

**Minutes
Inland Waterways Users Board
Meeting No. 68**

December 19, 2012

**Julian Carroll Convention Center at Paducah McCracken Convention and Expo Center
Paducah, Kentucky**

[Note: The following minutes of Inland Waterways Users Board meeting No. 68 were approved and adopted at Inland Waterways Users Board meeting No. 69 held on August 13, 2013 in Louisville, Kentucky.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 19th day of December 2012, at the Julian Carroll Convention Center at Paducah McCracken Convention and Expo Center in Paducah, Kentucky, Mr. Larry R. Daily, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present:

MR. LARRY R. DAILY, Alter Logistics, Inc.;

MR. MICHAEL W. HENNESSEY, Brownsville Marine Products, LLC.;

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

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

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

MR. W. SCOTT NOBLE, Ingram Barge Company;

MR. BRUCE REED, Tidewater Barge Lines;

MR. MICHAEL T. SOMALES, CONSOL Energy.

Board Members Mr. James F. Farley of Kirby Inland Marine, Inc. and Mr. Charles A. Haun of Parker Towing Company were not in attendance at the meeting.

Former Board members MR. STEPHEN D. LITTLE (Chairman Emeritus) of the Crouse Corporation, MR. WILLIAM M. WOODRUFF of the Kirby Corporation and MR. DANIEL MECKLENBORG of Ingram Barge Company were also in attendance at the Board meeting.

Also present at the meeting were the following Federal observers, designated by their respective agencies as representatives:

MS. CLAUDIA L. TORNBLOM, Deputy Assistant Secretary of the Army (Management and Budget), Office of the Assistant Secretary of the Army (Civil Works), Washington, D.C.;

MR. WILLIAM K. PAAPE, Director, Inland Waterways Gateway Office, Maritime Administration, U.S. Department of Transportation, St. Louis, MO;

Note: There were no observers from the U.S. Department of Agriculture, Agricultural Marketing Service, or the National Oceanic and Atmospheric Administration (NOAA) in attendance at the meeting.

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

MAJOR GENERAL MICHAEL J. WALSH, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil and Emergency Operations;

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

MR. KENNETH E. LICHTMAN, Executive Assistant, Inland Waterways Users Board;

Staff support provided by the U.S. Army Corps of Engineers was as follows:

MR. JON SODERBERG, U.S. Army Corps of Engineers, Headquarters, Programs Integration Division;

Program speakers in scheduled order of appearance were as follows:

MAJOR GENERAL MICHAEL J. WALSH, U.S. Army Corps of Engineers, Deputy Commanding General for Civil and Emergency Operations;

MR. JAMES E. WALKER, JR., U.S. Army Corps of Engineers, Headquarters, Operations Division, Navigation Branch;

MR. EDWARD BELK, U.S. Army Corps of Engineers, Mississippi Valley Division, Director of Programs;

MR. JON SODERBERG, U.S. Army Corps of Engineers, Headquarters, Programs Integration Division;

MR. RICHARD A. HANCOCK, U.S. Army Corps of Engineers, Great Lakes and Ohio River Division;

MR. JOSEPH P. KELLETT, U.S. Army Corps of Engineers, St. Louis District;

Other individuals called on to provide additional information in response to questions raised by Board members during the meeting included the following:

MR. JOSEPH P. KELLETT, U.S. Army Corps of Engineers, St. Louis District;

COLONEL LUKE T. LEONARD, Commander and District Engineer, U.S. Army Corps of Engineers, Louisville District;

MR. DAVID F. DALE, U.S. Army Corps of Engineers, Louisville District

There were no public comments made during the public comment period at the end of the meeting.

MR. MARK R. POINTON: Good morning, everyone. I'd like to welcome you to the 68th meeting of the Inland Waterways Users Board, here in Paducah. It's been a few years since we've been here. I believe it was the summer of 2009, so it's good to be back.

We have Chairman Emeritus Mr. Stephen Little joining us today. Mr. Little is the former Chairman of the Board. He was gracious enough to join us. Fortunately, he's from Paducah, so he's probably just, kind of, taking a little side trip today. We had a really good tour of Olmsted Locks and Dam yesterday, and we had a really nice social at the River Discovery Center. I'd like to thank the Port of Paducah Propeller Club and the Seamen's Church Institute for being our hosts last night.

My name is Mark Pointon. I'm the Executive Secretary and Designated Federal Officer for the Inland Waterways Users Board.

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

The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended.

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

This is a "Government in the Sunshine" Act meeting, and as such, is open to the public. There will be a public comment period at the end of the meeting. If anyone wishes to make a public comment towards the end of the meeting at the appropriate time or submit a statement for the record, please let Chairman Daily or myself know during the meeting.

The proceedings are being recorded, and a transcript will be available shortly after the meeting.

I'd like to thank Colonel Luke Leonard and Brigadier General Margaret Burcham for all the support we got from the Louisville District. In particular, I'd like to thank Ken Beyer, Vickie Whitehouse and Susan Toutant.

Vickie is actually deploying to Afghanistan in a couple of weeks. So I'd like to thank her for her help here this week and leading up to the meeting.

And I understand Susan is retiring tomorrow. So this is probably the last official act she is going to do. So I hope we send her off in style.

I'd like to turn the floor over to General Walsh now.

MAJOR GENERAL MICHAEL J. WALSH: Thank you all for being here today, especially those who pulled this meeting together. It's been an excellent meeting.

Susan, this is the Army. You've got to request to retire and I haven't seen that request come up yet. And it's effective tomorrow.

Well, thank you very much for all of your hard work.

The Board has had several meetings here in Paducah, and I understand, from looking at the history, that this is our fifth meeting in Paducah.

So Mr. Little, I think, you must have had a lot influence on us meeting here.

As was mentioned, our last meeting here was in August 2009.

Our inland navigation construction budget is about \$200 million a year, of which 72 percent of it is spent right here in Olmsted. So it's probably the right place for us to be meeting in Paducah so that we can go and look at that -- that very large project -- that's under execution. And, I think, our tour yesterday showed that there's tremendous amount of work that's going on in the river and it's moving along smartly. And Mr. Rich Hancock will brief us later today on more of the details of that particular project.

I'd also like to welcome the Federal observers, Mr. Bill Paape. Bill, welcome. Bill is the director of MARAD's Inland Waterways Gateway office, and he is representing Mr. Keith Lesnick, the Associate Administrator at the Office of Intermodal Systems Development, MARAD, at the U.S. Department of Transportation. Wow, that's a handle. I thought mine was a handle.

