left hand side. (Laughter.)

I'm showing in the pilot house of that, the coal burning steamboat there that's in the lock chamber, you know, so we've transitioned kind of beyond this. I think the last time I was on the Mississippi River at Mel Price (Locks and Dam), you know, watching the lockmaster do his job, he was looking at the computer screens the entire time. You know, clearing that vertical lift gate. He was watching the camera zoomed right on that, talking to the pilot. And so, we're kind of doing a lot of this already. And as Tom Smith would tell you, some of this is, it is closed campus where we're doing it from the tower you saw at Charleroi or is that tower somewhere else? We've got a lot of these locks are in remote locations and I've got one man crew, one person crews on at night. And we're concerned about the safety of our people too, as I know you are. So, I've got somebody driving through the night on a shift out there by themselves. If there's a way we can collectively get to better and find some win-wins then I think we got to explore that, but we're not going to do this blindly and we're not going to do this without you being right beside us, fair?

MR. HETTEL: And I'm for efficiency as long as it doesn't do anything to risk safety.

MR. FRANTZ: And we're not doing it overnight. I mean this is time and we've laid out internally you know some different timelines for implementation, and we're looking at 30, 40, 50 year time horizons to move through our portfolio. And as we get lessons learned from where we apply it at one, we take those lessons learned and we apply it at the next location, and it makes it --

MR. HETTEL: Assuming you will have redundancy somewhere, if a system goes down you can flip a button?

MR. FRANTZ: Well, and we've already talked about that too, is making sure we keep the ability to operate at the lock, as well as remotely. Yeah, that is something that we had discussed early on is and that is in our plans, to have that back up capability to operate on site.

MR. HETTEL: Thank you.

MR. WOODRUFF: I have a question. This is Matt Woodruff. You said the highest return on investment is at IMTS (Inland Marine Transportation System) Level of Service one sites.

MR. FRANTZ: Yes.

MR. WOODRUFF: I know we talked about that years ago when we were talking about levels of attending locks, but I don't remember what the levels are. Is that a high use lock or a low use lock?

MR. FRANTZ: That's a high use because that's going to be where you're going 24/7/365, and so that's where you're going to have your most operators. So, if you're look to restructure your work force, that's where you get some of your savings. But we also realize the challenges at working at those locations as Marty was pointing out on the volume. So that's something we have to get right. We are also looking at some of the low use. And it's been pointed out before that those may be the better cases to learn from. And that's where the regional implementation plans come in, you know. At the Headquarters today we're putting together the overall view of what it should look like and putting together the policies and putting together some of the guidance, putting together some of the templates for what needs to be in a regional implementation report. And then we'll go and work with the districts and the MSCs as they look at their river systems and look at their portfolio of infrastructure and they say, hey, it makes sense for us to do it

here, it doesn't make sense for us to do it on these river systems. So, we're going to kind of rely on them to know their area, put together their reports to see where it makes the most sense for that particular reason or region, and then we go from there.

MR. WOODRUFF: It seems to me counterintuitive to suggest, I guess you could say, on the one hand, that at your high use locks you have the most people, therefore there's the most opportunity to remove people. But the reality I think from my perspective is this is something that might make sense at your lowest use facilities where you might actually be able to increase the level of service instead of saying this lock only operating eight hours a day, it operates 24 hours a day, but it operates remotely. And cut your teeth on the lower use facilities, gets some experience. One of the things that is important, whether the lock is operated by people on site or remotely is situational awareness. You know, I don't want to sound like a Luddite, but we've put a lot of technology on our towboats but we still have windows in the wheelhouse, and there's a reason for that, because having that situational awareness is vital. And so, the further you remove people, you can help their situational awareness with the computer screens and the cameras and all that, but you're also limiting their situational awareness when you take the window away from them. And they've got to be able to assess and respond to situations immediately to preserve the safety of themselves, the mariners, and the communities.

MR. FRANTZ: And you're absolutely right, and you've echoed comments that we're getting from the folks in the field. As they're reviewing our reports and they're providing their comments and their feedback, we're getting a lot of those questions that say, how are you going to address this?

So, we are taking all of those comments seriously and we are looking at how to address each of those comments that coming in. But yeah, you've touched on a lot of comments that we are getting from the folks in the field, same with Marty's comments.

MR. WOODRUFF: Final comment, perhaps an opportunity is look at the remotely operated bridges, drawbridges, that have come into fashion the last couple of years on some waterways. I think there's some interesting lessons learned there from might have gone well and have gone poorly with respect to remotely operated bridges. Maybe learn from some of the things that have happened in those situations.

MR. FRANTZ: Yeah, and we've had meetings with the Coast Guard and some of their staff and the same conversations. You know, the conversation centered around looking at the bridges. The Coast Guard is seeing a lot of bridges going to remote operations as well. So, they have ideas for how to handle their responsibilities when it comes to those bridges. So, we have had those conversations with the Coast Guard, you know, with the understanding that we will have many more conversations as this moves forward and as it starts to mature. Any other questions?

Again, thank you very much for your time, turn it over to Pat Chambers.

MR. POINTON: Yep. Moving on to Pat Chambers, he's gracing us with his presence up here from Vicksburg, Mississippi, he's the Chief of Operations and Regulatory for the Mississippi Valley Division, and he's going to follow up on what Jim (Bodron) reported on at the for the last meeting. So Pat, all yours.

MR. PATRICK CHAMBERS: Thank you. Mr. Connor, General Graham, Board, I appreciate the opportunity to be out here in front of you today to talk about what we saw as a success overall, although with some challenges and limitations that we dealt with throughout the low water event of 2022. You know, the first two slides I have here are mainly obligatory slides on the Inland Marine Transportation System, showing that, you know, the Mississippi River positioned as a center coast.

How do we do this? Who's got the slides? You got them? Okay, thanks.

MR. POINTON: We're not Luddites.

MR. CHAMBERS: Showing the Mississippi River system positioned as the center coast within, one of the most fertile agricultural areas in the world.

You know, since 1988 the USACE has invested about \$1.6 billion in the revetment and dikes and on the MR&T and the Regulating Works Project in St. Louis. Since 2012 we sunk over 200 million revetment squares, constructed 14 miles of dikes, in addition to the rock pinnacle removal at Thebes.

Just some slides here, one of the things that I like showing this slide because this is where we try to show everybody that we're trying to engineer our way out of dredging, if it's even possible. And one of the things that you'll see is, through the lengthening, lengthening and raising of some dikes and the work that we put into it from the late '60s to now. With the efforts that we put into the dikes in the blue shaded area going up, you can see that our dredging efforts have significantly reduced since the '60s. And you know all the way up to 2022 you see a pretty big blip there, and I think you understand where that came from. The rock pinnacle work removal picture up there at Thebes, you know, we moved 1,000 cubic yards of rock, which gained us about two and a half additional feet of water, for low water events, like we dealt with here lately.

And then that lower right slide, Memphis, the dynamic river, just showing that the work that we've done, we've actually become a lot more efficient in the river. We're passing at lower stages more cubic feet of water through those areas, and Memphis is a good representation of that.

This is a slide that we use -- it's a really busy slide with a lot of information on it. And I'm going to just kind of bring you to the lower green area, the proactive mitigation. This is where I think that we really shine throughout the event was our communication. We were communicating up to Mr. Connor, all the way up, through the chains and all the way back down, all the way to the lowest level, you know, with industry, the Coast Guard, we were working across division boundaries with LRD (Great Lakes and Ohio River Division) and NWD (Northwestern Division). With the Coast Guard and we had NOAA involved, we had water control you know through several different areas.

The biggest thing here was our dredging. We had three cutterheads (hydraulic pipeline cutterhead dredges), four dustpans (hydraulic pipeline dustpan dredges), one mechanical, for a total of eight dredges, you know. And just tracking from 1 September, you know, we moved over nine million cubic yards that cost nearly \$30 million.

The rest of this is just some gee whiz facts for the entire system, for the Mississippi River.

MR. HETTEL: One question on the previous slide.

MR. CHAMBERS: Yes. Go back.

MR. HETTEL: You said you spend only \$29.6 million in dredging?

MR. CHAMBERS: From 1 September, from 1 September to January.

MR. HETTEL: So that was the worst part of the low water?

MR. CHAMBERS: Yes.

MR. HETTEL: And you only spent \$29.6 million in dredging?

MR. CHAMBERS: Yes.

MR. HETTEL: I thought you had requested \$200 million.

MR. CHAMBERS: We did, we were requesting, trying to get all of our funds so that we could go back to the harbors. And that's one of our challenge areas, where we didn't have the time to get back in there. You know, based on the harbors not wanting us in their way for dredging. We were requesting everything that we could in order to be able to bring everything else to bear that we could get our hands on at that point.

MR. HETTEL: So, does that include harbor dredging or just the channel?

MR. CHAMBERS: Some harbor dredging, but it was just the mainstem route, that was it.

MR. HETTEL: Thank you, sir.

MR. CHAMBERS: Not at all.

MR. THOMAS SMITH: From the beginning, and everybody above it, the division, they projected what they would need, well, so that we would get through this challenging low water, I think we were out to the second quarter -- but this is about what was spent. So, there were efforts about projections which were intended to ensure that we were communicating transparently the entire lift that could be possible, but we weren't here to spend money that we didn't need to spend.

MR. CHAMBERS: Yes. That's right.

MR. SMITH: Somewhere you know regularly we were looking at forecasts and when we might be able to say, well, we can probably begin to wean ourselves off from the idea that we need more resources. So, it's a little bit of a healthy story, actually. I don't know, the \$200 million, that's a little bit, probably have to unpack that. But keep going with that.

MR. CHAMBERS: Yeah, right, we were asking for more, and I don't think \$200 million was the number, but it was up there.

MR. SMITH: In a sophisticated type of condition that would be needed in certain things at certain stages.

MR. CHAMBERS: And trying to set the timing and, you know, through all of that.

MR. CONNOR: Can I just add?

MR. CHAMBERS: Yes, sir.

MR. CONNOR: I think it was, we were looking at amounts above budgeted resources, and I think we cleared \$100 million in emergency funding, if we needed it projected. I think by the time it got to that figure it was projected into February, if the event continued. So, we had great communication, I agree exactly what Pat said, and then we got good support for getting the resources we needed had the effect continued into 2023.

MR. OAKLEY: Help me out, I'd just like to say thank you guys for keeping the river open. I didn't know if you were going to stay ahead of it or not.

MR. CHAMBERS: Well, you know, we had our hiccups. You know one of the biggest challenges I think in working with RIETF (River Industry Executive Task Force), the RIETF organization and our local marine commissions, LOMRC (Lower Mississippi River Commission), and RIAC (River Industry Action Committee), all of those, I mean that communication that was daily. And it could have been multiple

times per day that, you know, that those local maritime commissions were talking with our experts at the districts and then funneling information up and down and throughout. So, I appreciate your comment.

You know, one of the biggest things, whenever we couldn't get the deeper draft vessels off or tows off soon enough when the water fell out on us and so that caused some problems, but I think we overcame them with time. But and I think Marty has got the exact number of hours that we were actually shut down. He shared that with me a couple of times, and that's a couple of times, you know, not more than four times. (Laughter.)

But no, I appreciate the communication that we have, and it's open and honest communication, I believe. And I think we each can attest to that.

Just kind of laying out the timeline here, beginning on 18th of July. About the 18th of July is when it was our first movement of one of our dustpan dredges out of the deep draft crossings to bring them up. I think they went up to the Arkansas-White for about five or six days of dredging before dropping into the Mississippi River. And that was really where we really started moving assets around in order to start responding to this.

Just some of the key facts on this. We had, you know, three dustpan dredges that the Corps owns. One is a contract dredge. The dustpan dredge WALLACE McGEORGE. You know, those five dredges, those four dustpans and the Dredge GOETZ, our cutterhead out of Saint Paul District are responsible for 64 separate location of dredging and accounted for 425 days of dredging, during the event. That was just from 1 September until mid-January. So, I mean, it was Herculean effort, by those you'll see that we started building the saltwater sill, down in the Lower Mississippi at Mile 64, beginning on the 10th of October and I think that completed on the 21st of October. And then we started seeing the impacts of the Missouri River reductions, where they started reducing flow out of the Missouri on the 28th of October, and that hit us about two weeks later where we felt the full effect of those reductions.

And then we actually ended up bringing the WALLACE McGEORGE out of the deep draft crossings, brought them up for about three and a half weeks at Stock Island.

And like I said, we had some challenges. You know I think it's a good news story overall, but one of the biggest effects on our ports, our on and off ramps to the mainstem river. You will see that bottom right picture there, that is Rosedale Harbor, you know where they had barges just pretty much stacked up and couldn't get them out based on the depths that we were set at.

One of the things, and I guess I'd like to go ahead and explain harbor dredging. What we do is we look for our water control folks to give us a low pass, for the worst that we think that the water is going to go to at every gauge on the river that we are tracking. You know, what is going to be the worst. And we try to dredge each of the harbors way ahead of time to leave 10 feet at that low stage. You know with the northwest drought that over the last few years as this water started falling and continued to fall, we had missed that mark. And we had already expended all of our funds in those harbors and released those dredges that were under contract. So, the challenge was to get contracts re-initiated, get them funded, and bring them back. And we were looking at about 40 days for each of those harbors. And I'll talk about what we're doing in the end for that. But I did want to point out that you know this is one of our biggest challenges, and one of our, I think that we missed the mark here.

So, for the open and honest and transparent discussion, I thought that was important to point this out here.

Next slide is limitations and lessons learned. You know, our dustpan dredges are our main go-to on a highly trafficked navigable channel, and especially with the sizes of barges and ships that we have moving through there. You know we use our dustpans for the most part down in the deep draft crossings, and then in the mainstem Mississippi, above Baton Rouge whenever conditions warrant. You know our limitations, our Dredge POTTER out of St. Louis, it can't work in deep draft or high flows based on the free board on the tail, on the stern of that dredge. The Dredge JADWIN is underpowered and can't work in extreme high currents, so that's challenging. Victoria Bend is one of them. And then you know the WALLACE McGEORGE is our only contract dustpan dredge that's available to work on the Mississippi River. You know we work and make sure that, if we've got one of these down at all times, we've got the other two are up and ready to respond. Where pretty low water harbor dredging really minimized the light loading that they had to do, but it wasn't a save all. One of the things that we got to do, and this is what we're committed to doing in working with the Coast Guard, industry, all of our local maritime groups, and RIETF, you know, as to develop our low water action plan, just like we do our high water action plans. You know, long range stage forecast, and be aware and track and work with TVA on their peaking operations. And then the channel improvement program kept the channel efficient during the low flow. So that was significant to us, the better efficiency that we have in the river now.

One of the things that, with our Dredge POTTER and JADWIN, both of those dredges are over 90 years old and, we are working, trying to get them re-capitalized but it's a ways down the road. But you know that is a significant limitation and the challenge. Because in this last event, open and honest, if we'd have lost one of those, we would have lost the river. And to recover the river would have taken a whole lot longer than the short closures we did. Not only that, in reality the WALLACE McGEORGE is 58 years old, and that's the one contract dredge out there, you know, that can work on the river, and the USACE Dredge HUREY is about 30 year old. So, not only I think, somebody on the Board mentioned our aging infrastructure with our locks and dams, our aging assets here can prove to be significant, you know.

And then the last slide, we can't ever fully control the river. All we can do is do our best to deal with what she brings us and try to stay ahead of it and mitigate these extreme events, whether it's flood and low water. So, I appreciate your time and appreciate your comments.

MR. JUDD: Damon Judd. Backing up some, we had some of this conversation as well, I will echo what Dennis said, I think from an industry perspective, we're all really appreciative of how the Corps jumped on this. And it felt the communication and urgency was something like we'd never seen, doing maintenance in transit to keep dredges moving, allowing traffic to pass and the information flow was really spectacular. And I think one of the things that we heard from mariners was, as you look back at historical low water events, kind of in your theme of the investments that have been made, that at the given stages we were at, that the river was functioning better than it did you know back in 2012.

So, Secretary Connor as you think about your five themes, for me there's a really important take away here, which is these investments we're making are providing a resilient and reliable system. And as we think about overlaying that our conversation last night around, you know, from an environmental impact standpoint, one of the challenges we all face as shippers and operators is to bring more cargo to the river, which the most environmentally mode of transportation, we have to have a reliable system. So, you talk about 90 year old dredges and you talk about the 12 foot channel conversation we had last night, the more we can paint the picture to shippers that they're insulated from these weather events and risks, the more tonnage we'll be able to bring to the system in a more environmentally friendly manner.

MR. CHAMBERS: You know, I appreciate the comments. One of the things that Chuck Mellow got out of one of the farmers up in the St. Louis area, he said, you know it costs me to move my grain 50 miles to that port, you know, it costs me about the same to move it 1,300 miles from there down to New Orleans, for export. That's how significant it is.

MR. HETTEL: And Damon brought up the 2012 low water, I'm going to talk about the 1988 low water which was the previous low water record at Memphis. I remember those days, to Pat's point about the channelization work you've done on the Lower Mississippi River, back in 1988 we were running with maximum tow size of 12 barges. This year we didn't get below 25 barges. That's how good the channelization work you've done on the Lower Mississippi River has been, and I can't wait till you get to the point where we don't have to go below 30 barges. Another great example of how the channelization and the dikes that you put up on the Lower Mississippi River kept us more efficient. Twice the tow size at the same depth.

MR. CHAMBERS: Makes me feel good that there was a whole bunch before me that have done that, and tons more out there doing that work.

MR. OAKLEY: Well, I'd like to say one more thing. It's kind of scary we've got two 90 year old dredges keeping the river open.

MR. CHAMBERS: Yes, sir, scares me too, daily.