And I would also like to welcome Ms. Claudia Tornblom, Claudia, welcome. She is representing the Honorable Jo-Ellen Darcy, the Assistant Secretary of the Army for Civil Works.

The Federal Observers will have an opportunity to make remarks before I turn the meeting to the chairman, Chairman Daily.

An update since our last meeting. Pretty much we're operating under a six - month continuing resolution at roughly the same funding level that we had in 2012, and that will continue for -- until the six months expires. As you guys have been reading in the paper, the sequestration is due to kick in on the 1st of January, and if there's no agreement reached, that will affect that budget.

A little update on the Civil Works transformation. We are making good strides on transforming the Civil Works program. In particular, the budget transformation, we're looking at prioritizing projects that are ready to get into a completion at a higher budget priority than those that are not. So we're trying to move those projects that are near completion into the -- and fund them to capability and get them completed, and moving towards a system-based budgeting that will focus on holistic approaches that will maximize the return on the investments. Very similar to the Capital Plan, the 20-year plan that the Inland Waterways Users Board is looking at. How do we take some of these great ideas that you put together on putting that together, how do we use that in other business lines, and so folks understand in a 10-year time, these are the projects that we're going to get to and not. So we're using some of those ideas that you came up with from that perspective.

In the planning transformation, we're trying to get our planning products done more rapidly than we have in the past, and we have instituted what we call a "3 x 3 x 3" Rule, three million dollars, three years, and the three levels of the Corps of Engineers to get those projects moving. And we're reviewing the current inventory of planning products that we have across the nation so again that we can move those forward that have a higher chance of moving to fruition than those that are not. And there's a lot of discussion you may have heard, Board members, about the "3 x 3 x 3" Rule.

The third leg of the Civil Works transformation is the infrastructure strategy. And what we're looking for there is life cycle management and how we make decisions on repair and rehabilitation. And then also, what do we do for disposal, de-authorize or re-authorize particular projects since we've got a lot of work going on.

And then the last leg of the Civil Works transformation is what we call methods of delivery and how do we best or more efficiently move projects through the Corps of Engineers system until we get production so that folks have three levels become a -- there's three things you need to become an expert, that's education, training, and experience. And there are a lot of folks that have experience in doing particular projects. How do we move those projects to those most experienced folks so we can turn the projects over faster and in a more complete way.

Another update to the Board is our response to Hurricane or Superstorm Sandy. Certainly, on the 28th of October, the President mobilized many of the agencies across the federal government to support the response to Superstorm Sandy and those folks that were in the path. At the height of the response, we had about 700 Corps of Engineers employees, volunteers moving into New York, New Jersey, Pennsylvania, and a few other states to provide support to Hurricane Sandy -- those who were impacted from -- from Hurricane Sandy, as well as the North Atlantic Division. They have about 3000 people in their division, and they were all supporting

this as well. So it was quite a response with the federal government and our portions of it where we work on Emergency Support Function number three.

Our priorities during that time frame was to bring in temporary emergency power, pretty much generators, un-watering missions, debris removal and disaster recovery missions. From an engineering perspective, trying to figure out how you're going to un-water the Brooklyn Battery Tunnel that's 200 foot below the water and trying to get high head pumps in there and trying to pump those out was a pretty interesting engineering challenge.

Certainly trying to keep transportation going between the two states, between New York and New Jersey, was high on the President's priority list. And so our team from the Mississippi Valley Division of the Corps, working with the Metropolitan Transportation Authority and a couple of others, were able to pump out 11 tunnels in a few weeks and able to bring back transportation in those particular areas.

We also hooked up about 200 generators. Mostly our responsibility is life, safety, buildings, the hospitals, fire stations, police stations, government offices, and so we hooked up about 200 high power -- five, six hundred kilowatt to a mill -- to one megawatt in -- in those particular facilities.

The coast really got damaged, and we've noticed in a lot of the areas where there was a Corps or an engineered beach, those communities fared better than those that did not have an engineered beach. And there's a discussion now underway on what are we going to do from a national perspective on putting those beaches back to pre-storm conditions. And we are working on putting those project information reports together.

Let me just switch now to the national drought. As you guys know, about 60 percent of our nation is under some level of drought. Talking with the Division commander from here at LRD (Great Lakes and Ohio River Division), many of the Great Lakes are at historic lows. We have significant challenges at the border between Georgia, Florida, and Alabama, in those areas with drought. Down in Texas, in the Southwestern Division, a lot of the lakes there that are for water supply are rapidly drying up. And then in the Pacific Northwest, the seven dams that we have there are to provide multiple and sometimes competing authorities and resources there. But one of the things is to have 12 years of drought storage on that particular watershed. And right now, about 20 percent of that storage has already been used up in one year. So from a national perspective, the drought is having significant impacts.

We'll talk about the navigation impacts for the drought when Mr. Eddie Belk comes and gives a presentation on that in just a few moments.

So this meeting is really to hear the Users Board's recommendations, and we're looking forward to hearing them. I'd ask you to keep in mind the IMTS future investment strategy question that we posed last time. You know, what do we want our -- what do you want your inland water transportation system to look like? At what level should we fund Olmsted? And we had extensive discussions on Olmsted, and we'll continue those discussions from Mr. Hancock later. But what are we going to do with the 902 authority? What happens if we don't

get that -- if that doesn't become fixed? At what level do we want to do a slowdown on that particular project? So we're looking for your advice so that we can pass that on to the Secretary's office.

So with that, let me just turn it over real quickly to the Federal Observers for their remarks, if they wish to do so, and then I'll turn it over to Chairman Daily. Mr. Paape?

MR. WILLIAM K. PAAPE: Thank you, General Walsh. I would just like to take a brief opportunity to thank the Corps of Engineers, particularly Colonel Leonard and the Louisville District, and the team at Olmsted for a very insightful and well-executed tour yesterday. Thanks.

MAJOR GENERAL WALSH: Thanks. Thank you. Ms. Tornblom?

MS. CLAUDIA L. TORNBLOM: As General Walsh said, I'm representing Assistant Secretary Jo-Ellen Darcy who is unable to be here because of a family emergency, and the Principal Deputy, Mr. Rock Salt, who is unable to be here because he's on a cruise contemplating the meaning of life. Some of us probably would rather be there, but I'm happy to be here today.

You are facing important challenges. And many of you already know that these have the attention of the highest levels in Washington, and we're looking forward to working with you to addressing those challenges with the immediate ones with the drought and the longer-term challenges on the inland waterway investments. Thank you.

MAJOR GENERAL WALSH: Thank you.

I'll turn this over to the Chairman.

CHAIRMAN LARRY R. DAILY: Thank you, General Walsh.

It's a pleasure getting to be here in Paducah. I'd also like to echo what Mr. Pointon said. I appreciate the reception last night by The Port of Paducah Propeller Club and the Seamen's Church Institute. The site of the reception is something that always makes me feel good when I see the history and the importance of the waterways and what they have meant to America, and also how they tell our story to people who are not as intimately familiar with our industry as we are.

We are living in some very interesting times. We have gotten a very high profile through what could be an impending disaster on the Upper Miss. I know the Corps is working very, very hard to delay and hopefully stop that disaster. The level of interest, I understand, has reached the White House. I believe there's a meeting tomorrow or this week at the highest levels of our government that will help address our needs, and that obviously we wish would come at better times, but this is the kind of thing that seems it has to happen before people really take us seriously.

We are the quiet transportation industry. We go gently under your bridges. We move your products without a lot of fanfare, and you hardly ever hear of us unless we've done something wrong.

And with that, I'm going to take the opportunity to read the introduction to our draft annual report because it does discuss our history.

“Throughout our nation's history, our system of navigable rivers and inland waterways has played a vital role in our success as a nation. George Washington helped build canals, locks and dams. The Northwest Ordinance, passed by the Continental Congress, ratified by the states and ratified again by the Congress of the United States under our current Constitution, decreed that the waters leading to the Mississippi and the Saint Lawrence “shall be common highways and forever free... without any tax, impost or duty therefor.” And this was the law of the land for almost two centuries until the fuel tax that supports the Inland Waterways Trust Fund was imposed.”

As an aside, that's why we're here.

Again from our draft annual report.

“As transportation arteries, our waterways gave us the opportunity to prosper as a nation when no other means of transportation existed. Today when transportation options range from walking through the woods to walking in space, inland waterways transportation still plays a vital role in our national competitiveness, allowing vast quantities of goods to be transported at less cost than competing modes. This benefits consumers in the U.S., as well as American farmers and manufacturers who are able to win sales in highly competitive world markets because of the low cost of waterways transportation makes the delivered cost of American goods lower, offsetting higher production costs here. Ultimately, this means good paying jobs for Americans in all manner of fields.”

So even if you don't work on the river or work in an industry directly related to the river, you still get the benefits of what happens out there on America's waterways.

And we're here today to offer our support and reiterate that we are not a watchdog group. The Users Board is a collaborative group. We're here to help. I mean, we mean that seriously. We give -- we volunteer our time to travel and participate in these meetings. And we're just waiting for you to ask us what else we can do.

And with that, I'll move on to Mark and the rest of the meeting.

MR. POINTON: Thanks, Larry. Next on the program is we need a motion from the Board to approve the minutes from our last meeting, Meeting Number 67, that we held in St. Louis in August. Can I get a motion from the Board, please?

VICE CHAIRMAN MICHAEL W. HENNESSEY: Yes, sir.

MR. POINTON: Moved by Mr. Hennessey. Can I get a second?

MR. MICHAEL T. SOMALES: Second.

MR. POINTON: Mike Somales seconds. Can we get a vote from the Board? All aye?

BOARD MEMBERS: Aye. (Affirmative Responses)

MR. POINTON: Any nays?

BOARD MEMBERS: (No verbal response)

MR. POINTON: Great. The motion is approved unanimously. Mr. Noble, do you have a question?

MR. W. SCOTT NOBLE: Yes. I'll address this to our Chairman. Mr. Chairman, this is Scott Noble with Ingram Barge. I appreciate the minutes are a transcription of the meeting, and I don't question the transcript, but the cold transcript does not clearly capture what I think is an important point that I intended, and, I think, the transcript shows this, that I intended to be -- an important point that I intend to be a clear part of the record of the decision and that's the fact that our discussion was predicated on the prior unanimous recommendation of this Board that there should be no further funding of the Olmsted project from the Inland Waterways Trust Fund.

Therefore, I would make the following motion to ensure that the intent of the Board is perfectly clear, and this is that resolution.

“Although the Board voted at its last meeting to support an increase in the 902 limitation for the Olmsted project from \$1.745 billion to \$2.918 billion, the Board wants to be clear that such support is contingent on all future funding for the project beyond the current expenditure level of approximately \$1.519 billion, coming from 100 percent federal general funds, and not from the Inland Waterways Trust Fund. The Board does not support an increase in the 902 limitation if such an increase would involve additional funds being expended toward the project from the Inland Waterways Trust Fund.”

CHAIRMAN DAILY: We take that as a motion. Is there a second?

VICE CHAIRMAN HENNESSEY: Second.

CHAIRMAN DAILY: Mr. Hennessey seconds. Any discussion among the Board? A vote. All in favor say aye.

BOARD MEMBERS: Aye. (Affirmative Responses)

CHAIRMAN DAILY: Any opposed?

BOARD MEMBERS: (No verbal response)

CHAIRMAN DAILY: Thank you, Scott.

MR. POINTON: We'll move on to the next item on the agenda. I'd like to call on Mr. Jim Walker to discuss the impacts of the low water on the inland navigation system.

MR. JAMES E. WALKER, JR.: Good morning. I'll try it again. Good morning. Is this on? Okay. I'm Jim Walker, the Navigation Branch Chief at the Headquarters, Army Corps of Engineers. And I'm called upon to bring you an update of the USACE's drought actions associated with the great drought of 2012, which immediately followed the great flood of 2011.

You see in this slide a map of the United States with the various drought levels as identified by NOAA, colors ranging from the yellow, which is abnormally dry, up to the dark red, which would be exceptional drought, and the different layers in between. What you see is that nearly two-thirds of the --the major part of the nation, almost two-thirds of the nation, is in these drought conditions, an ongoing persistent drought with impacts ranging from moderate to exceptional. The drought has affected communities, fresh water supplies, agriculture, livestock, and water-dependent commerce.

The nation needs rain and a lot of it to ease the drought situation. And the long-term forecast indicates a potential for below-normal precipitation. Therefore, USACE is partnering with other federal, state, and private interests to mitigate the effects of a prolonged severe drought.