MG GRAHAM: Okay. Again, great job cooperation by you, the MVD team, cooperation with the industry out there, particularly all four of the dredges in our fleet that worked really, really hard winters, proud of you all.

MR. CHAMBERS: Thank you, sir.

MR. POINTON: Before the break we're about a half an hour behind schedule. Can we limit the break to about 15 or 20 minutes, so we can grab back 15 or 20 minutes? We will reconvene at noon.

(Whereupon a break was taken.)

MR. JUDD: I would ask of the Board, we've got a lot of important content here and the time is shortening on us so accept there's things, they are a little more minutia that strategic and don't necessarily need to be on the public record. If they would channel those, all questions through the Board representatives. And I think our plan is, just for the people presenting, you will see the Board representative and doing that with each of you as well to try to streamline things, so thank you for that.

MR. POINTON: Let me add-on, as part of the annual report we actually have a table that shows the members and what projects that they are designated to represent. So, if you're not sure who's representing your project, the Board members are listed there. Please reference that when you get the time. Thank you.

We got Colonel Curry here, the Rock Island District Commander, and oh, he's got something here. Nice. (Indicating.) Lost that bet, did you?

COLONEL JESSE CURRY: Well, Good Afternoon, Mr. Connor, Major General Graham, Mr. Judd, Board members and other distinguished guests, for the record, I'm Colonel Jesse Curry, the Commander of the Rock Island District. As you saw there at the beginning, I do also stand before you as a cautionary tale of the reminder of the penalty for using acronyms and not explaining them in this forum. So that is the reason behind this (indicating).

MR. POINTON: We have physical evidence that he did come through on the bet.

COL CURRY: Yes, sir. And I would add one additional note of warning though, I do believe Mr. Hettel did claim the strawberry sprinkle one in there, so don't take that. But again, good morning, it's an honor to be here. I certainly appreciate the chance to provide some critical updates as we jump into the presentation.

Before we do, I also wanted to provide a quick update on the Illinois Waterway consolidated closures. I have received a number of questions about that here today and just wanted to touch on that very, very quickly. That particular program is on schedule. It is moving forward, and we are on track to begin the 120 day closure this summer starting on 1 June. As a quick reminder, that's closures at Brandon Road Lock and Dam, the Marseilles Lock and Dam, and Dresden Lock and Dam. As we look at those guarantees that we have provided back, we are on track to meet our commitment, which is meeting that 120 day closure. We will complete all the known work that requires a full dewatering and closure this summer. And the remaining work at Marseilles and Starved Rock will only require partial closures and with restrictions that will be coordinated well in advance with industry. I would also add the note that part of the efforts going on this summer does include the supply contracts that will continue to deliver repair components that if the ones that are not installed this summer will remain on hand in the event that any of those components fail before we come back to install them in a future year.

Bottom line, we will remain transparent and continue to communicate. We appreciate your assistance in ensuring we are communicating with all interested people for the river and keeping them updated on the progress this summer. We certainly value your confidence and the confidence of those that you represent.

The topic of this morning's brief, I'll transition to that. Navigation and Ecosystem Sustainability Program (NESP), specifically (Mississippi River) Lock 25 and LaGrange. But before I provide some opening comments and then hand off to some of our team members to talk some specifics, I do want to note that we do have some significant milestones that are occurring as we speak and are in the very near future. Most of you are aware that actually yesterday, at (Mississippi River) Lock 14 in the Rock Island District, we did conduct a Lock 14 mooring cell groundbreaking ceremony. In attendance, Representative Sorenson from the 17th District of Illinois, the Director of the Iowa Department of Transportation, from Iowa, Mr. Scott Marler, as well as Major General Holland and other representatives from all the associated partners were in attendance. And it was a great event with similar beautiful weather in support. So that was yesterday.

We also have next month at (Mississippi River) Lock 25, the construction contract groundbreaking on May 18th. That is going to be another significant event as we look at these key features that begin to start, and start construction, and really establish that initial momentum that will be critically important for NESP as it moves forward.

As all of you are aware, NESP, Navigation and Ecosystem Sustainability Program, is a once in a multiple generational program that has the potential for positive impacts for all Americans well beyond our lifetimes, of our children's lifetimes, and our grandchildren's lifetimes. The projects within NESP and the responsibility over the entire program does rest on the shoulders of the best and brightest, and the best and brightest from the delivering districts and from across the Corps through world class centers like the INDC (Inland Navigation Design Center). You were introduced to Lenna Hawkins earlier, but as a key example of those best and brightest, but also it would include the Engineer Research and Design Center (ERDC) in Vicksburg, across the enterprise, coming together in order to deliver these projects as a

collaborative effort. Our leadership has complete confidence in the collective capabilities of those teams to meet your expectations and those of the American people.

As we begin, I do want to introduce some of those members, so from Rock Island District that serves as the program leadership for NESP; behind you, Ms. Kim Thomas, the DPM (Deputy District Engineer for Program Management) from Rock Island as well is Mr. Andrew Goodall, the program manager. Additionally, and I'll be asking him to come up here in a moment, I want to introduce Mr. John Peukert from St. Louis District and Mr. Jose Lopez, the project manager from St. Louis District. These teams coming together with the support of the entire enterprise and key centers like the INDC, and Engineer Research and Design Center is what gives me confidence that we are on the path to deliver your expectations for these key products.

Without further ado, I'd like to introduce Mr. John Peukert to talk about Lock 25, and, sir, I'm going to head back to the noodle pit, and someone might have to pull me out a little bit later. Thank you. (Laughter.)

MR. JOHN PEUKERT: Good afternoon everybody, Secretary Connor, General Graham, Vice Chair Judd, other Board members, and federal observers, thank you for letting us brief Lock 25 today. Really important project not only for the St. Louis District but for the entire Corps of Engineers, the nation, and certainly the industry you represent. I'm going to talk about a few things and I'm going to turn it over to subject matter expert, Jose Lopez, our mega project manager. Three salient points I kind of want to hit just real quickly and then Jose will expand on those.

NWD, and I'm not talking the Northwestern Division, but New, Weird, and Different, I don't know if the Midwest is embracing weird yet, we'll get there, but certainly new and different. So first we're talking acquisition, and a really revolutionary acquisition in Civil Works using ECI (Early Contractor Involvement) IDAC (Integrated Design and Construction), so not a typical ECI that we saw in the aftermath of Katrina down in New Orleans but a much more designed on outcome based on the IDAC part of that. So that's "Integrated Design and Construction." Yes, sir, I used it twice before I defined it. I apologize. So that's an interesting mechanism and Jose (Jose Lopez) will brief a little bit more on it.

What that's going to do for us, and we'll kind of walk through a quick schedule, but it's going to give us a construction industry validated cost by this time next year, and I think that's at roughly a 15 or 20 percent design. That's where we've seen major cost growths happen, and whether it's vertical construction or marine type construction, you've baked in bad ingredients in your cookies by 65 percent. If they're in there at 65 percent, it's really hard to get it out later on and as you encounter risks both time equals cost and growth. So, I'm not picking on Pittsburgh District, I spent several years here, great years, and it's certainly the most professional district I've ever worked with. And I say that in all earnest. Charleroi is an example, right? We're getting it done, but no continuing contract clause and we go through all the reasons why it's taken 30 years to deliver a 10 year project and it's certainly not on the district's shoulder, why that happened. It's the system in which we work, right? So, our method is to get to an acquisition process that gets maybe not cost control but defines cost much more accurately early on, thereby setting expectations with the nav industry and taxpayers.

So, I also want to highlight, second point is, all though St. Louis District -- Jose sits there and I'm the DPM there, this is an enterprise effort.

So, across the Corps of Engineers, I was looking through some data last night, seven districts have PDT, or project delivery team members on this team, plus we have the cost folks in Walla Walla District, and our Engineering Research and Development Center down in Vicksburg all engaged on this project.

And then the last kind of big point before I turn it over to Jose is early coordination, right? So, we quite honestly are at about 15 percent design. I think that's generous, and so we can't think inside our, you say stovepipe, anymore. I could probably bring out 20 AARs (after action reports) where we've learned that lesson. So, we've learned that lesson I'd like to reiterate that. So, we've already had multiple meetings with the navigation industry, and I think at this stage even more importantly with the construction industry, and I'm talking heavy construction, big multi-million dollar companies with unlimited or really high bond capacities, and that's who we'll be looking at to probably award this type of contract to in the future. So just kind of a quick update on the acquisition process.

So, we are actively in acquisition on Lock 25 now. So, February draft RFP (Request for Proposal) for the project going out. June -- and we've had an industry day since that draft RFP release in March. In April, just a week ago Headquarters contracting, USACE Headquarters contracting approved our acquisition method and processes and that's great news and it was a heavy lift for the team.

So really appreciate all the vertical support there getting that through. We're going to advertise on the street, RFP, late June with a late August bids received which should leave -- it's a lot of evaluation that goes into this kind of contract evaluation to select the winning bid. So, we're looking at the March time frame to have a known winner of the contract -- of the ECI IDAC contract. So that's where we are in the process, and I'd like to hand it over to Jose Lopez, our mega project manager. Thank you for your time.

MR. JOSE LOPEZ: All right, good afternoon. Secretary Connor, and General Graham, chairman -- sorry, what was your last name?

MR. JUDD: Judd.

MR. LOPEZ: Judd. Should have written that down. Members of the Board, federal observers, and colleagues, thank you for having me here. My name's Jose Lopez for the record and I'm the project manager for the Lock and Dam 25 project under the NESP umbrella. John touched on a lot of good points. I will kind of go deep diving through the slides and if you guys want to hurry me up, back me up, you know questions, feel free. This is my second time briefing you guys, so I'm kind of aware of the mechanics.

So, I'll skip the first three items, nope, nope, keep that slide, or first two items but I will talk on schedule. So big picture, right? Major General Graham addressed some of this in his opening remarks about how we project schedules out for these long, big projects. You know, this is sort of our best guess at this point in time with a 15 percent level design of where we're at. And this obviously assumes certain funding scenarios, right, and then we've got some fiscal completion dates in there.

So, we as an agency are required to kind of lock these in and sort of, use them to track our progress. We all know things can change, but I just wanted to put that out there, because it is something that is reported within the Corps levels.

So, the cost update, right? So, about a year ago I told Major General Graham that I was going to be timely and transparent with updates on cost and schedules. I'm probably going to eat a little bit of crow on timeliness here. We are working on our cost update, and it is getting vetted and revised through the agency process, seeking that validation certification from Walla Walla. The nuance that we've kind run

into is we are in active procurement. We are going to solicit this ECI contract in a couple months. We actually have released the draft contract and have had one-on-one sessions with contractors to get feedback on that contract structure. And in coordination with our contracting folks and some of our costs, members from the cost CX, such as Mike Jacobs, we feel it's a little bit tricky for us to sort of certify and possibly release a number when we're in active procurement, because it could potentially compromise the integrity of the competitive bidding process, right? Because we would be sort of giving up the government's negotiating position. You know, one example, sort of conversely is when we had one-on-ones with contractors just a couple weeks ago, we asked one of them about their bonding capacity and sort of in jest the gentleman indicated, well, I'm not sure what my bonding capacity is, but it's not -- and he said a number and it was a specific number and he sort of took a step back and kind of -- you know kind of recoiled because I believe he was somewhat giving up his idea, right, of what the project's cost is. So, any way that's kind of the gist of where we're at with the cost update. We are still working the certification process, so there's still ongoing reviews from the cost CX. It's not like we've paused any efforts. But it is something that typically on projects occurs when we're further along in design, say at the 95 percent level when we're really, really close to getting bids in, but in this sort of new paradigm of using Early Contractor Involvement, we've sort of accelerated that to the 15 percent design, 35 percent level design. So, I'll pause for any questions, but I could keep going. Sir, yes?

MR. CONNOR: Quick question, timing, again, I know you mentioned this, but I didn't get it down, when the contracting process will be done?

MR. LOPEZ: Yeah. So, our schedule right now is to solicit at the end of June, right? And then we have about 60 day period for contractors to put together their proposals, submit bids, so in the, you know, talking about like August time frame. We will have bids, actual bids from contractors, I mean what this could cost, right? And so that's another sort of added benefit as Mr. Peukert talked about with regards to getting cost validation, right? So, we know, we're always learning. We're a learning organization. We know we're not the best, but we have a really good strong cost estimating you know method, right? But getting industry feedback by receiving bids from contractors, that's going to be sort of a game changer as far as how we operate in this scenario of contractors telling us, for your ten year delivery project, I think it's going to cost you this. Because of the way the contract's set up, there is guaranteed ceiling in there that it can't exceed, and so it really gives us a picture of cost certainty more so than necessarily cost savings or anything like that. And that's one of the benefits of Early Contractor Involvement.

MR. CONNOR: Hey Jose, if I could?

MR. LOPEZ: Yes, sir.

MR. CONNOR: Secretary Connor, just to hear it, specific to your question, correct me if this is incorrect. But once that bid window closes after that 60 day period, that will potentially be a period where then the government certified cost estimate will become -- we'll be out of the period where it is unwise to release it?

MR. LOPEZ: Yeah, yeah. Right, yes, you're correct, sir. And at that point in time, we would be more comfortable, right, with having our number be more public because we've already closed the competitive window, right? And we're going to be unduly influencing possible contractors. I will note that we've had really, really good engagement from the construction industry. One of the top things we have heard is this is the way, Early Contractor Involvement for these types of projects is the way. We ask them very, very broad questions about, you know, what do you believe is the best acquisition method to deliver these projects, and they've had Early Contractor Involvement as Number One. And folks that are outside of the

Corps that don't know Early Contractor Involvement it has other names out there in industry. Construction manager at risk, general construction manager, general contractor, and it's used pretty widely in the state, sort of local level. DOTs (departments of transportation) use it, actually GSA (General Services Administration) uses it a lot for their facilities. So, it's not necessarily new, but ECI, Early Contractor Involvement in this sort of form of integrated construction or integrated design and construction is new to the Corps. In fact, this would be is the first Civil Works contract of this type. Sir?

MR. CONNOR: New and different.

MG GRAHAM: Maybe not here. We do this on the Military Construction side pretty regularly, a few billion dollars-worth of work at Fort Meade in Maryland for NSA (National Security Agency) is being delivered in this fashion, and they're a very demanding customer and it's being delivered very well. So, we are trying to be innovative here and it just kind of makes sense, get the designers in, get the person who's going to build it, get their input into the design. The risk here is that if that person doesn't win the construction part of this, and I think that's a risk we're willing to take.

MR. LOPEZ: Yeah, sir, there is a risk, right, because the way the contract is structured is a base for them to provide us advice and an option for construction. So, you know it's in the name, option, it just means optional item, so it's not guaranteed. You know we have talked a lot through or across the enterprise. We've talked to Baltimore District extensively about their processes and how they've handled it on the MILCON Program side. And we understand that risk exists. We believe it is a low risk. At the end of the day when you spend a year, two years with a construction contractor, getting their input, collaborating with industry as far as, you know, closures with restrictions, limitations during construction, you end up sort of cementing that relationship and incentivizing both parties to come to an agreement and exercise that option. So certainly the risk is there. We believe it is low and worth taking for the benefits that we could extract. So, any further comments or questions, and I can keep going?

So, now to the sort of specifics of the project, I've shown this before but, essentially, we're building a new 1200 foot lock and that's getting bolted to the existing 600 foot lock -- and I always say bolted and my tech lead engineers always, you know, roll their eyes -- but the reason I say that is we are reusing about 600 linear feet of wall to essentially construct this project. As you can see that intermediate wall that kind of juts out from the existing chamber is going to be utilizing that 90 plus year old wall as part of the new 1200 foot chamber. So, certainly a complex and challenging piece from the engineering aspect.

Actually, one of the main reasons that Early Contractor Involvement is also a tool for us that had a lot of value, our structural engineers and the INDC, they can tell you all about the best of the loads and how the concrete's got to be and the rebar and all that, but to build each of those monoliths down there with floating plant -- platforms, cranes, we're in your guys way. And that's critical for you guys and for us, right? Because we don't want to punish you, for lack of a better term, while we're constructing the lock to give you a 1200 foot lock and sort of you know incapacitate that 600 foot for too long, right? Or for something that's not necessary, and give you that short -- we don't want to give you that short term pain, right? And so, having the contract involved with us to better facility how we sequence the construction of the monoliths, right? And having them at the table with us and you guys at the RIAC level and above is going to be critical for us to be able to put together a plan that is constructible and that actually shares the risk among all three parties. You know if we were building that specific chamber away from the existing navigation channel, right? So, like on the other side of the bank or on the side or whatever, it would be a different story, right? Kind of a green site, we don't really have to mess with the existing traffic necessarily. And so that is one of the critical pieces, I want to highlight, I know there's a lot of TBDs here,

that's within the context of the ECI contract, right? So, the contract has some flexibilities for us to shift depending on how bits coming and funding, so that's why they are TBD. At the end of the day is the goal to award the base contract -- back to Mr. Connor's point -- the base contract some time a year from now, right? After we evaluate all the bids that come in, and that would run us about a year to two -- closer to the two -- side for those preconstruction services, right? Them designing with us, or rather us getting their feedback while we design, being able to engage with industry, and then hopefully exercising that construction option in the Fiscal Year 2026 time frame. When the design is complete, and we can say here's a set of completed plans and specs, let's negotiate the final price, let's move out.

Next slide I'll touch on the traffic lights here, so as John mentioned we have awarded the first contract, right? The first contract for NESP, navigation for the locks was award back in September to about a \$10 million or so dollar contract. It's a lockwall modification. So, the riverward side of the intermediate side of the wall is getting new floating mooring bits, some line hooks, there's some embedded metals work that's going on, some concrete, so that work is ongoing. We actually just recently received the contractor schedule and officially accepted his schedule, you know, I mean from a contractual administration standpoint. So, we may be able to update some of our financials once we have that in place, because we'll be able to cost load it and hopefully have some values there.