Here you'll see, though, how the presentation will go forward. We are showing six different water basins within the Continental United States. And so we'll have a -- each of those geographic areas -- an overview of what's taken place at each of those locations.

The drought status, beginning with on the Great Lakes. What you'll see there is the drought that's affecting the lake levels. They're all below their long-term averages, but above their cyclical record lows.

As far as the slide goes, you'll see the line in red is the long-term average and so you're seeing that in some cases you're seeing the lake levels in the Great Lakes above these averages, and then you'll get into periods of below. The low cycle up on Lake Superior was back in the 1926 time frame. So it's been 86 years since we've seen lake levels at this low stage. When you get to Lake Michigan here, you'll see that both the peaks and valleys' time frames below these

levels, but we're now anticipating, then, the months of January to March we may see record low levels on these lakes. So the lowest since we've ever been recording at these locations.

The impact is that you're seeing shipping with lighter loads. You see the commercial harbors being affected. While we do have authorization to dredge deeper, we do not have the funding as far as drought compensation to be able to be accomplished under our present funding levels.

The Missouri River basin will be next. As the General mentioned, we have a 12-year drought storage is the plan for the Missouri River basin. In 2012, we used roughly 20 percent of that storage in meeting the needs of the Missouri River navigation season, which took place from 1 April to 1 December. Releases at Gavins Point, I've usually got an arrow there, the fast-paced change of events there, we're showing 14,000 CFS (cubic feet per second). We just heard yesterday that now they're looking at 18,000 CFS as being needed to meet the water supply needs so that they continue to have water supply withdrawals on the Missouri River over the winter months. Some of these changes are due to, kind of, a rewriting of the needs and water studies levels that following the great flood of 2011 and learning to see where we are with 2012 and those needs.

Presently the water levels that we have used in 2012 and now have us looking at what will be available for the 2013 Missouri River navigation season, this could be affected by the flow and duration. At the present time, we're looking at water levels that would be an eight-foot by 200-foot navigation channel for the start of that season which begins on 1 April. So water releases will begin in the latter part of March to begin to step up and be ready to have the Missouri River navigation available on 1 April.

MR. MARK K. KNOY: On what --

UNIDENTIFIED MALE SPEAKER: April.

MR. WALKER: I'm sorry?

UNIDENTIFIED MALE SPEAKER: It's 1 April.

MR. WALKER: All right. The Mississippi River basin, and you can see the drought and how it significantly affected the Middle Mississippi River navigation. It's showing you the problem locations at Grand Tower and Thebes, the rock that's going to be removed. We do have tow size and draft reductions affecting cargo shipments. We've got the blasting underway. The details of this, Eddie Belk will follow up these slides and give you a more detailed breakdown of what's taking -- the actions on the Mississippi River.

All right. The drought status on the Ohio River basin. The yellow that you see on the map is indicative of abnormally dry conditions. This is one of the best areas in the country in terms of lesser drought impacts than other basins, this just being abnormally dry. There's been recent rainfall that's helped to alleviate those conditions. We do not have -- the wickets are down on Lock and Dams 52 and 53, so the open river conditions exist. We've got right now normal

seasonal operations underway and we have some storage in Kentucky and Barkley to assist with water management as needed for the Lower Mississippi basin.

In the Southwestern basin, you'll see the -- again, a lot of red in that area as far as the amount of drought that's taken place there and its affects to water supply and water quality in other project purposes with actually minimal impact to navigation.

The area that we had a challenge with was that the drought halted MKARNS [McClellan-Kerr Arkansas River Navigation System] navigation in that critical region between the Montgomery Point Lock and Dam and the Mississippi River. Montgomery Point was down for important maintenance that needed to be accomplished.

We had scheduled this at a time we were anticipating, based on historical river flows, that the navigable pass would be open and would not interrupt navigation. However, the drought impacted that and we weren't able to maintain navigation there. The situation has improved. The navigable pass is back up and functioning. So we're back in a mode of navigation being able to pass there.

And then lastly, the drought status in the South Atlantic Division. You're seeing, again, areas of red. And as far as extreme and exceptional drought in those areas, there's really minimal impact to navigation along these areas. It's mostly along the Apalachicola-Chattahoochee-Flint River system and then the Savannah River basin, but above where there's actual commercial navigation, but we are monitoring the surveys and providing that information and reporting the conditions in that basin.

The seasonal outlook as far as the drought continuing, again, from NOAA's three-month forecast projections is that the Missouri River would remain below normal precipitation so that those conditions would be a drought that's going to persist or intensify is the color that you're seeing in the vast majority of the crossed-hatched areas or where there's drought ongoing, but some improvement. And then green, with drought likely to improve. But you're seeing the vast majority of the country will still be in that persistent drought, which is the basis of our needing to look at this as a long-term, as well as the immediate needs as far as relief in providing for continued navigation.

At this point, now we're ready to bring up Mr. Eddie Belk from the Mississippi Valley Division to give you a more detailed briefing on the efforts for the Mississippi River navigation.

MR. POINTON: Thanks, Jim. Do you have any questions for Mr. Walker?

MAJOR GENERAL WALSH: I just have a comment. I would like to thank Mr. Walker, as this is his last Inland Waterways Users Board. He is retiring, although I didn't see his request as well, at the end of this month after 36 years of federal service. Many of those years as being our navigation guy at Headquarters and gave a lot of good support to the Inland Waterways Users Board. And I want to thank you, Jim, for your 36 years.

MR. WALKER: Thanks.

MR. EDWARD BELK: Okay. Thank you. All right. Thanks. Good morning. Mr. Chairman, Major General Walsh, Ms. Tornblom. It's a real pleasure to be in Paducah. It's really a privilege to address this Board once again here at your 68th session.

I do bring greetings from Major General John Peabody, my boss back in Vicksburg. He wanted me to send his best.

I am Eddie Belk. I'm the Director of Programs for the Mississippi Valley Division in Vicksburg. I also serve in that same capacity for the Mississippi River Commission.

We do have one commissioner here from that Commission, Brigadier General Margaret Burcham, ma'am, and of course, my boss, Major General John Peabody, is the current President of the Commission and General Peabody -- or General Walsh is the past President.

It seems that between record floods that we experienced last year and the near record low stages that we're experiencing this year here in the confluence area that we simply cannot escape history. And I'm going to talk to you a little bit about what we're doing with the Corps of Engineers to respond to this historic drought.

The Mississippi Valley Division and the Army Corps of Engineers has been engaged in a campaign for the last, oh, seven months, since June, in a long-term response to the challenges that this drought presents to navigation across the Mississippi River system. Of course, you saw some of the information that General Walsh described and Jim Walker described in terms of the footprint of the drought. And some of you may remember the focal point of the low-water campaign really began on the Lower Mississippi River back in July and August and into September where we had a real fight on our hands to sustain navigation at historic and near historic lows for several weeks. We did get through that and we never dropped below authorized dimensions on the lower river, which is nine feet wide by 300 feet -- nine feet deep by 300 feet wide.

But now the focal point has shifted to the Middle Mississippi between Saint Louis and Cairo. And really the short answer is we need rain.

This is a chart probably only an engineer could love. But I'm going to be walking you through it because there's some very important information on this chart that we use within the Corps of Engineers. We worked this with our industry partners on the RIETF, the River Industry Executive Task Force. Mr. Noble participates in those, and we also worked this with the Coast Guard. So I want to walk you through it because it really helps explain the reality that we're dealing with and helps frame the actions that we're taking in response to this historic drought.

On this side of this chart is our gauge at Thebes -- gauge reading at Thebes. Across the bottom are dates beginning 17 December. This reflects our forecast as of the 17th. This was a product that we got from the National Weather Service on Sunday. And so it goes from 17 December out to 13 January. Key points on the chart, at two on the Thebes gauge is the depth -- is the stage at which we have nine feet of water above the highest pinnacles through the Thebes

Reach. That's important to the Corps because that reflects the authorized dimensions, nine-foot dimensions, that we're authorized to obtain and maintain on the Mississippi River.

This line here is what the River Industry Executive Task Force has asked the Corps to exercise all the tools available to us to maintain a 10 foot of water over the highest pinnacles in order to provide a nine-foot draft for navigation. So this has been sort of a planning target to maintain flows and while this is our authorized limits for nine-foot depth above the pinnacles.

What you see here is the 28 day no rain forecast issued by the National Weather Service. That comes out in a table, and we take it - - and we get it every day. And we overlay it on this chart so that we show for the next 28 days what the Weather Service is predicting in the way of flows.

This line is the 16 day forecast with rain. It reflects the Weather Service's best information about what to expect with the rain that is predicted.

The troublemakers that we've had to deal with throughout this process have been this line, this forecast, and this forecast. And I'll tell you why. Quite frankly, if you look at the science available to predict weather in the first instance, and then stages that are produced as a result of that weather in the second instance, you get beyond five days and you start getting pretty speculative. And what we have found over the last few months of working this process is that although this trend that you see in this no rain forecast – and basically this shows falling below the authorized channel depths on or about 31 December.

We've had that same trend occur for the last couple months, but again, that forecast assumes no rain. This is yet to become real over the last couple of months. We have yet to get to a stage that falls below a three on the Thebes gauge in spite of that daily 28 day forecast that shows anywhere from 10 days out to 20 days out from the date of the forecast that we drop below that critical threshold. We have not done that. Nor have we achieved the somewhat optimistic forecast that you see here for higher stages. The numbers vary a little bit, and the shape of this curve varies a little bit. The numbers here vary a little bit and the shape of this curve varies a little bit every day as we get the new forecast.

But my point is the reality that we're seeing on the river is somewhere between these two extremes. We're using this no rain forecast as a worst case boundary condition that we use for decision making. Quite frankly, I think, the industry is as well because the challenge we've got is we, in the Corps, have to make operational decisions today based on the effects we want to have two weeks, three weeks, four weeks, two months from now.

The navigation industry is in the same boat. You've got to make business decisions today based on what you expect the river to provide you weeks and sometimes months in advance. And so the challenge is we're dealing with a significant variability which is a problem in business and you want dependability. And most years it's not an issue because we have enough water to where we don't have extreme conditions to plan around. But this year and this event, it presents challenges to figure out what the future holds based on the variability and the uncertainty beyond five days that we're seeing.

A couple of the other things I wanted to point to you. This line represents the record low stage on each day for this period of record, the record low in history. So you can see that over time, historically, we will see the stages start to creep back up as you move into the January time frame.

Our stage this morning at 6:00 this morning at Thebes was at 3.9 and steady. And again, based on the 28 day forecast, it shows crossing the nine-foot depth, 31 December.

I would go back to the point I'm making. The reality that we will see will occur somewhere in between these two lines.

This is the area here is the art of our business, the art of your business, that we're trying to get a handle on and make informed decisions about.

MR. MARTIN T. HETTEL: Eddie.

MR. BELK: Yes.

MR. HETTEL: Thanks, Eddie. For the record, why we're asking for the 10 foot of water. In order for us to transit this reach between Thebes, a nine-foot draft barge, a nine-foot draft tugboat, the Coast Guard is requiring 12 inches of clearance --

MR. BELK: Yes.

MR. HETTEL: -- between the bottom of the barge and the bottom of the river. That's why we're after the 10-foot depth in river. So when we fall to nine-foot depth of river that only allows us an eight-foot draft. And if we fall to eight-foot depth of river, that's only going to allow us a seven-foot draft.

MR. BELK: Right.

MR. HETTEL: So just for the record and for the members in the audience, I think it's important to understand that 12-inch variance that the Coast Guard is requiring for us to transit this area. While I understand the project -- or the project dimensions is 300-foot by a nine-foot channel, that's only going to allow us to run with an eight-foot draft. Thank you.

MR. BELK: That's a great point and that's the consistent message that RIETF delivers to us in our weekly and multi-weekly calls that we've had to sustain that draft that you just described. I want to switch gears a little bit --

MAJOR GENERAL WALSH: I think that's a very good point, Marty. And again, the authorized depth is nine feet. And, I think, working with the Mississippi Valley Division and many others trying to keep that other foot, I think, is very important. But again, just to make sure that people recognize the authorized depth is nine, and if we can do better than that, we're certainly shooting for that.

MR. BELK: That's a great segue to the next point I want to make on this slide, and that's the actions that the Mississippi Valley Division and the Corps are taking to be responsive to RIETF's request to maintain this depth.

Back in, I guess, September, October time frame, General Peabody issued a directive that all the Mississippi River reservoirs on our system, we would start holding water of up to 10 percent above the rule curve for each of those reservoirs. We executed that. Unfortunately, we didn't get a lot of rain to work with, but the rain that we did get we held. And as a result, again, with RIETF's input, in our 28 day forecast that we had back in -- and Scott [Noble] will remember this. The 28 day forecast that we had back in mid November showed that we would cross below this magic depth of 10 feet on or about the 10th of December. And this was, again, in mid November.