Phase Two, which is the design of the rest of the project is on track, we are on schedule. As John mentioned we started off at a 15 percent level back in September. We're going to be complete with the 35 percent, essentially having completed 35 percent design phase roughly in the fall of this year, so. And then I already talked about some of the major contract awards and milestones. This just kind of lays out all we have talked about, these first few bullets with regards to the, you know, the acquisition.

One thing we are doing is we have looked at the project and said, okay, what part is actually really severable and what kind of helps us remove things from the critical path of the overall schedule. So, to build this project we're going to need 20-some odd bulkheads so that when we have the two walls completed, we can set those bulk heads in the water and actually construct the floor and all that. And so, 20 some odd bulkheads, that's a lot of steel and a lot of fabrication, that's long lead time. So, we need to have those, right? And we need to project to have those by the time that we have to un-water. And so, we are peeling that design effort off to the side, proceeding on its own, and doing it as a supply contract. That's on track right now. It's at about 50 percent level design. We're thinking about possibly FY 24 for that award. So that will give us lead time, so we're kind of paying a little bit up front to buy that float in the schedule, to make sure that when we do have to un-water, we have those bulkheads.

And, as was mentioned you know we have constant engagements with the ERDC, the Engineering Research and Development Center, down in Vicksburg. We have had ship simulators where we had pilots from -- some of your guys -- companies come and operate and navigate the simulation with the new lock in place, with construction scenarios to help us sort of initially gauge some of the impacts that we might see during construction.

So, I've said this before, I'll just reiterate. Lock and Dam 25 is interesting. It's in the Midwest. There's typically a lot of room in the Midwest, but Lock and Dam 25 is kind of an island on its own. There's another water body that's right on the other side, called Sandy Slough, those water bodies, with the Mississippi River being the other one, usually always have water, and so the site is pretty isolated. So, we do have staging and access issues that we know the contractors are going to kind of bake into their way of doing business and the way of executing the project. So, we are starting the acquisition process for temporary construction easements that we will need to provide them space for storage, staging, parking,

you know, administrative offices, the concrete batch plant, and all the large real estate needs that are required for the delivery of these.

So, next just a kind of condensed version of the schedule, our P2 schedule is pretty complex and large. It has a lot of activities. It's a pretty robust tool. So, this is us kind of making it a little bit more digestible, you know, as I talked about before. We have an existing construction contract, that lockwall modification. We have the bulkhead design fabrication going on, and then we have the design. And the ones that talk about ECI IDAC, there's those windows of preconstruction services and then construction, so.

MG GRAHAM: Okay, so we'll go to what next October, on the construction contract -- well let me back up a little bit. Marty, you were talking about LaGrange, hey, can we do some things smart in advance so that, you know, we buy the real estate, get some of this work done early. That's pretty much what you're doing there, up until the time you award the major construction contract in 2026.

MR. LOPEZ: Yes, sir.

Yeah, and I didn't mention this, we are currently thinking about -- there's other things that came out of the ship simulator such as some downstream protection cells that are going to be needed to facilitate that access into the new chamber. Those are still in concept form but those would likely thing that is we pull out and sort of -- I don't want to call them accelerate, but we pull them out and take them out of the critical path, right, for the bulk of the construction. Sorry, sir.

MG GRAHAM: No, no, you're good. So, if I'm looking at that construction contract duration blue block sticking up, that's eight and a half years?

MR. LOPEZ: Yeah, if you look at Walla Walla, what my cost engineers generate because the cost engineers are ultimately responsible for the projection, that's 8.35 years, sir.

MG GRAHAM: Okay, so Walla Walla grades your paper, you write your paper, right?

MR. LOPEZ: That's right.

MG GRAHAM: So, 8.35 years. Okay, so cost here, understand we're getting -- we're shouldering up against procurement sensitive, but I'll do some Marty math here. All right. So, Colonel Sahl, how much is Kentucky (Lock Addition) right now?

LTC JOSEPH SAHL: Cost, sir?

MG GRAHAM: Yeah, cost.

LTC SAHL: \$1.5 (billion).

MG GRAHAM: Okay, that's a 1200 foot chamber, \$1.5 billion. Now it was inefficiently funded, but I'm just going to throw that number out there. I have no idea what your cost estimate is going to come back in for a 1200 foot chamber, but I would hope another the top end it is \$1.5 billion, okay? So just want to get the Board's thoughts. So, \$1.2 billion, \$1.5 billion might be the range for this, again, I'm doing Marty math. And five and a half years -- or eight and a half years. Thoughts from the Board?

MR. HETTEL: We thought it would be done faster, honestly, from the first time that we were at Lock 25, and we heard the presentation with the Secretary, I was, we were thinking six.

MG GRAHAM: Okay. And you're basing that on our past performance of 25 years building one of these? (Simultaneous speaking.)

MR. WEBB: From the presentation.

MG GRAHAM: Again, I'm going to go back to Joe Savage's optimism bias. I think where we are, I need the Board's help on stamping that out. We will lay out the engineering for you that justified that, no fairy tale engineering going in that number, no fairy tale engineering going into that schedule.

MR. LOPEZ: Yes, sir. If I may on the specifics, so we have estimates on the quantities, concrete, steel. We have production rates, historical, we can validate those through our methods for cost estimating and we use those to project out how many crews, placement rates, monolith by monolith. And so yeah to your point, you know there's good numbers and science behind that, but it's still our forecast of a construction contractor's forecast, right?

MR. OAKLEY: How do you, on the funding part of it, so you don't have a 30 year project?

MG GRAHAM: His next slide is going to kind of show you some of the funding breakdowns, and there's going to be a lot of to be determined on there, but it's that efficient capability number that we've talked to the Board about really laying out for you what we need to stay on track to deliver to that schedule. So that's what I'm trying to get through to the Board here today is his job is to make sure that blue bar is realistic. Because if it's unrealistic, we can't manage towards it. And once that district commander makes that commitment to deliver to that blue bar, they absolutely better deliver to that blue bar. And the minute one thing falls behind, that PM can't mix and match or trade future things for current features of work, they got to let me know.

Just had that happen out in San Francisco, last Friday night there was a beneficial reuse harbor deepening project that the team got stuck on, and normally they would probably have gotten stuck for about six months trying to solve it themselves. But the commander knew that we were not going to let them fall off the schedule. And so, they talked to the division commander and she immediately called me and then we're worked that with Mr. Connor's office this week to try to break this thing through, of a policy kerfuffle that's tripping us up a little bit.

That's what we got to do to help Jose out to deliver this. But the number one thing is that blue bar has to be feasible.

MR. LOPEZ: Yes, sir. Same as the cost point I made earlier about getting market input right on cost, we in the solicitation will be asking them for draft construction schedules. So, when we get four, five, however many bids they will have their cost and what they think their schedule is. That will be another validation of the construction contract, you know, the construction industry is telling us, this is what we think based on what you laid out, and sort of helping us validate that early. Because that's one of the challenges that we've had, is we never get validation until 95 percent done, right? So again, another of the benefits of this procurement method.

But yes, your points are well taken, sir. Totally tracking.

MG GRAHAM: I'm going back, because 25 words out of this and then we're going to take a little time here of laying this out for you. Back up one slide to your picture, or two to your picture. Okay, so the risks you're baking into the engineering is you're going to reuse the existing 600 foot wall.

MR. LOPEZ: Yeah, that's a good point.

MG GRAHAM: Okay. So that's some engineering risk that we're working hard to burn down right now. When have we ever on a lock -- I'll call it expansion project -- reused a middle wall successfully? Lenna (Hawkins)?

MS. HAWKINS: We have.

MG GRAHAM: Okay, where? At Point Marion, we used it?

MR. HAWKINS: I was going to say Point Marion, right, we went landward on that one.

MG GRAHAM: Okay. Do we have some track records of doing this, all right? We got a big giant hole somewhere out there where that downstream lockwall is.

MR. LOPEZ: That's right.

MG GRAHAM: Okay, so we know that one. So, we saw at Charleroi we did that in the dry for the most part, left the cofferdam out. You don't plan to cofferdam this?

MR. LOPEZ: No, sir, we plan to use all the lessons from the Charleroi on the box method for the majority of this construction.

MG GRAHAM: And then so as we learned in Olmsted, really hard to do in the wet construction and a very volatile part of the Inland Marine Transportation System. So how volatile is the Mississippi Lock and Dam 25?

MR. LOPEZ: Yeah, I mean it's a difficult river to kind of do that work in. And it's different than where Charleroi is, right? So, we are taking the successes from Charleroi on the box methodology, and we actually have consultants that worked on that on our team kind of helping us refine some of those methodologies. At the end of the day though, part of the ECI delivery method is going to help us with that, right? The contractor's going to be able to --

MG GRAHAM: That's how you're mitigating those construction risks on bringing the potential construction contractor on in the design phase.

MR. LOPEZ: Correct, yes, absolutely.

MG GRAHAM: Just wanted to share that with the Board that these are kind of the risks that we're looking at. Now a lot of the risks that Jose's prepared to take are to keep the river open optimally for you all, which is going to be make his job a little bit harder in how he builds it.

MR. LOPEZ: Yeah, and Marty, you know you talked to me a lot about this. And I mean I understand it, right, but we got to find that Goldilocks approach of, you know, with restrictions, closures when it makes sense, because I mean the proximity to the existing nav channel is just -- you can't get around it. Our contractors are going to be right on top of the approach for the barges. So, we have to find that Goldilocks, you know, of what works for you, works for us, works for our contractor. The only way we can do that is if all three of us are at the table. And the only way we can get the contractor to the table is if we involve them early.

MG GRAHAM: So as Jose comes up here every quarter to brief you on the status of this what I will ask him to do is to continue to brief you transparently on those engineering risks, how he's mitigating them, and how much residual risk is sitting out there for Rock Island District.

Matt, you look skeptical, okay, or pensive, or thoughtful.

MR. WOODRUFF: (Indicating) Sir -- oh, sorry Marty.

MR. HETTEL: Correct me if I'm wrong, the only obstruction in the navigation channel is to extend the existing 600 foot wall out, once you get that done, then it'll just normal transit -- (Simultaneous speaking.)

MR. LOPEZ: Yeah, so I mean it's kind of somewhat intuitive, right? But the further we move away from the approach, the less impacts we may have. And so yeah, the river wall construction, which is the far one, the 1200 foot one that we're extending is likely a lower risk from impacting you guys. Which, you know, I'm kind of spit-balling here and kind of getting ahead of myself, but you know I can see a scenario where our construction contractor helps us figure out the sequencing and the methodology for box form construction in the river wall, right? Because that way he can kind of test his means and methods, right? And get his production up to snuff, before we move over to the more complex and challenging wall section. That's just thought of what could happen when we get the contractor involved, could say, hey, you know this is a good idea for us to incorporate in the design, so.

MR. HETTEL: And you're stating that the challenge is extending the existing 600 foot wall.

MR. LOPEZ: Yes.

MR. HETTEL: You may build the river wall first, let him learn that and then go on to the other one.

MR. LOPEZ: Yeah, cut his teeth on that.

And sir, Major General Graham to your point about the hole over there, you had a homework assignment for me at the last meeting -- we got some slides about that, so we can talk more. Yeah, so funding summary, I guess I will call a phone a friend here, Andrew Goodall, if you don't mind hitting this one pretty quick for me.

MR. ANDREW GOODALL: (Inaudible.) (Court reporter clarification.)

MR. GOODALL: Can everybody hear me okay? Sounds good. Okay, so \$732 million received for the project. That's what we are showing on this slide now. The program (NESP) includes Lock 25 of course. The program is where we have our, typically as we hear our 902 limits, it's for the program, it's not for the individual project. So, we'll work that within the program, that's what we're trying to convey on this slide. As we have updated cost information, of course we'll include that in this slide, but as Jose talked the procurement sensitive nature of it, we did not include that at this point in time. So that's the biggest point here is the program versus the project and how the costs are tracked specifically.

MG GRAHAM: And back to Dennis's point, you all are going to have to know when the -- if I'm getting my Marty math, a billion or billion five, something less than that, hopefully. We'll need to know how far that \$732 million is going to get you and when you are going to need that next tranche.

MR. GOODALL: And we do have some ideas of that, sir, we just are trying to be a little bit cautious with the --

MG GRAHAM: I understand. it's 2025 right now, so my expectation is it's not in FY 25.

MR. GOODALL: No, sir.

MG GRAHAM: Okay. And you can do the construction contract award in FY 26 without a continuing contracts clause?

MR. GOODALL: That is a great point, sir, so continuing contracts is something that we are discussing.

MG GRAHAM: They don't, no need for discussion of it, because right now that's not necessarily on the table.

MR. GOODALL: Okay.

MG GRAHAM: So, what I don't want you to do is to plan on that's your only get out of jail free card. (Simultaneous speaking.)

MR. GOODALL: No. Yeah, that is not our only get out of jail free card, yes, understood.

MR. PEUKERT: Jose, why don't you touch on for the General -- as part of the design process, we will try to look at potential separable elements.

MR. LOPEZ: Yeah, so you just teased it out, right? So that's exactly what we would be looking at is, you know, changing scope, phasing, but back to your point on the schedule, and that bar, that's when we get in the trouble of, hey, that 8.35 years now isn't necessarily as viable.

MG GRAHAM: And to the question Marty's about to ask you, you don't want to have a construction firm that builds the outer wall, the river wall, and learns all those lessons and then a different contractor that wins the award for the critical inner wall, right? We don't want to have to get into a situation like that. So, you can kind of see where this is heading, it's either going to be a big dollar lift all at once or we've got to figure out some sort of continuing contracts clause. But right now don't bet on continuing contracts clause.

MR. LOPEZ: Understood. Next slide please.

MG GRAHAM: Doing good, Jose.

MR. LOPEZ: All right, thank you. Okay. So, the issues and challenges, I'm almost done, I promise. Just highlighting a couple of thing, right? Phase One is well under way, you know, the two challenges that I've got at the bottom here -- it's more of the world we live in, the environment we live where the lock is located. Again, we want to minimize impacts and maximize predictability for you guys, we've kind of talked ad nauseam about that right now, so. And then, had a really good discussion and talk from the cost center about market inflation, it's something that we are tracking. It is something that we are considering strongly to incorporate into our current procurement, something called Economic Price Adjustment Cost, to help share in some of that risk so we could bring some of their bids down to reality, right. By giving them that benefit of, hey, if we do go in a crazy other escalation of certain type of commodities we can share in that risk. And that works both ways, right? If it goes down, we get it back and if it goes up, they get more. So, that's getting worked through our contracting chain in Headquarters and it's moving along. Taking some examples from Soo (Locks), they had those incorporated into their contracts, so.

Next, so last time, Major General Graham asked me to kind of try and explain about this hole that we have. And I know this a busy slide, so bear with me. I'd like you all to pay closer attention to the bottom right. So that isometric view of the lock you see, the existing 600 foot there to the left and then the sort of -- was constructed back in the '30s for that eventual 360 foot auxiliary chamber that had been conceptualized back in the day, right?

So, in 2012 when we had that barge accident, essentially a 60 foot scour hole developed just underneath where that river wall is supposed to be constructed. Essentially, our foundation got completely wiped out in the matter of weeks. That point in time, NESP had not been funded, so we're in a situation where we have pieces of concrete from the existing structure falling into the hole, you know, our engineers are

running the numbers, talking about the stability of that wall, and people are getting nervous. And so, what do we do? Issue an emergency contract, dump a bunch of rock into the blue hole to buttress the structure. And so, two things, it stabilizes the wall and then also it prevents continued erosion and scour, right? So that was 2012 in a nutshell.

Fast forward to BIL, we get the money, and now we've got to look at this and we say, Oh my God, we have a Volkswagen sized rock in this hole, and we got to build the foundation of the lock in there. And again, this is a pile-founded structure, because it's mostly alluvial sands before you get to bedrock, so we've got a challenge, right? We did have a lot of engagement with industry, construction industry, what do you think about this, is this doable, is this an existential risk? Their answer to us was, no, not necessarily. There's things that we can do but you're going to pay for it. So, you know again, part of that cost update is the fact that was not a thing, that wasn't a condition when we put that in there in the scope, so.

So, what is one of the methods that we are thinking about, and how to mitigate for this. So, when we do build that river wall, we are conceptualizing that we're going to have to do it surgically. So that rock is there for a reason. It's there to buttress and also to protect from erosion. We cannot just remove it and go back because we would be risking the existing structure. So, we kind of have to go in surgically. I'm demonstrating where that monolith cross section is that we'll likely have to remove segments of rock, you know kind of in piecemeal, so to speak, kind of hopscotch and then install sheetpiles to kind of provide that structure and protection so that when we continue to do that, the scour doesn't progress any further. So that adds a wrinkle, right, to how the construction contractor is going to be able to do the construction sequencing.

But again, back to the ECI paradigm, it's going to be helpful for us to have them in the room, looking at the designers and saying, that's crazy, don't do that, do this. And us being able to be kind of honest with each other and partner in that way. But definitely something that in 2010, when the PED efforts for this was suspended this wasn't a reality, right? We had a foundation, it was, you know, we might have had to do some dressing up, because the river is still dynamic, but that event kind of wiped it out, so.

Sir, Board members, any questions?

MG GRAHAM: Okay. Thank you.