Based on that, General Peabody made the decision at that time to release all the water we were holding at our reservoirs above Saint Paul, Minnesota. We did that. That water, in fact, showed up last week in the Thebes Reach. And, of course, at that time we were showing that the stage -- that the gauge was going to get down close to one. We never -- we have yet to have the gauge drop below three. In fact, it's been above three consistently, not much, but consistently throughout. But at the time, again, we were looking at a worst case planning factor, and General Peabody pulled the trigger in order to be responsive to that need.

In addition, we've had discussion with RIETF over the last week. We had two other reservoirs left in our arsenal that have been withholding water. As a result of our RIETF call on Friday, General Peabody, on Saturday, made the decision to start releases from Carlyle Lake, which is our biggest reservoir that we have capacity in right now. And we started those releases on Saturday. That will produce another six inches of water for about three weeks, and we'll start seeing the full effect of that over the next -- actually by the 22nd or 23rd of December.

And finally, we had one reservoir left, Red Rock up in Iowa. And yesterday, General Peabody ordered the release of those flows. They will be only a few inches difference. They'll only be able to make a three-day difference, but their arrival time will come at the end of this three-week pulse that we got out of Carlyle.

So the intent of all these decisions, again, informed by what we see is the worst case, is to sustain this 10-foot depth over the height of pinnacles at Thebes.

One other point on this slide I'd like to point out, had General Peabody not released that water, this would be the 28 day no rain forecast. So the bump that we're getting and we'll see starting on about the 22nd is this additional six inches that's showing up on this slide. Yes, sir?

MR. KNOY: Eddie, Mark Knoy, ACL.

When will you be able to forecast the additional CFS that NWD [Northwestern Division] talked about releasing on Monday through this river stretch? When will you be able to forecast the benefits of that?

MR. BELK: My understanding, and I'll defer to others here because that's in Northwest Division. I don't know all there is to know about that, but my understanding is a lot of that's going to be captured as ice, and we won't see much effect on the Mississippi. That's my understanding.

MR. KNOY: Okay.

MAJOR GENERAL WALSH: If I could just read -- this is a news release from the Northwest Division on exactly that issue. And it says, "The increased releases are not expected to affect stages along the Mississippi River since much of the additional flow will be held as ice in the Missouri River basin until the spring."

MR. WILLIAM M. WOODRUFF: If I could ask a question. My name is Matt Woodruff and I am here on behalf of member Jim Farley who is unable to be here today.

And I know that the RIETF group is discussing this on a very regular basis, and I see textual summaries of this information on a fairly regular basis, but I find this graph to be very informative in a good way to pull it all together. And it's a graph I had never seen before. Is this graph made publicly available so that we can --

MR. BELK: We don't make it publicly available. We have made it available to RIETF over the last week or so, and we can hook you up with -- all the members with that, with this product.

MR. WOODRUFF: I think that would be very helpful because this explains an awful lot in a very easy to comprehend way.

MR. BELK: The point I want to really emphasize, though, is while this is a planning factor for us in making decisions, as it is for you, it has yet to come true. We have sustained consistently much higher depths. Nor has this come true by the way, the 16 day forecast. We're bouncing between them. Therein lies the art. Therein lies the challenge of making business decisions on the -- sort of the trenches of the hydrograph. Any other questions on this slide?

MR. PAAPE: This is Bill Paape from MARAD. Just a clarification. My understanding is there is also some reserve in Lake Shelbyville. Was that included as part of Lake Carlyle in your brief or was that separate?

MR. BELK: I'm sorry. I missed the question.

MR. PAAPE: Lake Shelbyville.

MR. BELK: The only lakes with any capacity right now are Carlyle, which we just released, and Red Rock. Now, Shelbyville, I believe, is just above Red Rock. There is very marginal capacity there, but all of that would have to come through Red Rock anyway. So the Red Rock releases that we started yesterday capture that.

I'll move to the next chart. Again, another chart only an engineer could love, but this does illustrate a couple of important points. First, this is our annual hydrograph of the Thebes gauge, and it shows for every day of the year, the highest stage of record, the lowest stage of record, and the mean – the band of mean stages that you could expect for each day.

On this day in history, our record high was a 34. Our record low on this day was a 2.2. And you can see today, this red, we're about 3.9 on the Thebes gauge.

There are three takeaways from this chart I want to leave with you. The first is the dynamic variability of this system. There is tremendous variability. You all know that. You work in this every day, but it gets lost sometimes in the public in how dynamic and how variable the system is.

The second take away from this chart I want to point out is that we're operating at the extreme edge of the hydrograph. That makes decision making much harder. When we have stages up in here, there is enough water to where we don't have to have precise and exact science. You know enough to make business decisions and have a predictable outcome.

When you're at the fringes here, and oh, by the way, when you're at the fringes up here, if you recall during the record -- the flood of 2011, we had to make some hard decisions that impacted navigation.

So at the fringes of this hydrograph, decision making is much harder because the science that you need for decisions just isn't there.

The third take away I would offer from this slide is that if you look historically on this hydrograph, the inflection point for stages to start increasing occurs in the December-January time frame. Now, that is not a prediction. That is simply history, and if history suggests anything it is that we are at an inflection point and we should see some improvement over the next couple months in our posture.

But again, the National Weather Service is the best predictor of that. I can just show you what history suggests.

Okay. Let's talk a little bit about what we are doing on the Middle Mississippi River. I have described to you how we have leveraged our reservoir capacity to supplement and augment flows on the Middle Mississippi to meet the targets that RIETF has established for us. We are also doing some other things, but I'd like to frame this.

If you look at the top 10 low water stages at Saint Louis, the record, was in 1940, minus 6.2. You can see in the last few years, the last 20 or so years, we've flirted with records, 2003, 1989 which many of us remember.

Today at Saint Louis at 0600 this morning our gauge was a minus 3.0 with a slow rise -- a very slow rise predicted. So you can see we're still well above records territory, but we are close.

Since the last big drought in '89, the investments that this nation has made in our channel improvements and our regulating works have allowed us, both on the Middle and the Lower Mississippi, quite frankly, have allowed us to sustain the commerce of this nation. I'd also tell you that the investment in that infrastructure that's performing for us today in this drought is also the same infrastructure that performed for us in the 2011 flood. So it is a system and it performs and it delivers on the investment made.

We have executed continuous dredging operations on the Middle Mississippi since July, again, to obtain and maintain a channel 300 feet wide by nine feet deep, minimum, although on most days we exceed that. That's the authorized dimensions.

We do have, I say, weekly RIETF calls. They're -- Scott [Noble] will tell you it's a little more frequent than weekly lately. We had one on Sunday as a matter of fact. But it's very helpful for us because what that does, it allows us to discuss the National Weather Service products that we get each day, talk about some of the trends and uncertainties that I just described to you on the last chart. We get feedback from the industry on trouble spots and issues that you're seeing that we can use to calibrate our decision making in the Corps in terms of movement of assets, release of water, et cetera. And, of course, we have the Coast Guard on as well because they help us make sure that we do all that we do safely. So those are very productive and helpful, and we will continue to do those as often as we need to. We've talked a little bit about the Mississippi River tributary reservoirs and what we've done there.

But now I'm going to move to talk about the rock removal in the Thebes Reach that has been ongoing for the last few weeks. Gee, this is a little bleached out. But a lot of stuff on this slide kind of orients you of where we are on the Mississippi -- Middle Mississippi River, some 3D photography that shows the edge of the navigation channel and the rock formations that are causing the concerns as river stages drop.

We, as many of you may know, did mobilize two contractors to start rock removal operations in the Thebes and Grand Tower Reaches. First contractor mobilized, was onsite Saturday, and they actually started rock removal operations on Sunday. That's Newt Marine out of Iowa. They have two rigs that are in operation currently. And what they have found is that their production rates using mechanical removal are significant. So they have not had to execute blasting operations as of yet because of that. The rock is incredibly hard, six times harder than concrete. I think we've described that to you before. But it's also, we're learning, very brittle.

And so with the mechanical operations that they're using, they're able to get decent production, and they will continue to do that as long as it is productive because what that allows you to do, when you go to blasting operations, you've got to clear, you've got to survey, you've got to drill, you've got to set, and detonate and then remove the material.

Here, they're just steadily removing it. So it's much more efficient and as long as they're continuing to be productive, they will continue to use mechanical means, although we do expect to and are prepared to go to blasting when we are no longer hitting production targets.

So Newt Marine is onsite. This is a little bleached out, but they're actually at the upper end of the reach right now operating around -- between miles 44 and 46.

Durocher Marine out of Chicago, they were onsite yesterday, and they will start rock removal operations as we speak. So they're in place. They're at the lower end of the Thebes Reach and are conducting operations now. Again, much like Newt Marine, they expect to use mechanical removal means for the time being. And at some point they will be prepared to, again, go to blasting operations as necessary.

As of yesterday morning, with a couple of days of production under our belt, we've removed about 39 cubic yards out of the 890 cubic yards that we are projecting are required to achieve lower the bottom of the river one and a half feet and 300 feet wide.

So we've got 4.4 percent, basically, of the material removed that we need to remove to get that one and a half feet of additional depth. And at the production rate we have now, we have projected that even in -- remember the worst case hydrograph I showed you, the 28-day no rain forecast, even if that were to come true, we now believe that rock removal operations will keep pace with that worst-case hydrograph and that we will be able to maintain current depths through mid January, again, at current production rates, so that's important.

I guess, one final point, the queue. We've talked this with RIETF, and we are doing rock removal operations 0600 to 2200 each day, and then we'll cease operations and pass traffic 2200 to 0600 the following morning. Between the 17 and 18 December, we passed seven southbound tows, six northbound tows, and they were all passed without incident. And we'll maintain that schedule for the time being. Any questions on rock removal? Yes, Mr. Knoy.

MR. KNOY: Just a question. Is this the tool that you use to see the channel in this example in the bottom right? And to what extent that accuracy is as we start to pass traffic during the off hours and, you know, what level of confidence do we have that, you know, the material that's been broken off has been cleaned away, et cetera?

MR. BELK: Yeah. The tools we have available now for surveying and mapping the bottom of the river are far superior than just -- as recently as five years ago. So we had dramatic leaps in technology. That's one of the products that the contractor is doing each day to verify where we are. We will work with RIETF and, obviously, the Coast Guard and not make any change in conditions until we've assured ourselves that we have a clear channel and that there's no risk posed by remaining material.

And, now, this is -- you know, I told you we started rock removal on Sunday. This is some of the rock that we removed during that first day of operation. You've got some rocks the size of a Volkswagen that we're able to pull out. So we'll make sure that we've got the surveys right before the Coast Guard, our partner, works to open the channel.

I'd also point out, Mr. Joe Kellett -- I should have done this earlier. Joe, raise your hand.

Joe is a senior civilian in our St. Louis District office. Saint Louis is the lead district that's executing this rock removal operation, and he and I both will be available to talk with you after this if you would like further details. But Joe and his team are leading the charge to execute this work.

Okay. So I've talked rock removal. I've talked reservoirs. I want to take a minute and talk about our dredging operations. Again, we use dredges routinely to obtain and maintain the authorized channel dimensions. We currently have two dredges operating on the Middle Mississippi. We have the Dredge *Potter*, which has been operating since July, moved about six million cubic yards of material since then. Last Friday, we had the Dredge *Hurley* move up into this reach, and they'll be conducting operations until we get all of the crossings down to the point where we'll have nine feet of depth at .5 feet on the Thebes gauge, which is where we will go with the rock. So the rock and the crossings are all going to come down together. We will have all of the dredging done and the crossings by 7 January. So we'll stay ahead of the rock removal process.

I'd also tell you, we've got two other dustpans available. Dustpans are the optimum tool for this kind of work. They are the most efficient dredge for this kind of production, this kind of material movement. We've got these two dredges. We've got two others. They are both dustpans. There are only four dustpans in captivity. Three of them are Corps. One of them is private industry. The *Hurley* and the *Potter* are Corps dredges. We've got the Dredge *Jadwin* that's currently in Vicksburg. That's a cutterhead -- or a dustpan that we can mobilize. We also have the *Wallace McGeorge* which will be headed and tied up in Memphis Harbor within the next few days. It's available to us as well. So we have additional capacity if we need it, but at this point, the *Potter* is taking care of the river above Thebes. We've got the *Hurley* addressing the situation below Thebes. So we feel that we have more than sufficient capacity to take care of the crossings as the rock comes down.

I want to just take a step back a little bit. I've talked a lot about the Middle Mississippi, but we really do have a system, and I want to talk about the low water impacts over the entire system.