COL CURRY: Thank you, Jose. And sir, Mr. Savage pulled me out of the noodle pit, not the first time he pulled my backside out of a precarious position. But before we really wrap up with a couple of quick slides on LaGrange, I want to make one point. So, a little bit purposeful today in bringing up John, Jose, and Andrew, and then in a minute, Kim Thomas. Really, because I would express to the Board that the confidence that you have in this project and program delivery team rests on their shoulders. I've got a little over a year left. The reality is the Army's already named my replacement, and this is a team that you can place your confidence in for certain. So, without further ado I'll ask Kim Thomas to come up talk a little bit about LaGrange.

MS. KIMBERLY THOMAS: All right. Good afternoon Mr. Connor, General Graham, Vice Chairman, and the Board. I'm going to give a brief update on the LaGrange new 1200 foot lock project. We are moving and shaking on the design. We received just a little over \$69 million in FY 22 and FY 23 to move that along. If we're looking at the schedule, we are getting ready to -- we awarded the 35 percent design with the FY 22 funds and we will be awarding the 100 percent design with the FY 23 funds by September of this year. So, things are really moving along there.

We will be really ready for an initial construction contract in 2024, pending funding for the project. The cost, we are going to start the cost estimates, commiserate with the 35 percent design completion in March of 2024. So, we do not have an update on cost for LaGrange.

Next, as we know this is a little different than what Jose just discussed as the lock will be landward of the 600 foot lock currently, so we will not have the navigation impacts like we will see on Lock and Dam 25. So that will be a little different and somewhat a little bit less complicated with that factor in there. If we move on to the dashboard.

MG GRAHAM: Back up for one second.

MS. THOMAS: You bet, sir.

MG GRAHAM: Do we own all that land?

MS. THOMAS: We do not. So, we talked about long lead items, we've already started -- we've obtained rights of entry on all of that location with the current funding that we have working towards the real estate acquisition. So that is something we have already moved out on, we've already been out there getting geo-tech borings as well. So, we recognize that that was a critical step in the schedule and moved out on that early. Yes, sir.

All right, on the dashboard, so we have the physical modeling going on at ERDC. We've had several folks down there to look at the lock configurations and run with the ship simulation down there. Fiscal Year 2022 as I mentioned, 35 percent design.

I just talked a little bit about the site surveys, the geo-tech, moving out on all of that. This year by September we are on track, thanks to our good folks in the Louisville District for being able to borrow some capacity on a Navy contract, we are going to be able to award 100 percent design for LaGrange by September. So that will complete all the design features required for the project.

Acquisition strategy development, we will have a contractor industry day in the July time frame and start to get that input from industry there. Again, because this project is landward, we're able to go into more some separable elements as we move forward with construction there. We're as -- I hate to commit to this, at this point -- but as we're planning now, we are thinking about eight years. Three years for design, five years for construction on this project. And, obviously, we need to verify that as we move forward a little further in the design. But that is our current estimate.

All right. Quick update, but any questions? Yeah Marty?

MR. HETTEL: Yeah, Marty here. Would you go back to the picture please of the lay out. I had one of our captains ask us why the lockwall on the upstream side is the landward side and not the riverward side?

MS. THOMAS: I'm going to phone a friend. Mr. Goodall?

MR. HETTEL: I guess you'll figure that out.

MS. THOMAS: Yeah, absolutely.

Marty. I'll answer that question right now. Is that we're working on the optimal configuration. This image does not show how far upstream and downstream those channels extend, so that can be modified as necessary to ensure the optimum approaches for your folks as they approach the lock upstream and downstream. We're in the physical model side of things, the physical model is just got the final

configuration of what you see here in it. That, of course, will go through the physical testing but also the ship simulation over the next few months here and you all will be involved in as well.

MR. HETTEL: And will you do the simulation with the lockwall on the river side versus landward side?

MS. THOMAS: It can be adjusted if necessary, so if that's necessary --

MR. HETTEL: I think our profession would like to see that.

MR. THOMAS: We absolutely can run that option. Yes, sir.

MR. RICH: Rob Rich. Just a question about the property acquisition, and this may be a little down in the weeds, is that public property that you'd be looking to acquire or is that private property or is it a mix?

MS. THOMAS: It's private property.

MR. RICH: It's private, okay. Thank you.

MG GRAHAM: Can you go back up one? Okay. So, we're going to use this to tease out something we talked about last night. So, you got \$70 million of Congressionally directed spending, is that part of the Capital Investment Strategy timeline?

Okay, so the Capital Investment Strategy is not a budgeting document, but it is a good document that portrays the sense of the Board. And so just be interested in some of the Board's thoughts on Congressional spending is our future – how do we deal with that future, successfully? And we don't get back to starting a whole bunch of stuff that we don't fund efficiently?

MR. CONNOR: Well, General I think your point on the Capital Investment Strategy (CIS) is critical in that I guess as we think about how we advocate tying in priorities to the priorities through the CIS. And I think one of the chicken and the egg issues here that we continue to stumble with a little bit is, as you go through this comprehensive process – starting in March of 2024, I don't know how long that takes to complete, but right now we're all flying blind on what you think this number may be. And we're, you know, we got to work through an annual update to the CIS and we're going to be well into the five year update as we start the next year. We're going to be flying blind on a priority project that's already in the CIS. So that puts us in a position where, if there's not some way to accelerate at least some ranges on estimates, it's really hard for us to sit here and say as a Board, here is how we would rack and sack, here's how we would direct, here's how we would make sure we are aligned with the mission of finishing what we're starting. And I think it also gets into this conversation around knowing we're going to have overages, we probably have to be more agile and creative than we've been, in how we look at the pool of capital in aggregate and think about where is there dead money in the timeline that could be reapplied in the projects, you know? So, I know that gets complicated in terms of the way the funding mechanics work and the improvements work, but if we're not looking at cumulative funding and cumulative need, we're going to end up with exactly this issue of having dollars on the wrong projects at the wrong time. Longer answer than you probably wanted.

MG GRAHAM: No, appreciate that. So, 1200 foot chamber in a somewhat big river, so a billion-two to a billion-five, that's our track record, okay? Okay, you ready for one more?

MS. THOMAS: Yes, sir.

MG GRAHAM: And so, this is the transparency piece. So, we just heard Mr. Lopez gave a really good pitch for the wisdom of using – I got to get the terms straight, make sure I use it – Integrated Design and

Construction. And you're not using Integrated Design and Construction, is that because Colonel Curry is not innovative? (Laughter.)

That's my current front running bet. (Laughter.)

MR. GOODALL: I am happy to take that, sir. (Simultaneous speaking.)

COL CURRY: I do think I can answer and then ask for back up there. You might be right on the innovative, I'm going to pull out my flip phone – not really. But, no, I mean the realities are, the differences you see in these slides between these two certainly build our confidence that the more traditional pathway will or doesn't address – there's risk that we talked about in Jose's brief that we don't anticipate having to address in the same manner with LaGrange. And that gives us confidence that our traditional pathway is the right way to go in order to take advantage of the things that aren't new and different for LaGrange that will ultimately benefit the schedule and cost.

MS. THOMAS: It also plays into funding, right? And in how the project will be funded. And straight up front dollars or are we going in separable increments as we move forward? I mean those are all pieces that are considered.

MG GRAHAM: Okay. So, this way you can control your destiny better and more readily deal with inefficient funding?

MS. THOMAS: Correct, sir.

MG GRAHAM: Okay. Which, sir, goes back to your point of the better we can war game this out.

MR. CONNOR: Beyond the billion-two, billion-five rough estimate, that gets into the nuances of the capabilities, using the continuing contracts clause or how we're going to build this.

MR. WOODRUFF: This is Matt Woodruff. I think one of the things we've got to recognize is that if these projects that we thought we were funding to completion with the infrastructure bill money are going to cost twice as much as we thought, we're only going to get half as many of them done. And so, you know we created a plan to spend that money, or the government created a plan to spend that money based on the estimates, best information available at the time. We haven't started turning shovels and maybe before we start turning shovels and end up with a bunch of holes in the water we can't finish, we take the new estimates that we believe we have the certain degree of confidence in, and say, taking that money and the cash flow coming into the Inland Waterways Trust Fund, how do we finish the maximum number of projects possible with the resources that are available? I don't think any of us are interested in starting projects that we can't efficiently finish. And that may mean we have to start fewer.

MG GRAHAM: That's certainly in concert with what my boss is thinking as well. Okay, any other hard questions of for Colonel Curry?

MR. OAKLEY: I think that's a good idea.

MG GRAHAM: Thanks again.

LTC SAHL: So, for the record, I'm not Kevin Jasper, although I want to be him when I grow up. So, I'm Colonel Joe Sahl. Assistant Secretary Connor, General Graham, vice chair, and esteemed members of this Board, so I'm up here to introduce Kevin Jasper as our keynote speaker from Nashville District, but I had a few things. And really the primary reason for being here is that Kevin is new in this seat and growing in

the Integrated Project Office. So, I'll start by just quickly showing some appreciation for the recent funding.

As you know with both these projects, especially with Chick Lock, we went through a period of almost no funding until almost shutting that project completely down. And this recent confidence in the funding we're received and what we have currently on hand has enabled us to restructure in the district and apply some bandwidth to these projects to demonstrate the importance that they are to us as a priority.

And so, Kevin Jasper was selected two months ago, a little over, to be our temporary or 120 day Interim IPO Chief, Integrated Project Office Chief. And in that role he will oversee both these projects and he is currently standing up that IPO structure in the district. It's really not so much a cost growth in the district as it is a reshuffling and re-prioritization and some bandwidth at the senior levels. And so we're pleased to have Kevin here in his expertise and he's made quick rounds. Yes, sir?

MG GRAHAM: And let me translate that. Board speak is we knew we had to watch over Chick and Kentucky closer, and so what you just heard Colonel Sahl speak to how he's improving the governance within the Nashville District to watch these two projects closer.

LTC SAHL: Thank you, sir. That sounded better. (Laughter.)

LTC SAHL: So instead of seeing my DPM or myself up here, we're going to have similar to what you have seen Mr. Fritz and others, and that expertise and that singular focus and so I'm excited about that. What you will also hear, and maybe a little difference that we've been working through, is that we are talking about now when we're awarding the final contract, so taking a lot of the lessons we've learned and applying those into how we intend to complete the remaining work. So, he will go through the normal where we are, but as you see our capabilities expressed in both Kentucky and Chick what you're hearing is not how we are going to award separate contracts over the next five to eight years, but how we're going to award a singular contract for Kentucky to complete that work and a singular contract for Chick to complete that work. Whether it is all up front or the base in options, that is the most efficient way to complete those projects. So really what that does, and part of that learning is, we were optimistic in our schedules and cost projections, but until you award that contract you don't know how right or wrong you are. And so, this is the goal to get that award done, to enable you to then be able to focus on those other projects as a priority. And he'll talk through what those are. I'll just highlight on Chick Lock, we've expressed the capability for 2024 and we are currently working on what that would look like in features, but we can give you those draft numbers today as well to show how we would stream that out if we had to do that.

And then finally, I have gained a lot of lessons, I really appreciated being welcomed into the setting over the last two years. And part of this push over those two years has been really heavily focused on how tight we partner. And I am excited about how we talk a lot about the challenges and struggles, but we've had two committed, really, three committed contractors right now that made significant progress in 2022. And some of that will be lost in here because they're behind schedule. But we did see a significant shift in 2022 that will also be highlighted from Kevin.

So, Kevin Jasper if you'd come up and go through the project details, and I have the Chick breakdown that you sent me if that's what you are looking at. And I'm going to stand off to the side in case there's historical questions.

MR. JASPER: Thank you. Secretary, Connor, Major General Graham, Vice Chair Judd, Board members, guests, both online and here today. I'm honored to be here to present two of the most important projects

within the USACE enterprise among the long list of important projects that is USACE is tasked to execute.

First project we'll talk about is the Kentucky Lock Addition project. This project's located in Grand Rivers, Kentucky, located at Mile 22 on the Tennessee River. This is a lock that as a young man I visited during my summer vacations, so born and raised in Kentucky.

Next, Kentucky Lock was authorized in 1996, reauthorized in 2020. It's authorized to construct a chamber of 110 foot wide, 1200 foot long. The project will provide a lock chamber that can accommodate 15 barges compared to the current capacity of nine barges. Our schedule right now is that we will be operational in 2029 through 2030. Project completion is scheduled for 2030 or 2031. I don't believe this is any different than the date that Ms. Hall briefed to you at the previous Board meeting.

Our total project cost estimate, as Colonel Sahl pointed out is \$1.5 billion, our Section 902 limit is \$1.6 billion.

Since 2003 the District has awarded a total of nine contracts. The contracts range in price from \$4 to \$380 million. Eight contracts depicted in green on the slide have been completed. Two contracts associated with the bridge and roadway relocations have been completed, total value of \$148 million, and they were completed in 2006 and 2014. Two contracts for the construction of the cofferdams were completed at a value of \$94 million and completed in 2006 and 2021. We completed an upstream monolith contract for \$110 million in 2017. Miter grate fabrication contract was completely in 2016 at a value of \$6 million. The downstream excavation contract was completed in 2022 at a value of \$54 million, and with the next slide we'll go through the current and future contracts.

So, the current contract that's ongoing is the downstream monolith contract. And we are about 14 percent complete on this contract. The contractor has set up his concrete batch plant. They've completed the test patches for the concrete meeting the design standards. Several mud mats have been completed on the project. And pleased to report that last night, late last night we actually did start our first structural mass pour concrete, that pour is continuing. That start has been a challenge for us, but I believe it gives us the momentum we're looking for going forward on this project.

And future operational contracts, we have four elements we are working through to design right now. We will use private sector and in-house resources to do this design. We have bridge work to be completed. We have an operations building that needs to be designed and completed, approach walls to be completed, along with electrical and mechanical work on the site and some site restoration.

So, we need to bring those elements together in a complete package with a solicitation scheduled to advertise in early FY 25 for a contract award in FY 25. In May, actually later this month, we have a planned visit from the senior contracting official for USACE to the site. At that meeting we'll sit down and talk to her about our contracting strategy. Our current strategy has used a base plus option concept with a firm fixed price going forward.

Next slide, so the project here was started in 2003, as has eloquently pointed out, we've been work on this for 20 years. So, the goal on this project is to be operation in 2029-2030, as I said before, with stretch completion in 2030, 2031. No change from what you've previously heard.

Next, for the Kentucky Lock project all combined we've been authorized \$1.2 billion. In FY 22 it received \$465 million from the Bipartisan Infrastructure Law. This infusion of \$465 million allowed us to award the options that were aligned under the current contract that we're executing and gave the

contractor some confidence that we're fully funded, we're fully vested, and we're a team going forward to complete this contract.

To date the Construction, General account has funded \$373 million of project with the Inland Waterways Trust Fund providing \$301 million. The current Total Project Cost Estimate from 2022 is \$1.6 billion. Our full capability for the project is \$332 million. We provide a break down here using our base and options concept, basically giving the legislator authority or the ability to have a couple of options in funding this project.

The Benefit/Cost Ratio (BCR) for this project is 2.5. The RBRCR (Remaining Benefits/Remaining Costs Ratio) is 4.8.

MG GRAHAM: You need \$332 million more dollars that you don't have right now to finish this?

MR. JASPER: Yes, sir.

MG GRAHAM: Okay. You need that what year?

MR. JASPER: FY 25.

Next slide has our issues and challenges here, basically working through the design process for the operational contract, a lot of the points have already been made in regard to increased costs associated with inflation, labor market concerns, and different things like that are something that we recognize on all of our projects going forward. With the start up with the mass pour on the concrete, just in recent days, it's excellent momentum for us going forward to execute this project.

Nashville District's done an excellent job in building a strong partnership for the project. The firm on this one is someone Nashville District has worked with before. We have a senior leadership team that meets on a regular basis, quarterly basis, and then we have an executive level team at the project level that meets on monthly basis going forward. So, the key here for me is relationships. Throughout my 34 year career with the Corps of Engineers, a key part of my success has been building the relationships and this will be no different for the Kentucky Lock or the Chickamauga Lock project.

Any questions on the Kentucky Lock project?

MR. JUDD: So, Mr. Jasper, as you know I'm the designee (from the Board to the PDT). So just to, I guess, get some things here on the record in terms of the questions I've gotten from the industry, and a lot of these things that you all addressed that are recent industry out there. The first question I guess is around the 902 limit obviously getting pretty close, but the takeaway I heard at the meeting was, at this point, not concerned about bumping into the 902 limit?

MR. JASPER: Correct.

MR. JUDD: The second question is really around, with additional funding or faster funding, could this project be completed faster? And the takeaway I heard from the meeting was, because of the sequential nature of the remaining work that needs to be done, that you all have done a lot of analysis and at this point you really don't see, even with additional funds, the ability to pull the timeline forward.

MR. JASPER: Mr. Judd, I would agree with that. I will tell you that provided with those additional funds and a contract award, a single contract award, we'll do everything we can do to expedite, as fast as possible.

MR. JUDD: And then I guess is, you think about major risks, I guess two things. One, you mentioned the pour that started last night and some of the challenges on Chick. My takeaway is that if you get a successful pour here with what's being completed today, hopefully that that's a really major accomplishment in terms of getting past a risk threshold on, kind of the work streams.

And that it sounded like the two other major risks from the project team were the labor ramp up scheduled to occur this summer, going from 100 people in the pit to 300 people. And then making sure you get the \$332 million in a way that you can make that award efficiently here in 2025 and 2026, is that a fair assessment?

MR. JASPER: That is a fair assessment, appreciate your participation for the navigation industry of the stakeholder roundtable we had, fully informed, appreciate the coordination.

MR. JUDD: From my perspective, some of the key takeaways around the question that the Board would typically weigh in with here. If there's, others, feel free.

MR. JASPER: Sir, you were spot on with that. I think the two things to tie a bow on the next 90 days, that labor ramp up is going to be a real thing. So, even with the length of time to do one mass pour with the crews they have, they're challenged right now. They recognize this and they are fully committed to this, but it is going to be the most significant part of this. The confidence, if we have some, is that as they do ramp up, they've demonstrated the capability to then meet production. And what you'll really be looking at is that Y path and I think our next update to you should really be telling that story.

MR. WEBB: Is there a risk that they can't ramp up due to labor constraints?

LTC SAHL: They, that region is busy. But they bid it at the time with this market is what it currently is, and that's a difference from what we saw elsewhere, and so that's factored into their proposal. But they are wrestling with that right now. It's a very significant wrestle, and a lot of communication with them and with our team.

MR. JASPER: So, we've met with them, they have been successful in ramping up to a point. You know, now they are in production, they feel like they can be successful at ramping up. I think they've identified some resources, but clearly that is a risk going forward that will have to be managed.

MG GRAHAM: Okay. So, this is where we're trying to square the circles. If you look at that picture, there's a lot there, right? But we still got seven years to go and a third of a billion dollars. And we just heard from folks who haven't started yet, I think we might be able to get this done in six. Those don't exactly mesh well, okay? But a lot of this is, like I said, renovating an old house. You're opening up a wall and you're going to learn an awful lot. So, why I share that with the Board is that for 2025 for LaGrange and what we're going to hear on Upper Ohio, we're looking at this with much more skeptical eyes that we have in the past because of this.

Here's where I need the Board's help. Can you go backwards two slides to your funding? One more. That's it. This is, like we talked about on Charleroi, what we can't have. Can you go up to your funding one, the next one with the bar chart, or with the graph, the table, spreadsheet. Yeah, that's it. So, 2017 you know we got \$18 million, I guess \$36 million, how much can you build for \$36 million? I'll give you six monoliths, right? But this was the reality back then. This is the reality that we had at Lower Mon too. This is where we need the Board's help, is to not do this again. And I realize that you also need us to do our part so that we don't force you into this.

MR. JUDD: Yeah, I mean, I don't want to dwell on the past, but I think one of the challenges with this project is I think the IJA money was intended to get us past that threshold, and the \$465 million now needs another \$332 million, and we are where we are. But we agree and we're aligned with trying to make sure we work as a Board to help solve this capability trajectory.

MG GRAHAM: Okay. Before we let Kentucky go, I think will have a motion to the Board is that the next Board meeting that we do that down in Paducah and visit this project.

MR. WOODRUFF: Having been around the Board for more than a decade, we've been talking about this project, you know, what we've been saying is let's finish Olmsted, Kentucky, Lower Mon, and Chick and then never make these mistakes again. So just more reemphasis of what I said earlier is, we have an opportunity to either repeat these mistakes or not make them again, and so hopefully we choose not to repeat them.

MG GRAHAM: Absolutely.

MR. JASPER: Looking forward, sir, to seeing you at Kentucky Lock.

MG GRAHAM: Joe Sahl is going to buy the donuts.

LTC SAHL: Hot dogs.

MR. JASPER: Okay, the next project is the Chickamauga Lock replacement project. It's located in beautiful city of Chattanooga, Tennessee on the Tennessee river, Mile mark – Mile 471. The project provides for the replacement of an existing lock that is almost 100 years old. To say that this project has maintenance challenges is very much an understatement for us.

So, this was project was authorized in 2003 and reauthorized in 2018. The authorization is for construction of a lock chamber 110 foot wide, 600 foot long. The new lock will replace the old lock. The new lock will reduce commercial transit times by 80 percent. Based on the recently certified Total Project Cost Estimate that was done in March of this year, our new operational timeline is 2026 to 2027, with construction being completed in the 2028. The 2023 TPCE, Total Project Cost Estimate, all combined is \$954 million. This is \$237 million more than the 2020 Total Project Cost Estimate.

Next slide is a similar slide to the Kentucky Lock project. Since 2005 the District has awarded nine contracts using funds made available to them over the past 16, 18 plus years. The contracts range in price from \$400,000 to \$257 million. Seven contracts depicted in green on the slide have been completed. The completed contracts include relocation of roads and bridges, similar to Kentucky Lock, completed in 2007. Fabrication of miter gates, valves, approach beams, total contract value of \$31 million, completion in 2013.

Those miter gates, valves, and approach beams are currently being stored at two locations along the river. They'll be moved into the project site and placed under current and future contracts.

And we also completed two contracts associated with the construction of cofferdams totaling \$89 million, completed in 2012 and 2016.

A lock excavation contract was awarded in 2016 and completed in 2019 for a value of \$35 million. The lock excavation contract removed 100,000 cubic yards of rock from this project site.

We'll go to the next slide and talk about the existing contracts and the future contracts. So, we've got two active construction contracts under way at the project site today. The lock chamber contract was awarded

in 2017, the current contract amount is \$257 million. This contract to date has placed over 170,000 cubic yards. The contract required completion date is November of 2023.

Unfortunately, we will not make this contract completion date. The contractor is approximately two years behind schedule. USACE and the contractor are currently going through an Alternative Dispute Resolution (ADR) process in an attempt to reach a mutual agreement to the cause and effect of these delays. The contractor claims COVID impacts, and design changes have impacted their ability to staff the project, execute the project going forward.

Since their delays the contractor has staffed up and has successfully been executing the project. In 2022, they actually were pouring about 7,000 cubic yards a month. In 2023 they've been able to maintain that so the work that's going on today, while we have had some missteps at the start of this project, the contractor has been successful in going forward. They are committed to demobilizing from the site in late 2025.

The lock chamber contract is on the critical path so it's important for us to resolve the dispute with the contractor, continue the working relationship that we have with them to make this project successful going forward and meet our operational and contract completion date.

I'm sorry, go back to the previous slide. The second active contract we have is for the upstream approach wall. This contract was awarded in September 2021 at a value of \$61 million. The required completion date is March of 2024. This contract is about 15 percent complete, preliminary field investigation work and template has been completed. The contractor has mobilized to the site and plans to be fully operational in the May or June timeframe. There is a high probability that the completion date for this contract will slip into late 2024, fortunately, it's not on the critical path for the project.

For the remaining work, we are currently in the process on creating a contract solicitation package using firm, fixed price contracting that we plan to solicit and advertise an award for 2024. The advertisement date for that currently is scheduled for February of 2024. The remaining work is for the construction of the downstream approach walls, commissioning of the new lock, decommissioning of the old lock, and site restoration going forward.

This slide also depicts our metrics, regarding safety, project status, schedule, and financial status. From a safety standpoint the lock chamber contractor has had several near misses that ultimately have required safety stand downs. Those safety stand downs have impacted our production, but we continue to see improvement in their area of safety. Project schedule, based on the fact that we're two years behind schedule, clearly we have a red indicator on that. With the new Total Project Cost Estimate, we have the opportunity to re-baseline ourselves and measure ourselves against that new baseline.

The next slide is the timeline similar to the Kentucky Lock project. As you see with this slide, a lot of it, a lot of work has been completed, and we do see light at the end of the tunnel for this project. Project started in 2005 and, as previously reported, we are projecting construction completion in 2028, 2029. The good news is a lot of green on the slide indicating we completed a lot of work and we can see the finish line going forward.

Next, for the funding summary all combined, \$717 million has been authorized for the project. In FY 20 the project received \$49 million of funds. Through the years the Construction, General account has funded \$406 million, and the Inland Waterways Trust Fund has funded \$259 million. The new Total Project Cost Estimate of \$954 million was issued in March of this year. An additional \$237 million is needed to fully fund this project to this year. Based on the 2018 Total Project Cost Estimate, we were short \$39 million from having the full cost. Based on the new Project Cost Estimate we need the \$237

million to be fully funded to the Total Project Cost Estimate. With our plan to award a single contract in FY 24 our capability is listed \$237 million.

The Benefit/Cost Ratio (BCR) for this project is 1.0, and the RBRCR is 2.5. This is based on the 2018 Total Project Cost Estimate, and we are in the process of revising these numbers going forward.

Next, we've talked about the issues with our contractor, the claim, the Alternate Dispute Resolution process we're working through. Similar to the other projects we've talked about, we see the issues in regards to the economy and staffing delays and things like that. But the good news is the contractor is performing well today. We see successful execution. We've built a strong working relationship with the contractor. We've gotten over the hurdles of the bad relationship from the delays that we've had. And we see production continuing to go forward.

What I will tell you, for these two projects, given the infusion of the BIL funds, the BIL money, and the possibility of additional funds to these projects, there's a lot of excitement in Nashville District surrounding, around these projects. I feel fortunate to be a part of the team that's involved now. I look forward to working with you. It is my goal to be back to this Board and represent these two project when we go to Kentucky Lock in the future here.

So, any questions on Chickamauga Lock? Yes, ma'am?

MS. TAYLOR: You said the new cost estimate was 2018?

MR. JASPER: No, the new cost estimate is 2023. The BCR was based on 2018.

MS. TAYLOR: Okay, thank you for clarifying.

MR. WEBB: So, if the contract resolution goes in the contractor's favor, is there more exposure for the total cost to go up?

MR. JASPER: There is some exposure, but I will tell you there's contingency built into that Total Project Cost Estimate. And it's based on a range, so it all depends on how much we negotiate out of it.

MG GRAHAM: I would assume a lot of that's going to be the time, not necessarily cost.

MR. JASPER: Absolutely.

MR. WEBB: That's my thoughts.

MG GRAHAM: They've taken a look at that, it's a good question to ask. But particularly when we have COVID impacts, probably time is what we'll negotiate with them. And that will help them some on liquidated damages, et cetera, but that's the expectation. Did I get that right, Kevin?

MR. JASPER: Yes, sir. There is that risk, clearly, but as he says, time will be a big part of that, and we'll have to negotiate out and deal with it in our contingency that currently have.

LTC SAHL: I think for clarify, because there's been some misprints on this, that the cost increase that we're demonstrating here is due to factors that we're seeing everywhere else, and the contingency that's baked into those is risks to contract administration to the construction project itself. And we've put a healthy contingency into it due to the break in time and some other factors.

MG GRAHAM: Kevin, well done. Thank you, sir.

MR. JASPER: Thank you.

MG GRAHAM: I double booked Mr. Connor and let this meeting run a little too long. So, sir, would you like to say some words before you've got to bounce for your next meeting?

MR. CONNOR: Mostly since I've talked enough this morning, I just wanted to say thank you to the Board for the very robust good conversation last night and today through this meeting. I am greatly encouraged by the level of dialogue that we're having about all of these issues. I am sobered by the challenges from a funding perspective to get what we need to get, which is completing work, moving onto the next highest priority. And that I get and appreciate your comments, particularly about where we should be allocating resources and where we should be starting with versus completing work at hand. So, it's like every else there are some great progress being made with respect to the funding for them as we received over the last year, how we allocate that in recognition of the reality check that we've had over the last six months in particular. But the reality check that General Graham has got us all focused on today, which I think is the right thing we should be doing is, you know, we got to work through the challenges and demonstrate we can make progress with resources that have been provided, continue to build trust on the folks who ultimately make the final funding decisions about how much money to give us.

So, thanks very much for the great dialogue, I'm sorry I got to run to a meeting and do this one on video. So, I will wrap up here and let you all continue. And I appreciate your time and effort and we'll be in touch. Thank you.

MR. POINTON: As Mr. Connor moves out, we're going to do like a tuck and roll here, and so we're going to flip and do the Southwestern Division projects starting with the GIWW project Brazos River Floodgates and Colorado River Locks and then we'll move to the MKARNS projects.

And then, since we heard from Steve Fritz and the capable Pittsburgh staff yesterday, we'll go ahead and get to those after we cover the SWD projects. So, Orlando, without further ado.

MR. ORLANDO RAMOS-GINES: All right. Thank you, sir, Major General Graham and Mr. Judd and Board members, glad to be here. I couldn't be with you back in December, I was really under the weather. I tried all the fixes out there, honey, lemon, whiskey, they don't work so I have to go to the doctor, get some antibiotics and also some steroids, that was really weird. It was not COVID, it was not flu, it was something else, but really kicked me out.

So, I'm here to brief you all on the Brazos River Floodgates. Couple of good news, and I'm going to explain where we are, we have some official delays or we do have delays, I will explain that. So back in December, as I mentioned I was under the weather. I'm glad you have had opportunity to see our really updated infrastructure there, a lot of happy faces there, I really missed that, really.

MG GRAHAM: I was talking to Marty.

MR. RAMOS-GINES: And I also heard that there were like maybe a near miss in impact to this structure because of the flow current. But all good. Again, sorry that I missed the meeting, Board meeting. Glad to have you there, so you got that firsthand contact experience to see the really outdated facility that we have on site. So, about to replace it with new up to date state of the art construction.

So, this next slide is this project was authorizing in 2019. That's not current estimate – our former cost estimate was around \$414 million. Our current estimate has escalated and it has escalated in every single project. Main cost driver has been still on all the construction materials, as everybody has experienced throughout the nation.

The purpose is definitely improving safety and navigation efficiency. If you recall for the feasibility phase project estimated that there's impact on the navigation industry, about \$10 million plus of impact to the industry. Safety concern is all relative of the commodities that navigate through these structures or crossings. And, you know, the frequency continues that risk is still there. The reason we need this project constructed as soon as possible. There's a break down provided in the slide as it was requested, control houses, sector gates by different components.

If you recall, we have two major components in this project, authorized in 2019. The Brazos River crossing facility and the Colorado River Locks facility, which is going to be replaced with sector gates.

Schedule-wise, we're looking at this schedule here, is looking at when you will be enjoying the new facility, improving the safety and navigation efficiency through the crossings.

So, for Brazos River Floodgates, we're looking at 2025, with the assumption we will be receiving funding in FY 24 for a single contract, single contract for the companies. If we receive less money, we're already in discussion with the team to see what smaller pieces that make sense from the mission standpoint, navigation safety, and efficiency improvement, how can we implement that through time and what would be the cost.

So again, that initial schedule was 2025, you see it was also 2025 for Colorado River Locks facility. The idea at that time when the feasibility report was approved that we were in construction of both sides. The high Benefit/Cost Ratio of five plus, so a high priority project, so that was the thinking at the time. That has changed, definitely. We're looking at Brazos Floodgates to be completed, assuming we receive funding in 2024 by 2028, and then Colorado years after. Any questions so far?

The cost that I'm providing here includes all the costs of construction and the construction, the sign, and older costs.

Just quickly, this represents what was authorized by the feasibility report, on the right, and this is the river crossing, essentially we are doing there is removing the western gate, realigning the channels. And we are removing the eastern gate, constructing a larger opening sector gate. And we are also realigning the channels, we have requirement to mitigate for impacts that those are showing.

On the left side is the Colorado River facility, essentially we're removing the locks and replacing them with sector gates on both sides. That's it in a nutshell, that facility. Any questions?

As I have mentioned a couple of times, I'm going to go quickly over this. This project is in sync with the Administration priorities. We have here a high use waterway. The main commodity that is moved through at this site is petrochemicals and its derivatives, as it was mentioned at the last meeting. There's also some energy commodities transported in through this site. We need to upgrade this infrastructure because it is very, very old, and you have a first experience to see that facility that we have at Brazos River crossing, similarly in Colorado River crossings as well.

So, the idea is that we need to increase the efficiency and minimize, eliminate, the safety issues that we're experiencing in this facility as well as at Colorado River, and minimizing that impact that the industry is having year-to-year, since this is the years after they were constructed. Glad that we continue having this strong partnership. This is what I call, maybe because this is my project.

It is an excellent planning, execution, and engagement with the industry not only during the feasibility phase but through also the design phase. The industry has been great with us to make sure that we're

capturing lessons learned from the industry. We're capturing during ship simulations. We are capturing also those issues that are identified and we make adjustment to the design as needed.

As I mentioned we have a high Benefit/Cost Ratio here, 5.03, that's for Brazos, 1.65 for Colorado. The system, regional Benefit/Cost Ratio is 3.25, still high for this type of priority work. We're a category two project. We're in design. We are just waiting on construction, new start and Construction funds.

This is part of the engagement of the industry has had with us during the design phase. The team has done remarkable work here to ensure that we're looking at the facility report designed for this facility, and we evaluated that conceptual design, modify the design as needed, we improved it. But the team has used two numerical models, 2D and 3D, I'm not going into details on it. And the team most recently finished all the work on the physical model. So, both tools complement each other, one is more based on physics, going to the numeric side and have more opportunities to simulate many scenarios.

So, the physical model of this, when you are really done into that 65 person design that you can physically see the results of your design. And then adjust anything in the design. But I got good news here for you all. Again, our industry partners, Golding, Enterprise, and Kirby have been very, very, very helpful and got to be with them in many meetings during the ship simulation.

Next, this is the physical model. I know in my previous briefing about the numerical models confirming that, yes, we have validated the feasibility plan. There were some modifications into the design that I'm going to talk briefly, but also this was the end of all the technical analysis that they didn't need it to have or conduct to ensure that the plan – what is authorized is the plan that needs to move forward.

So, a couple of our team members, I believe representatives from – I don't recall the other industry that were represented in these physical model, very nice modeling here. It would have been great for me to be there, maybe do some you know remote control of the ship, pass it through the sector gate. But they keep finding, the physical modeling has definitely confirmed what the 2-D and 3-D model, numerical model confirmed, that the authorized plan with a minor modification that we have to do in the design to address concerns seen due to the ship simulations is the plan then is to move forward. That means definitely there is no need for a sector gate on the western side of the river crossing. The eastern gate, yes, definitely is needed. By having an open channel on the west, and more a wider sector gates on the east, that provides safety and the navigation efficiency that you all are looking on this facility.

Next slide. So, we're not in construction. In terms of safety, we are good, we're green. Project status summary, we're amber and I'm going to explain why. So, the team was being pushed heavily, what happened was that we did receive a lot of comments during the 95 percent design phase. Normally you receive a lot of comments during the 65 percent design phase and less comments during in the 95 percent design phase. So, we have to definitely address those technical issues that were identified in the design. Nothing related to the western gate or the channel realignment, mostly related to the buildings' design. Sector gate, channel realignment, mitigations area, not major concern, many concern about the buildings, administration, the warehouse, boathouse, wheelhouse, and others.

In terms of financial status, I put it as red, because, yes, we have had a lot of modeling to be done, answered many questions. We have to finish that physical model testing. We have to address so many more comments are expected during the 95 percent design, and we didn't receive the funding we were expecting this year to finish that, to advertise and award a construction contract. So, you know we would have been completed the design already if we would have received money for construction, because the idea is you got a lot of comments, but everybody can regroup together, supervisors align, get it done.

Because we need to advertise that contract and award the contract by September. But because we didn't receive the funding, we told the team, okay relax, we need to be sure of the quality of this design. And we have relaxed the schedule, but it's going to be done this year. So, anticipation is that in FY 24 we will be receiving the funding for this crossing, Brazos River crossing facility.

And any comments? No? I see none. Okay.

So next, this is our current schedule, I got a typo there, many times I see this slide, but I just realized it today. The schedule side, completely signed, they should be May, not March, as indicated there. The design is going to be completed by July, after that we can advertise any time. If we are making the solicitation for the full package, if we have to modify that package then we have to go through repackaging, review of the new package, and then move to solicitation. So, Brazos River crossing right now, finalize the design by July. After that has, again, we'll be able to solicit the contract.

Next slide is just showing our funding estimate, same information as it was provided before. Maybe looking a little bit closer to the left side, that indicates essentially we would have, further down the road, a potential total exceeding that everybody will avoid. We don't want to exceed that number, but there's no issues with implementing the construction for the Brazos River Floodgates. We do know now that we need to plan for and get in the new cost estimate proof so that we move to construction on the Colorado River facility, design and then construction. Any questions there?

On top of project issues and challenges, we didn't receive the construction funds. We should expect it that this one year, we're hopeful definitely that we can get that money next year, after that, the full package if not, we are in discussion already with the team. Our current thinking is there may be some four contracts, maybe two, if we take advantage of some options included in the contract and then be able to construct that facility incrementally through multiple contracts instead of a single contract.

And then, the last is the impact to the industry will really continue until we build this new facility and provide the safety, and then an obviously an efficiency that you all need at this crossing.

So, depending on if there are any questions that concludes my presentation. Yes, sir?

MR. WOODRUFF: I'm the Board representative to this project so there's a few things I think were covered but I just want to re-emphasize. Number One, a five to one BCR for the Brazos River. Starting out this BCR is higher than the Remaining Benefit to Remaining Cost Ratios on a number of other projects, and it could be done in three years, just like our grandparents used to do a lot of projects. So come to Texas if you want to get it done quickly. But I think more importantly we recognize that we're in a constrained environment and that we're not going to be able to get everything done that we need to get done. And so, I think it's important that the team has looked at this and tried to figure out, how do we provide benefits. You know, most of these projects you don't get any of the benefits until you finish them. This project is a little different, because the Brazos is actually two projects, it's the east side and the west side. The west side is a demolition project, not a construction project. There's a little channel realignment and what have you that needs to be done. But have you given any thought to what it would do to do the west side and open that up?

MR. RAMOS-GINES: Yes, I asked the team to give me some numbers, because I was anticipating that question. It's still a work in progress, but I can give you a range at this time, don't want to give you a specific number. But we're maybe looking at something, somewhere between \$75 to \$100 million, as all depends on how many components we include in that first contract. Right now, the thing is that we include the demolition for the western side gate and the facility up there, the channel realignment, and the

mitigations area. And maybe we want to include also, because I heard through off-line discussion here, others say the usual time of the fabrication of sector gates, because of steel, maybe we want to include that material, that piece into that contract, so that we can gain that ground when we want to do the second contract. So, between \$70 to \$100 million.

MR. WOODRUFF: The nice thing about that is for westbound traffic it solves the problem. If you're going westbound, if you get rid of the west side sector gate and open that up, somebody going west can go through the existing sector gate and then have the finished product on the other side, so they're not standing it. So, we'll get rid of the damage, we get rid of the delays, the repair costs, and what have you for all the westbound traffic. East bound traffic will have to trip and deal with the sector gate and the narrow opening coming in, but that's an opportunity. Probably in my years, sitting in this Users Board, the lowest cost opportunity to provide a significant benefit that I've seen. And so, you know, as we're slicing and dicing and looking where we need to put dollars to finish the project, we've already started to build the other priority projects, if we find a tranche of money in there, here's a place that could slide in and provide a benefit, get something finished and provide a benefit right away.

MG GRAHAM: (Indicating.)

MR. RAMOS-GINES: Thank you, any other comments? (No response.)

MR. POINTON: Thank you. We're going to take a quick five minute break. The court reporter needs to take a break for some water from her activities. We will take a quick one. And we'll be ready to start right back up in at 2:05.

(Whereupon a break was taken at 2:00.)

MR. CRAIG PIERCE: I'm being told I need to go ahead and get started. So, my name is Craig Pierce, I am the DPM for Program Management, Little Rock District.

So again, I'm the DPM from the Little Rock District and I'm pleased to be here to talk to you about the McClellan-Kerr Arkansas River Navigation System, the couple of projects that are on the slate for discussion today. Major General Graham and Vice Chairman Judd and Board members and the federal observers, again, I'm happy to be with you again. I've briefing the last few times these couple of projects. Glad to be with you again to give you another update. Before we move off of this slide, Three Rivers will be the first project that I talk to you about. This one is the little unique, so I wanted to digress a minute and make sure you understood what this project is about.

So, looking at that top right graphic, the location of this project, if you can see it is where the little arrow on the right side of the State of Arkansas in the upper little graphic within there, where it says, "Arkansas-White project area." So, it's right at the end of the system where the Arkansas River, the White River, and the Mississippi River come together. That's obviously the Three Rivers, and the reason when he we call it Three Rivers. The MKARNS travels mostly through the Arkansas River, but right at the end of the system there is a canal, the Arkansas post canal that carries the channel to the White River and it ends at the end of the White River, discharging into the Mississippi River.

The issue that we're having here is the overland flow that happens typically from the White River down to the Arkansas River, and that happens typically when the Mississippi River is up. The flood water kind of comes down the Mississippi River, the high water comes down the Mississippi River. The elevation of the White River, which is on top, rises, the Arkansas River entrance is well down the Mississippi River. So, it takes a while for that water to come and back up into the Arkansas, and so you have this head differential

between the White and the Arkansas that's creating high velocities and causing head cutting and it's threatening the navigation system. So, if it head cuts all the way through then you have a shortcut, basically and lose your navigation pool from the White River to the Arkansas River. So, the purpose of this project is to keep that from happening.

That lower graphic there is our Phase One project and it's a weir that, essentially we're locating that weir where the historic flow from the Arkansas – from the White to the Arkansas would happen. We're doing that at an elevation that controls just how much can go across there. And then the Second Phase is a containment structure that holds the pool back until that Arkansas River can rise.

Okay, next Three Rivers project was authorized by the America's Water Infrastructure Act of 2018, the authorized cost at the time was \$184 million. As of FY 22 the escalated cost version of that is \$232 million, the FY 23 number is now \$242.6 million.

From a schedule standpoint we have awarded the Phase One contract for that weir that I was just showing you. That's a design-build contract. We awarded it in July of 2022. Unfortunately, and I mentioned this last time, we had a protest on that. That protest was not resolved until early January of this year and there's cost some implications associated with that protest that I'll cover in a moment. We do have a cost issue overall in this project, which I'll talk about. And as a result, we're working on a Post Authorization Change Report (PACR), which we're scheduled to complete in March of 2024. Phase Two is delayed because we do not have enough funding nor authority on the project to proceed with Phase Two at this time. Our December 2022 certified cost fully funded \$355.6 million, you can see that that's well above our authorization and our Section 902 limit.

And these are just the different features of the project. That bottom middle graphic, that's a historic closure structure elevation 145, that's the weir. Phase Two consists of everything else on there, primarily is that C157 containment structure, represented by the light blue line on that chart.

Okay, so this schedule is essentially red, and that's because we're on hold on the Phase Two contract. Phase One contract is proceeding on schedule at this time. I've already mentioned that we had the protest. That protest is significant because we lost a whole construction period. From July through December the contractor couldn't get out there and do work, so that was a hit to the Phase One schedule. And they lost a whole dry season and there's some cost implications there as well. The protest, the contractor had crews and plans to get in there and do that work, and because they lost that season, they have informed us that they're probably going to submit a claim, a request for equitable adjustment based on some losses that they experienced during that time. So that's a potential increase in the cost. And that was factored into our most recent certified cost estimate. There's some contingency built into that to deal with that potential request for equitable adjustment. The big cost issue though was that, just the value of the Phase One contract was about 35 percent more than what we had anticipated it to be in terms of the December 2021 certified cost estimate.

Factors were certainly just the overall market conditions. There's also an interesting factor, just because of the remote area here and the need to bring in crews. All the contractors that bid on this proposed a cofferdam. That wasn't something that we necessarily required in this design- build RFP, but they did that so they could keep their work crews out there, keep the area dry, keep their work crews out there. That was part of the cost increase, but that was across all of the bidders, they decided to do that same thing.

So again, our updated certified cost estimate from December 22nd is \$35 million, our 902 limit is a \$279 million. That's an FY 22 number, but still from a scale standpoint we're over that and so we are working on the Post Authorization Change Report.

Okay, this slide is our schedule. So right now, we are, again, the Phase One contract is going on. We are working on the Phase Two design. It's pretty much really ready to go, we just are on hold with that until we get resolution on the authority and the funding. And the red bar is just representing also that funding delay. Just from a normal sequence standpoint, the most likely scenario would be the earliest scenario, might be FY 25 before we receive funding and the authority to move forward. We're expecting Phase Two to take about four and a half years once we do get the funding and can start moving forward.

So, we did think that we had completion funding when we received the FY 22 \$109 million, but obviously that is not the case, using the end of FY 22 numbers our shortfall was about \$91 million, anticipating that forward and escalating that into an FY 25 start the most likely scenario for receiving funding that bill would be about \$115 million at that time.

MR. RASE: Mr. Pierce?

MR. PIERCE: Yes.

MR. RASE: Lance Rase. If you were to be able to get that money sooner, your \$90 million now, upwards of \$120, \$130, \$140 million, if you were to get that soon, you could start Phase Two?

MR. PIERCE: Right, we could be ready to start Phase Two this FY, if we had the money at this point. We were preparing for that.

MR. RASE: I heard earlier, I think Secretary Connor said there's about to be more of the IJA funding become available and was looking for input. As you can tell, as we're going through these projects, we're all asking, if you were to get funding sooner could you start? And some of the answers have been yes and some have been no, so I just wanted to point that out.

MR. PIERCE: Okay.

Next, I really talked about this first bullet enough, and also had mentioned the contract award delay in just the last point there, just annotating that challenging site conditions. It is a remote area. This area is prone to flooding. There's also a lot of cultural resources in this area, a Trail of Tears location goes right through this so part of our contract requires archaeologists on site monitoring, you know, all of the earth disruption we do for this project. No particular concerns with that at this point, we've got a good plan ahead on that.

Any other questions on Three Rivers before I move into 12 foot channel?

MR. JUDD: I think it's just a technical question on the minutes. It was our understanding that the projects that received the IJA money wouldn't necessarily have to go through that process. Is that a misunderstanding on our end or is there?

MR. PIERCE: Not necessarily, I think there's, you know, we're still working exactly on how to implement that on our side. But we still have to go through the process of preparing the PACR, and that's going to take a minute to get through that process.

MR. JUDD: Okay.

MG GRAHAM: So, we got that authority, and we work up the drafts, and the way that authority in 2022 was written is the implementation guidance, to put that authority to work rests with Mr. Connor, so we're working out how to implement that. We hope to turn that pretty quick.

MR. PIERCE: That does get back to Mr. Rase's question. I mean until we get through that notification process, even if we did get money this year, we can't use it until we get that.

MG GRAHAM: When the intent of Congress is not to pause, we still have to ultimately get the new authorization up to them. But their intent was not to pause, because inflation is something you couldn't consider before. We weren't anticipating it. So that's what we were telling Craig and his team, which is we're going to try to not have to pause anything, where we would normally go through the 902 process. That's what we hope to work out with Mr. Connor, keep construction going that we've started, because it's just only going to get more expensive if we pause it now.

MR. JUDD: Right.

MR. PIERCE: By the way, I'm not Jonathan Gillip. Jonathan actually was supposed to be here, he had a family emergency and so I'm filling in on both of these.

Okay, so the 12 foot channel, this project was authorized to deepen to 12 feet from 2004, the language, it's just worth noting, the language did not include a cost limit. In fact, we hadn't finished our feasibility level report until 2005. So, the authorization actually preceded the report in this case. But the purpose of the project is obviously to deepen the channel to 12 feet and do all the work that's required to do that. We are working on it right now. So again, the director's report was finished in 2005.

We really didn't do much of anything from that point until we received BIL money in FY 22, so our team has been working to kind of re-learn and get back into this project. First thing we're going to have to do, even though there's not a 902 limit, there's not an authorization, is we're doing a PACR, a Post Authorization Change Report using that format essentially to document our baseline on this project, get us our starting point so we can all understand what the costs will be on this project. We're scheduled to complete that in April of 2024. There's several things that need to happen before we can get through that process. You know, the best we can do right now just from a scheduling standpoint, we've got a lot of work to do before we can really schedule this out. Expecting to do it in phases, but a conservative estimate would put us finishing this project in 2035. I understand that's a long period of time, but this I'll tell you, I have spoken to you about this before, but I'll talk to you about our adaptive design approach that we're using as a way to reduce the cost on this project over time.

MR. HETTEL: Question. When you get done with your updated costs estimate, will that conclude a Benefit/Cost Ratio?

MR. PIERCE: It will.

MR. HETTEL: Okay. Have you looked at the BCR prior?

MR. PIERCE: We really haven't yet. We have a ways to go before we're going to be ready to do that.

MR. HETTEL: And is most of this work be done above Dardanelle Lock?

MR. PIERCE: No. I mean, we've got to work on the channel. We've got some areas in Pool 5, Pool 8 that we know we need to build some structures to the system to be able to self-scour and minimize dredging. In fact, I think we believe we're going to be working in those pools early.

MR. HETTEL: Almost sounds like channel maintenance, but.

MR. PIERCE: Right, and we've talked about that before, I understand that concern. Our approach on this project is to build training structures that will self-scour. That's the construction, everything we're doing is to try to minimize dredging to the extent possible and all of the disposal costs associated with that as well.

I do want to mention, we do think that the price is going to go up significantly from, you know, the escalated version of that report back in 2005. And some of the factors are, just from a pricing standpoint, the dredging unit prices that we're seeing how are on the order of 1,000 percent higher than what were in that original report. The stone costs are on the order of 450 percent higher. So, we know this project cost is going to go up significantly, but it's going to take us a while to work through all of this to get a good cost.

So essentially, we've an amber on the schedule, we don't have a schedule yet to provide, that's to be determined as we go through this process. As we get further along into the design, we'll have a better understanding of schedule and cost.

This executive summary is in the form of a timeline just to kind of get everybody up to speed on where we've been. Again, authorized in 2004, director's report in 2005, we did do some O&M work that we received that was beneficial to both the nine and 12 foot scenario, all that is pretty irrelevant because a lot of flooding damage has happened and we've got a lot of work to do that didn't give us a head start, and then 2022 we got the BIL funding. And then this year we got an earmark for \$10 million, including the 35 percent (the Inland Waterways Trust Fund share).

MR. HETTEL: Back to Lance's question on the Three Rivers, with this project going to increase in cost, admittedly stated not going to get done until 2035, does it make sense to take the Bipartisan Infrastructure Law funding off the 12 foot channel and take it down to Three Rivers where you can build that structure?

MR. PIERCE: That could make sense. That could make sense. You know, that's a thought that probably should be considered. But you know, right now that funding is on the 12 foot channel. And, frankly, we're not asking for additional funding – it's a lot of money. We're not asking for additional money on this until FY 26 because we've got so much design work to do.

MR. HETTEL: All the more reason to possibly take the money, \$92 million out of the BIL, get it down to Three Rivers and gets that project finished. My opinion any way, and that's not Marty math.
(Laughter.)

MG GRAHAM: It's close.

MR. JUDD: This is Damon Judd. I guess for that, General, is you look at this concept of having tracked dollars on projects where we're not going to know what the actual project costs are until mid-next year at best, it sounds like. And we got the ability in the Three Rivers project, if that goes wrong or if we don't get that done in time, we lose navigation. And so, whether it's the \$92 million here or the \$113 million that Lance referenced earlier, you know, I think finding a way to make sure we get Three Rivers is a top priority from my perspective. Dennis, you obviously have a lot of activity over there, if you've got a different view, please weigh in. But you know it seems like we have something here that we can maybe get done.

MR. OAKLEY: If we can take funds off that, get Three Rivers and get it done that would be my preference.

MR. WOODRUFF: If that makes sense to you, it sure makes sense to me, to finish it. And so, it doesn't do us any good to have a 12 foot channel for a non-navigable waterway.

MR. HETTEL: Is that a recommendation of the Board? Do we need to make any formal recommendation?

MR. JUDD: Do we need a motion around that, Mr. Pointon?

MR. POINTON: I don't think so. I think the intent of the Board is recorded here, and I mean you're free to make a motion, but I don't think we require it.

MR. WOODRUFF: It might be good in case there's other views that we flush them out, so I move that we recommend as a Board to the Corps and the Administration that they strongly consider reprogramming the funding for the 12 foot channel to complete the Three Rivers project and thereby protect navigation on the MKARNS.

MR. OAKLEY: Same.

MR. JUDD: Mark, I'm the vice chair so do I call the vote, or do you call the vote?

MR. POINTON: I do. All in favor say aye. I couldn't write as fast as Matt was talking, that's all. (Chorus of ayes.)

MR. POINTON: Any nays? (No audible response.)

MR. POINTON: Motion is passed.

MR. PIERCE: Next, this is our schedule. There's a lot of activity going on. We're working on the supplemental EA (Environmental Assessment). This is the schedule for that assuming that it doesn't somehow need to go to a higher level EIS (Environmental Impact Statement) type of supplement, but so far, we seem to be on track for this. We're working on programmatic agreements. There are a lot of tribes involved in this and cultural resources, and even Historic National Register items associated with this project. So, we're working this programmatic agreement. Our focus right now is the 30 percent design of the entire project as well as getting started with a Phase One design as soon as we can get in there.

When I say Phase One, we're thinking this is going to take four or five phases, and Phase One would be kind of that initial set of structures, dredge disposal facilities, and that kind of thing that would be required, that we know is going to be required for this system to be able to self-scour.

Okay. Again, we're not showing any required funding until potentially FY 26 on this. We have plenty to get through the design effort that we'll need up until that point.

Okay. So again, we're pursuing an adaptive design method, this is river engineering, right? We build some structures, the purpose of those structures is for the system to self-scour, which it largely does now in the nine foot. We build those structures, we monitor, we see what those structures actually are doing in the river, you know, in comparison to what our models indicated they would do. And if additional structures are required then we will build more. So, we'll kind of work our way through that. The alternative would be, make a whole bunch of assumptions about where all these structures would go, try to build them at once and build a lot more than we ever needed to build perhaps, which is really the way the feasibility study was created, but just on some assumptions of where all these things would go. Our hope is that the total quantities for both rock and dredging are reduced as we move through the process. So that's the idea behind our method here. Again, I mentioned some of the NEPA (National

Environmental Policy Act) factors. And then real estate, there are acquisitions required for dredge disposal facilities more than anything else.

Any questions on 12 foot channel?

MR. HETTEL: I would just like to make a comment here, and don't get me wrong I think that all of us in the industry the deeper we can load our barges the more efficient we are, so I think we're all for loading barges as deep as we can. Now I'm going to just give you an example, in our shop we moved about two million last year, we moved about two million tons into and out of the Arkansas River, the MKARNS. Of that two million tons, 60 percent of it went to and from the nine foot river. So those barges can't go to the 12 foot. So, when you are doing your BCR I would just advise you to look at IWR (USACE Institute for Water Resources) and get the OD (Origin and Destination) points of the tonnage that come into in and out of the Arkansas to see really how much tonnage would be affected by enabling us to load to 12 foot.

MR. WEBB: And also take a look at how often on the river, of those we can't load to 12 feet, because there's – I would see some of that.

MR. HETTEL: My advice to you.

MR. WEBB: Yeah.

MR. PIERCE: Okay.

MR. OAKLEY: If we had a 12 foot channel, we would bring some more in, it would bring more tonnage to the Arkansas.

MR. POINTON: Thanks, Craig. All right. We've got Steve Fritz coming up, and we heard a lot from the Pittsburgh team yesterday on the Upper Ohio and the Lower Mon, Charleroi, also the overall projects so since we have totally blown my agenda, the schedule, I'm going to ask Steve to focus on the high points. And hopefully he's got a bunch of 30 second elevator speeches that he can provide us so that we can expedite us getting out of here. Not to put you on the spot or anything, Steve, because I know you have a wealth of knowledge in your head on these projects, so I appreciate that.

MR. HETTEL: Does that mean I can't ask any questions? (Laughter.)

MR. POINTON: Marty can ask questions.

MR. FRITZ: Well, I want to thank you again for being able to talk about the Pittsburgh District projects that really benefit our nation. And General Graham, vice chair Judd, federal observers, and all the other guests here I want to thank you for coming. So, I'll first talk about the Monongahela River, you heard a lot about that yesterday. And I think you've pretty much got the scope from that yesterday. I won't go over this slide to kind of get everybody back on track a little bit. So, we can go to the next slide here.

So, on this slide the thing that stands out is the red in the safety. So, we were reporting, as the last couple of times that we did our Users Board presentations and even at our IPRs for the Mega projects, we were reporting green for our safety. We had a recent audit and we determined, we found out we were capturing some of our accidents incorrectly. Most of these accidents, all of the accidents that are shown here are considered slips, trips, falls, bumps, nothing very significant, but we take safety seriously. We have additional safety stand downs right now. Our contractor out there has appointed a specific foreman just to do house cleaning. That's what was causing a lot of these things. So, the contractors are back on track, our folks and their folks are walking the site every other week to make sure they're not missing any things

that are unsafe. So, they're addressing that head on and there's been positive results of that. If there's no questions on safety, I'll move on to some other stuff. Yes there, Marty?

MR. HETTEL: Not safety but on this slide, you say operational data is December 2024?

MR. FRITZ: That's correct.

MR. HETTEL: I thought I heard yesterday that you were going to do 60 days of locking at Charleroi with industry, and if everything was fine that was going to happen at the end of this year, then you would remove the fixed crest dam, so is that correct on operational in 2024?

MR. FRITZ: It's correct on there. So, the fixed crest dam is not going to be removed until, start removal until July of 2024. Once that starts it's going to take until December of 2024 to get the fixed crest dam out of the navigation channel at Lock and Dam No. 3. When that is out of the navigation channel at Lock and Dam No. 3, that's when the project becomes operational from a standpoint of the being able to achieve benefits. The lock chamber in Charleroi will be operational in December of this year or January of next year. So, the lock chamber will be operation, and that will include all the testing and everything else, but we're not going to blow up Dam 3 until July of 2024.

MR. HETTEL: (Inaudible.)

MR. FRITZ: I'm sorry?

MR. HETTEL: Why would you wait till July to do that?

MR. FRITZ: We're waiting to July for two reasons; one, environmental conditions from the standpoint of fish spawn. So, there's a window where we can't use, we can't use explosives in the river. That's what we committed to. The second part of that is, you know, January through June, July, is typical high water season. So, there's a very good chance that while we're out there doing that work, we'd have to remove our floating plant to adjust to that high water. But it just so happens that the fish spawn ends about the same time that the high water ends.

MR. HETTEL: Did you say that's a four month process taking that dam out?

MR. FRITZ: It'll go July through December, so it's about six months.

MR. HETTEL: So, I guess we won't be able to transit until the entire dam is removed?

MR. FRITZ: That's correct, but there's a positive there. So once the dam is breached in July of 2024, the pools will equalize probably within a week or two of each other. And during that time frame, the traffic will continue to go through the chamber at Elizabeth the same way it does today. But once the pools are equalized, and I say equalized, there's going to be a little bit of a difference there, maybe a six or an eight inch delta between upper pool and lower pool. So that lockage time through that chamber is going to be much reduced.

MR. HETTEL: But we're not going to be able go through like Charleroi so –

MR. FRITZ: It's You'll still have to break tows.

MR. HETTEL: Thank you.

MR. FRITZ: And can go back to that slide? I wasn't quite finished yet. So, the physical work at Charleroi, as you saw yesterday, it's progressing very well. The filling and emptying culverts are

complete, and they plan on finishing the wall placements this week, the panels on the walls. In May they're going to flood that chamber, they're going to put water in the chamber. They're going to hang the miter gates, and then they're going to dewater the chamber again, so that they can make the secondary concrete placements and adjust the miter gates. So, there's some adjustments that have to be made there in a dewatered state to make those secondary concrete placements. So, February to December of 2023, January of 2024 that chamber will be up and running, fully tested.

Fish reefs, we took out Lock and Dam No. 3, and there was considerable great habitat for fish downstream of Lock and Dam No. 3 because of the aeration of that fixed crest dam. So, we committed as part of our environmental impact statement to construct fish reefs out there, so 73 of those are going to be built. We just had a bid opening on that earlier this week, favorable bids, so that's a very a good sign. So, we'll start building those probably within the next two months I would say the contractor is going to be out there building those things. We have two riverfront parks that have to be relocated that we want to do prior to pool change, just because it's a lot easier to do them prior to the pool change. So, I have that kind of as a risk. I'll just briefly talk about that risk right now. But dealing with smaller communities sometimes is tough, but these two communities we're working with have really picked up their pace. So, we have one proposal from them already, and we expect another proposal by the middle, well it's already the middle of this month, probably within the next week, so we're moving good there. The other relocations are just a handful of those, maybe six or seven of them left out of the total of 70. Those are done after the pools change, so that will be boat ramps and some sewage treatment plant outfalls, maybe a couple other sewer outfalls. No big deal there.

The Benefit to Cost Ratio for the project, last time it was computed was 1.4 to one. We've not calculated the Remaining Benefits to Costs Ratio, but somebody pointed out, I think it was you Mr. Woodruff, that, you know, a lot of these projects don't start achieving benefits until they're completed. So, we have roughly, I don't know, \$50 to \$100 million of work left to do and we're still going to get those \$200 million of benefits at the end of this, so the Remaining Benefits to the Remaining Costs is pretty high, so it behooves us to finish the project. I think that's, well, I'll get into the financial stuff in a little bit more detail on slide 5. Can you go to the next slide please?

So, the key activities in the past two years, or the past year, we've completed two major features of work. We've completed the dredging of Pool 3 and we've completed the stilling basin out there at Charleroi, you heard me talk about that yesterday. That stilling basin was a DSAC Two, which is a Dam Safety Action Classification No. Two, which means it was in pretty rough shape and we had to do something with it. It just so happened that our authorized project had that in its scope. Provided on this slide are some timeframes for completing the ongoing efforts, remaining Charleroi contract. The flooding to hang the miter gates, I have that shown on here as April, that's actually going to happen in May. They had a little bit of a setback, so that's going to happen in May right now. And then we have two moderate size contracts, they're going to be awarded this year. One we just opened bids on Tuesday, that was the fish reefs. And the other big one is removal of Lock and Dam No 3. So, we plan to award that contract this year, in July of this year. That gives the contractor plenty of time to get their ducks in a row. So come next July, Marty, you can come out and push that plunger. And I'm not telling you can really do that, I was joking. (Laughter.)

MR. FRITZ: Go to the next slide please. Okay. Related funding. Marty, you're favorite slide. As I said yesterday, the 2014 baseline estimate was \$1.2 billion to get to the 90 percent benefits project. We've received \$1.1 billion, and those are round numbers. We are still \$100 million below that estimate. I do expect that we may need a little bit more money above what we've already received, but below that

baseline estimate. So, in 2024, we're estimating that could be \$41 million, and the project is going to be re-certified again as far as cost is concerned. So, the numbers that I'm giving you, I'm not banking on any of those today until we get this cost re-certified. But still, I plan on coming in below that 2014 estimate.

MR. HETTEL: So, a question for you, Steve, you say in your previous slide completion of May of 2026. So, we're three years away from closing out this project?

MR. FRITZ: That's right. Well, even a little bit further than that I guess, I didn't include in there monitoring for mitigation for environmental considerations. But physically complete where we're done with the stuff. After that dam is removed at Lock and Dam No. 3, they still got to take out the river wall, they still got to take out the middle wall. And that work continues even though we're getting operational benefits from the project.

MR. HETTEL: So, the \$41 million you're saying you need in 2024, is that for bid process to remove the dam and the lock?

MR. FRITZ: No, we have the money to remove Lock and Dam No. 3, we have that, and it will be informed by the bid from that, whatever the bid comes out from that. But we have to do something with that land chamber at Charleroi. You know, we've referred that to 2050 to stay under the 902 cap, so we're developing courses of action right now, and how we're going to close that chamber so that it's a safe condition. Charleroi is prone to drift and if we don't keep that drift out of that chamber, it'll be a problem not just for the navigation industry but for our own folks.

MR. HETTEL: So, are you telling me the \$41 million is to eliminate, do whatever you got to do with the old chamber at Charleroi to not make it operation again?

MR. FRITZ: That's a portion of it, yes, sir. The other is some labor. We're requesting the money in 2024 because it's likely it's going to be needed in 2025. And I'll tell you, it's odd the way that sounds, but the Charleroi or the Lower Mon project is not able to be budgeted because of its low Benefit/Cost Ratio. If we happen to be in a continuing resolution in FY 2025 that means one of two things, we're not going to get money till March, April, or May 2025, which would eliminate the possibility of trying to award any contracts early to do that land chamber. It also puts us in a bind from the standpoint of, if it happens to be a year-long Continuing Resolution, we don't get any money until 2026, maybe March, April, or May, does that make sense?

MR. HETTEL: Unfortunately, I see, I understand where you're coming from. So, we're under the impression in 2020 the allocation of \$111 million that this thing was funded to completion?

MR. FRITZ: I was too, sir.

MR. HETTEL: I know you were. Now you're saying \$41 million more. With everything we're facing, inflationary cost, is that going to be the last we request before?

MR. FRITZ: I'm not going to commit to that until we get a certified cost estimate, until we flesh out what we're going to do with that Charleroi land chamber.

MR. HETTEL: And what's in the bank account right now of the \$1.24 billion that you've allocated so far? What do you got left to spend?

MR. FRITZ: At the end of this fiscal year, depending on where we award the Lock and Dam No. 3 removal contract, I'm thinking about \$29 to \$30 million that will have unobligated carryover into FY 24. Now we have an opportunity to not fully obligate money to the relocations contracts until maybe 2024

when they put their things out for bid. We don't have to fully fund those up front. We can fund that construction for those. So that would maybe give us another \$10, \$12 million, that we could carry into FY 24. But right now, I'm saying we're about \$29, \$30 million.

MR. HETTEL: We've got so many projects right now we need to efficiently fund projects to completion. And if we can push the \$41 million to 2025 that would help us possibly up the funding on other projects. So just take a look at that for us, will you?

MR. FRITZ: Yeah. I completely understand. The downside or the risk to that I think, Marty, would be that if we push it to 2025, we might not get to do the work until 2026 because of the way the funding comes up.

MR. HETTEL: You can see if get the funding from Montgomery.

MR. FRITZ: That's another issue. That's probably a fiscal violation. So, I'm going to, I won't touch that just yet.

MG GRAHAM: You do it once.

MR. FRITZ: Did that answer your question?

MR. HETTEL: Yeah.

MR. FRITZ: All right. I don't know that I need to show anything else on that particular slide. We can move on. Sorry, back up. And then the issues and challenges. So, I think the biggest things with Locks and Dams Number 2, 3 and 4 is assuring we have the adequate funds to just wrap this up, put a bow on it so we're at the 90 percent project completion and we don't have anything else to worry about associated with it. We've made a lot of headway with these facility relocations, already talked about the risks associated with those so I'm not going to talk about them again.

And then the last thing, and I mentioned it to everybody yesterday is, you know, we did this dredging in advance because we had the money to do it. There's a chance that the channel could silt back in. We've watching that very closely. So, it's been done about a year. We've done some surveys. We got about a one percent siltation rate, very good. Once the pools change, they're saying that's going to be a self-cleaning river. I've heard that talked about a lot already here today, you know. They are trying to engineer a solution. Well, the Mon River itself has engineered itself for us, because it's a very clean river as far as sediment build up.

And that's all I have for Mon 2, 3, 4, unless there's discussions.

MR. HETTEL: Well, we had that discussion about, are we dredging too early, about two years ago.

MR. FRITZ: Yeah. And I did say that, at the same time, if I recall, and I don't know that I'll quote that the Mon River is pretty much self-cleansing and so far it is proving to show that.

MR. HETTEL: All the more reason to blow up part of that dam and let it scour itself out. (Laughter.)

MR. FRITZ: 2024.

MG GRAHAM: It's your guess, Steve.

MR. FRITZ: All right, we can move on to the Upper Ohio. Okay. As far as the overall scope of the project we're re-capitalizing three facilities again in it, Emsworth, Dashields, and Montgomery, a larger

lock in place of the auxiliary lock. So, there's a 56 foot chamber there now, we're going to put a 600 foot long by 110 foot wide chamber, kind of a sister to the one that's there already.

You can go to the next slide and then hit the next one as well. Okay. As far as overall work at Montgomery is on track. To date we've awarded three contracts at Montgomery. We had a secant pile contract, the tree clearing contract, and both of those are physically complete. We're done with those. We awarded, just in February of this year, the site development contract for the batch plant area. Work on that contract will probably start within the next month and is expected to be completed in the fall of 2024. And I think the important thing about that site development contract is that's going to save us probably eight to 10 to 12 months in construction on the lock chamber. And what that means is we're not keeping that lock contractor out there with those high overheads for an extra eight to ten months, so that reduces our cost. So that was a tough haul, because it took us a while to get the real estate for that. So it was, you know, I think at the last Board meeting I was skeptical about whether or not we get that real estate, but we got it and we were able to get it done, so.

At the Montgomery Lock itself, 95 percent designed. That's in the can right now, so we're 95 percent designed, that package will hit the street later this year. I think in the November or December timeframe, and we plan to award a contract in the fall of next year, like September, October, time frame next year.

Regarding the funding, and we talked about this already for Lower Mon, but you know the Bipartisan Infrastructure Law, we considered that to be fully funded at the time. Now that estimate was put together before the inflation went through the roof. And we're reevaluating that right now. So, there's going to be a need there, we're very confident there's going to be a need, and I think I was briefed yesterday that that need might be as high as \$475 million. That's not a number I'm going to quote you today because we're going to go through a cost certification to make sure that's right. But what we're doing to make sure that we have it right is we've employed a third party contractor to do a cost analysis and a biddability analysis, and a constructability analysis on those plans and specs as they are today. We've also engaged the navigation industry, not only an on-site industry day, if you will, we brought them all to the site and there were many contractors there. We solicited on the feedback on the plans and specs from I think maybe it was the 30 percent design, I don't recall exactly, that's not important. But those same contractors right now have those 95 percent plans and specs in their hands, so we're soliciting feedback from them again to try to make sure we have all the stuff right in those plans and specs. The Pittsburgh area is a very good place to build stuff, we have competent contractors in the Pittsburgh region.

MR. HETTEL: Question for you on your estimate, and I know you're going through a new cost estimate, with the \$800 and some odd million from the IJA BIL, Montgomery, when do you have any idea when you think you may need more funding from Montgomery or is it too hard to tell?

MR. FRITZ: A lot will be informed by when we actually get the bid opening for that. You know there's a lot of contingency in the numbers that we have. There's a chance that because, you know, the contracts that we've awarded recently have all come in where we expected to come in or even lower. So, I don't know that, I'm not saying that inflation isn't hitting Pittsburgh the way it's hitting other areas, but what I'd like to say it is not going to be 2025 or 2026. After we award this contract in late 2024, we'll be able to decide when we need that money. And the way we've structured this contract, this is a base contract with I think five or six options. And we talked a little bit about long lead items, that first option to get the hydraulic steel structures in place, because that's a long lead item, so the contract's going to take eight to ten years to get done, so maybe we only need that money three years out. You know that's the thing we'll

look at when we get bids in, how much money do we have in our pocket today? And we can decide at that point where we need to go next with awarding other options and when we need that money.

MR. HETTEL: Technically, could use this \$857 million or whatever the number was for the first four or five years of construction before you need any additional funds?

MR. FRITZ: I won't agree to four, I won't agree to four or five, but we'll be able to use it for a period of time, that's correct.

MR. HETTEL: Thank you.

MR. FRITZ: Let's see, Emsworth funding. So, we received \$77 million in the Bipartisan Infrastructure Law for Emsworth. We're doing modeling right now for that. We're doing real estate acquisition for that we're investigating the real estate acquisition for that. And that will be one of the challenges I want to talk about here in a minute. And I don't know if I need to say anything else about that now. But, well, I do want to say that, after we move out of the Montgomery design, it is going to wrap up here in September of this year, we're going to move that same design team into this design associated with Emsworth. There's a lot of commonality of design right there. So that same design team, if we keep them consistent throughout it, we get a better product.

So, we use that money, that \$77 million for design, real estate, modeling, and then we have an opportunity to award maybe a small contract same way we did with the site development for Montgomery to avoid a long tail on the end of a larger contract.

Oh, I'm sorry, I think I'm on slide four. So, Marty, another slide for you here, this is the overall funding for the project. It shows at the top right hand corner, there are \$3.2 billion, that was the BIL estimate that we put together back in 2021. That BIL estimate, the Bipartisan Infrastructure Law, that estimate assumed that we were going to get money for Emsworth, Dashiels, and Montgomery. And so, a lot of that construction shown there in that estimate would have been concurrent, you know, six years of it would have been concurrent. That's not going to be the case. We only got Montgomery, so the time value of money pushes that up. We'll be doing that cost certification, that's going to take into account stacking those products head to tail if you will, to be consistent with wherever the Capital Investment Strategy is at that time. So that we can get a good idea of what the cost is going to be in the future. We can move on Montgomery slide itself.

So, this slide is just focused on Montgomery the same thing, the \$1.18 billion; that is based on that BIL estimate. That number is going to be revised. It's probably going to go up and that's where that \$475 million that we talked about earlier kind of comes into play. And if you notice the \$857 million that we got, right here, is a lot less than the \$1.18 billion that's up there right now. So even after that stuff was put together, those numbers have changed. As far as the commentary on this particular slide, I've already talked about those items that are there, so I don't think I need to revisit those unless there's questions on them.

Okay, next Montgomery issues and challenges, the largest risk that we have out there with Montgomery and Emsworth and Dashiels is that we don't complete these re-capitalizations before the chamber there fails. We've got to get this stuff done soon. So, time isn't really on our side. The second risk, oh, I think Beth Schneller talked that a little bit yesterday. We're doing some things to those chambers, both at Montgomery and Emsworth and Dashiels that are going to keep that main chamber there operational, so we don't put ourselves in a position where that wall is going to fail, or of those walls are going to fail or any the systems will fail. Best foot forward is what we're trying to do. The second risk on here is the

construction cost inflation. We've talked enough about that, everybody understands what that is. If you don't, I'm willing to take any questions on it. (No response.)

MR. FRITZ: And then the last is real estate. Real estate is a big thing, actually I don't, it's not for Montgomery. We don't have a real estate issue at Montgomery anymore. We have it at Emsworth. And I'll talk about that now because I let the cat out of the bag. Emsworth is located along Neville Island. Neville Island it is a highly industrialized facility or site. We need to acquire real estate there to make the construction a quality construction and an efficient construction. It's hard for the Corps of Engineers, for the federal government, to acquire property that's contaminated. The primary site that we identified during the feasibility study is an Act 2 site under that's been remediated already. So, we're working up through our division office and through our Headquarters office to see if they're even going to allow us to attempt to acquire a site that's already been remediated. So that's still a risk for us, so we're working that a little bit at a time.

To get back to this construction cost inflation for Montgomery, economic price adjustment clause, I think Jose talked about that a little bit earlier today, that reduces the risk for the contractor, maybe lowers the bids, and reduces our risk as well. So, we can award those contracts maybe a little bit sooner or a little bit easier than we thought we could. Resource competition, contractors in the trades, supplies and materials, as I mentioned before we're engaging the construction industry already on Montgomery. We've had very good feedback with them. You can go to the next slide unless there's questions.

For Emsworth that's that \$77 million we received there. Same thing with the estimate up there in the top right hand corner, that's going to be revisited as part of the cost certification. Talked about the preliminary design efforts, the modeling that's already going on there. So, we're moving ahead and if we go to the next slide, this is where I talk about the real estate, it's in the highly industrialized corridor. The picture that's shown there is actually the navigation model being built down at ERDC right now, so they're making progress on that. So even though we're not starting the design specifically, we're already building the models down there to stay ahead of the game. No questions on Emsworth? (No audible response.)

MR. FRITZ: Move to Dashields, there's really not much to report on Dashields. We did receive a little bit of money. The way we parsed it out in the budget is that once we finished the real estate efforts and geotechnical efforts for Emsworth, we're going to dive right into those real estate items and those geotechnical investigations and environmental investigations at Dashields. So that's what that money is sitting there for.

And I think that about concludes my briefing. I know I went through that pretty quickly. Emsworth, Dashields, and Montgomery, they all have similar risks, so I won't address all of those again, but they all have similar risks. Any questions.

MG GRAHAM: Everybody got the questions out of you yesterday, Steve. All right.

MR. FRITZ: And thank you all for coming to Pittsburgh. We're happy to host any time you'd like to come back.

MR. POINTON: We have no requests to make any public comments so move into the closing remarks by General Graham and Vice Chairman Damon Judd.

MG GRAHAM: They've heard enough out of me.

MR. JUDD: They've heard enough out of me as well.

But I guess, before we do that, a long list of do outs, so let me just run through what I had down. Some of these are from yesterday's as well. But the way forward of the Trust Fund and better understanding of the IRS process and what's actual, you know, for any cost estimates that don't have dates, and when can we see cost estimates and capabilities.

This is more housekeeping but worth keeping on the list, Mr. Pointon, we've still got the outstanding issue of the staggered term and making sure we don't all disappear at once.

Similar vein, Bayou Sorrel was not on the list today, but we had a little bit of conversation last night, but the brief on where that sits next time, I think would probably be appropriate.

MG GRAHAM: Well hopefully I can get you briefed sooner.

MR. JUDD: The follow up on the Brazos, Matt's concept of the west gate only.

The MKARNS appropriation.

The annual CIS, and the ability or capabilities in the conversation last night around whether or not it would be helpful to start working on some selective case studies as we roll into the five-year CIS that would start next year.

And then this is more nuanced, Mark, just the \$400 million in capabilities that's been thrown around as we kind of tallied up, we didn't quite get to the same number. So, if we could kind of get a break down and make sure we're all apples-to-apples on what that number is coming from.

And do you have something else? (Indicating no.)

So, I guess in closure, from my perspective, you know our duty as a Board is to work with the partnership of you all to provide advice to Congress and the Administration on, you know, priorities within the funding stream here. We've talked a lot about the information we need to be able to do that efficiently. And I think as we think about where we really sit, I mean we're going to be short money. Right? It's kind of hard not to imagine that that's not the outcome here. I think the onus is going to be on us to make sure that in that environment, we're agile in terms of the way we think maintaining efficient funding. Because we know we want to finish what we started, and we know how detrimental non-efficient funding is to that goal. And likely we're going to have asks of the industry, as it relates to the IJA or the BIL Act, had a federal mission or accomplishing a list of projects, those costs have now gone up significantly. So, I think our ask will be to continue to explore federal funding as we look at working our way through the work list here.

But most importantly, how do we continue to work in partnership with you all? How do we as an industry help you in an environment where funding's precious and timelines are important, avoid the pitfalls of projects that pull us away from the mission. Community funded projects that don't follow the CIS is a great example, to be able to kind of move things forward here.

And then lastly the Board just wanted to take a moment, General Graham, to recognize your contributions. We're sad this is your last meeting with us. We know you'll be splitting time and helping the transition here for a while. But we've seen your commitment to transparency, I think we made a lot of progress. We've been playing catch up since we restarted a year ago, a lot of progress had been made. We've also seen your engagement with us and your engagement with your teams in the field, and your ability to pull out questions and drive discussion and your leadership in that regard, and we're thankful for

that. We do not have a Users Board challenge coin, if we did, we would be awarding you one, but we can give you a round of applause. (Applause.)

MR. JUDD: And thank you again to the Pittsburgh District for hosting and all the work that went into the last couple days.

MG GRAHAM: If I could see if Spencer's still awake on the online portion.

MR. JUDD: I've been getting little notes from him to make sure I cover things. So, Spencer if there's anything I didn't cover, please chime in. He's muted.

MR. MURPHY: Damon, you did a great job, thank you for filling in. If you'd like to have that position full-time, we can negotiate that off-line. We appreciate all you did today, and I appreciated following discussion. It's hard to do online, but I thought that this was a really productive meeting, and a lot of good exchanges were had, so thanks very much.

And, General, I'm sorry I'm not there to shake your hand and thank you in person, but I look forward to seeing you down the road and thank you very for all you've you done.

MG GRAHAM: Okay. Next Board meeting, sometimes we go over that at the end, at the last Board meeting.

MR. POINTON: We know where we're going.

MG GRAHAM: It was not a directive, but I think it would be good to get down to Kentucky (Lock), kind of see where that's at.

MR. POINTON: So that's a do out to get the schedules of the Board members and to see where that's going to work best in the July, August timeline.

MG GRAHAM: Does anybody have a better or different idea? I don't want to be too prescriptive here. We've been bouncing around. I don't think we've been down to Kentucky. I think COVID, right? First part of COVID hit when we first got down there with some folks back in 2020, so it's been a little while since we've been down there.

MR. JUDD: Might have been 2019 or 2018.

MG GRAHAM: Okay. Okay, then we will head to Paducah.

MR. JUDD: Thank you, sir.

MG GRAHAM: Want to close us out.

MR. POINTON: A motion to adjourn? Do we have motion to adjourn, folks?

MR. OAKLEY: Motion to adjourn.

MR. HETTEL: Motion.

MR. POINTON: All in favor. (Chorus of ayes.)

MR. POINTON: Any nays? (No response.)

MR. POINTON: We are adjourned.

(Thereupon, the meeting was concluded at 3:12 p.m.)

Inland Waterways Users Board Meeting No. 99
Pittsburgh, Pennsylvania
April 13, 2023
List of Participants

<u>Last Name</u>	<u>First Name</u>	<u>Affiliation</u>
Aldridge	Joseph W.	USACE, Headquarters
Bowman	Geoff	Van Scoyoc Associates
Bronson	Ms. Candida K.	USACE, South Atlantic Division
Bucci	Ms. Mary Ann	Port of Pittsburgh Commission
Burroughs	Ms. Tiffany S.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Cade	Ms. Beth A.	USACE, Planning Center of Expertise for Inland Nav (PCXIN)
Chambers	Patrick A.	USACE, Mississippi Valley Division
Chromey	Ms. Tretha	U.S. Dept. of Transportation, Maritime Administration (MARAD)
Clouse	Paul D.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Connor	Michael L.	HQDA, Office of Assistant Secretary of Army for Civil Works
Curry	COL Jesse T.	USACE, Rock Island District
Czekanski	COL Adam J.	USACE, Pittsburgh District
Davidson	Dustin H.	Waterways Council, Inc. (WCI)
DeCarlo	Vicent L.	USACE, Pittsburgh District
Dening	Christopher T.	USACE, Pittsburgh District
Dickens	Justin	Crouse Corporation
Drohan	Matt	Freeport Terminals
Estuardo	Beto	Private Citizen
Facchiano	Kathee	Van Scoyoc Associates
Felder	Cherrie	Channel Shipyards (for WCI)
Feldmann	Joshua J. "Josh"	USACE, Pittsburgh District
Frantz	David A.	USACE, HQ Operations & Regulatory Div, Navigation Ops
Fritz	Stephen R.	USACE, Pittsburgh District
Germann	Robert T.	USACE, South Atlantic Division
Gilbert	Ms. Heather	National Oceanic and Atmospheric Administration (NOAA), Office of Coast Survey
Glass	Ms. Pamela M.	WorkBoat
Goodall	Andrew J.	USACE, Rock Island District
Graham	MG William "Butch"	USACE, Headquarters, Civil Works Executive Office
Harshman	Scott	Port of Pittsburgh Commission
Haussener	James M. "Jim"	California Marine Affairs and Navigation Conference (CMANC)
Hawkins	Ms. Lenna C.	USACE, Inland Navigation Design Center (INDC)
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)
Hoey	Ms. Jeanine	Private Citizen
Horgan	Thomas	SCF Marine Inc
Ibrahim	Mohammad F.	USACE, Pittsburgh District
Jackson	Clay	Schimmick Construction
Jacobs	Michael P.	USACE, Walla Walla District
Jasper	Kevin L.	USACE, Nashville District
Jones	Cline	Tennessee River Valley Association
Judd	Damon S.	Marquette Transportation Company
Kelly	Patrick	Nicholas Enterprises, Inc.
Konesm	Joshua	Nicholas Enterprises, Inc.
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
Magary	Brooke E.	USACE, St. Louis District
Marcey	CAPT Daniel L.	USACE, Headquarters, Civil Works Executive Office
McCallister	Dr. Larry D.	USACE, South Atlantic Division
McDonald	Ms. Joyce M.	USACE, Southwestern Division
Melin	COL Nicholas O.	USACE, Pittsburgh District
Morgan	Samuel "Cory"	USACE, Inland Navigation Design Center (INDC)
Muench	Lynn	The American Waterways Operators
Murphy	W. Spencer	Canal Barge Company
Murray	David	The Waterways Journal Weekly
Nowlin	James M.	USACE, Planning Center of Expertise for Inland Nav (PCXIN)
Oakley	Dennis	Bruce Oakley, Inc.
Olson	Patty	Schimmick Construction
Peukert	John N.	USACE, St. Louis District
Phillips	Christopher W.	USACE, Great Lakes and Ohio River Division
Pierce	Craig R.	USACE, Little Rock District
Pointon	Mark R.	USACE, Institute for Water Resources
Ramos-Gines	Orlando	USACE, Galveston District
Rase	Lance M.	CGB Enterprises, Inc.
Rich	Robert D. "Rob"	Shaver Transportation Company
Ricketts	C. Matthew "Matt"	Crouse Corporation
Riley	Steven D.	USACE, Institute for Water Resources
Rohde	Paul	Waterways Council, Inc. (WCI)
Sahl	LTC Joseph M. "Joe"	USACE, Nashville District
Sattinger	COL Steven M.	HQDA, Office of Assistant Secretary of Army for Civil Works
Savage	Joseph M.	USACE, Great Lakes and Ohio River Division
Schimpf	Andrew C.	USACE, St. Louis District
Schneller	Beth L.	USACE, Pittsburgh District

Shaffer	Joshua D. "Josh"	USACE, Pittsburgh District
Smith	Chris	Corn Belt Ports
Smith	Thomas P.	USACE, HQ Operations & Regulatory Division
Tarmann	Jim	Illinois Corn Growers Association
Tarpey	Michael J.	USACE, Rock Island District
Taylor	Ms. Crystal D.	Ingram Barge Company
Thomas	Ms. Kimberly S.	USACE, Rock Island District
Trammell	Bradley	The American Waterways Operators
Trulock	Ms. Shelley F.	USACE, Southwestern Division
Turner	Richard C.	USACE, Southwestern Division
Walker	Adam C.	USACE, Nashville District
Wallace	Kirsten	Upper Mississippi River Basin Association
Webb	Jeff	Cargill, Inc.
Winters	Robert L.	USACE, Nashville District
Woodruff	W. Matthew "Matt"	Kirby Corporation
Zea	Tracy	Waterways Council, Inc. (WCI)