As I described to you, we had the peak challenge on the Lower Mississippi River from July to September. We got through that. We're now dealing with the challenges on the Middle. But what I want to describe to you is we track our groundings on the Upper, the Middle, and the Lower Mississippi by month. And you can see the location of those groundings by month and by location. And the bottom line is the peak groundings occurred on the Lower Mississippi River in July and August where we had 25 feet groundings; on the Middle Mississippi, it actually occurred in September and October, where we had 14. Every single grounding that we've had has been outside the channel. We've maintained authorized dimensions or greater both to the Lower and the Middle, and we anticipate continuing to do so, at least through the mid-January time frame, based on the forecast that we're seeing now.

A similar chart that I described to you, this is the Cairo gauge. Again, a 28 day no rain, a 16 day with rain. The take away I want to leave you with here is that the channel alone of the Lower Mississippi River below Cairo -- Cairo and below is currently stable. We expect to

sustain authorized depth and widths with the forecast that we currently have. So that said, while the near-term forecast is favorable, there is still some risk longer term if this drought persists. You can see the record low stage here, even with the no rain a little above that, but again, you get past 30 days into the January-February time frame, there's still risk there and we'll stay on top of that.

Again, a similar hydrograph at Cairo. You can see the variability, a 60-foot variability, between record high and record low stages at Cairo.

Memphis, the same story, different verse. We look to be in stable condition for the next 28 days, similar to Vicksburg. You can see the record. We seem to be in a favorable position in the near term.

And so we covered a lot of ground, but I'll close where I began. We need rain. I described to you all the tools at our disposal from reservoirs, rock removal, dredging. I missed the fourth and probably most important one, pray for rain. We're going to continue to use that tool for the duration. I'll stop there and entertain any questions.

MR. HETTEL: Eddie, Marty Hettel again.

The estimate for this contractor you had for the removal of the rock at Thebes, if you have removed 39 cubic yards to date, is there an estimate on a date when you think it will be completed?

MR. BELK: We're reluctant to establish a firm date until we get a better validation of production rates. But at the current production rates, we feel like we'll be able to get everything done by mid January, but we want to refine that. Durocher Marine, the second contractor, just started operations today. We really need to baseline their production to see if they're matching what Newt is doing. And after a few days, I think, we'll be able to give you a better, more informed date than we have right now.

Joe, anything different than that that you'd like to add in terms of production?

MR. JOSEPH P. KELLETT: No. I think you hit the production where I would say with the expectation that we will focus on the blasting and as the mechanical production starts to drop off.

MR. BELK: Okay.

MR. HETTEL: And a follow-up, Eddie. So in your previous graph, the three-foot gauge at Thebes gives us our 10-foot of water?

MR. BELK: Yes.

MR. HETTEL: And you're thinking you can add additional one foot -- 1.5 feet of depth by removal of these rock pinnacles.

MR. BELK: Yes.

MR. HETTEL: So when you're completed, our new gauge for 10 foot of water is 1.5 feet at Thebes, right?

MR. BELK: Yes, that is correct.

MR. HETTEL: Okay. Just wanted to clarify.

MR. BELK: That is correct.

MR. HETTEL: Thank you.

MR. KNOY: Eddie, I had one other question, but I was going to entertain it with the General, but I'll ask you. We had a conversation with the Louisville District about when Cairo gets to six foot and potentially below that, which, I think, it was forecast to do that before this slug of rain. And one of the issues was their dredge capability was above Thebes, and we asked them about mobilizing it below Thebes so we don't get caught with the equipment on the wrong side of the closure, just, kind of, a point to mention. We never heard back from Louisville whether they were able to do that or not.

MR. BELK: At Thebes or...?

MR. KNOY: No. The equipment to dredge the Lower Ohio, I think, was with a contractor - not mobilized, just stored up in Columbia, Illinois.

MR. BELK: Okay. I see. Yeah, I'm not tracking that. LRD might want to respond to that.

COLONEL LUKE T. LEONARD: This is Colonel Leonard from the Louisville District.

We still have that option to do so. This is Luhr Brothers. Their dredge currently sits in St. Louis and is not planning to do so. One, because we still have enough water to get past the pinnacles as of today. And two, the Cairo gauge is in good shape and we dredged it earlier in the summer. And so for the remainder -- through the end of February, we don't see a forecast that will show that we need additional dredging down there, but we are keeping an eye on it. So if that trigger actually happened, we will pull it.

MR. KNOY: Okay. Thank you.

MR. NOBLE: This is Scott. A question. Is Newt at the upper end or lower end of the Thebes region?

MR. BELK: Newt is at the upper end. Okay.

CHAIRMAN DAILY: This is Larry Daily. I'd just like to say thank you from the industry because this report today is so much better than what we had 30 days ago when it was going to be mid February before we started work. And so I appreciate the Corps getting a sense of urgency in this and getting to work and helping us out very much. Thank you.

MR. BELK: Thank you for that.

And, I guess, one additional point I did not highlight. It was on the slide. What we're doing now, the emergency work is what we call Phase One. With Phase One, we'll pull the rock down one and a half feet and provide a 300 feet wide channel through that reach. We also have a Phase Two contract that's proceeding under normal procurement -- expedited, but normal procurement approach. We'll have that contract awarded in January, late January. That contract will then pick up where this emergency work leaves off and expand the channel to, basically, enhance navigability and make for a little safer channel, a little wider channel, by removing additional rock. So that work will begin on the heels of this emergency work that'll wrap up in the mid-January time frame.

Okay. Thank you. I appreciate the Board's attention and I'll turn the floor back over to Mr. Pointon.

Oh, I do have hard copies of my presentation here on the table.

MR. POINTON: Thank you, Mr. Belk.

Next on the program is Jon Soderberg who will talk about the status of the Inland Waterways Trust Fund and a report on project summaries. Jon.

MR. SODERBERG: Good morning. Please turn your attention in your blue presentation books to Tab Four. Under Tab Four, you'll see an updated sheet on where we are in the budget development defense process. You've seen this chart before. We've updated it for you showing December, where we're in the Fiscal Year (FY) 13 execution, although under CRA [Continuing Resolution Authority], we are in that process. We're almost in the middle of the FY 14 defense of the budget. And just coming up would be the development of FY 15. So we're almost smack in the middle of all three processes going on concurrently.

Following that sheet is just a list of the projects you've previously seen. We've put it back in the book for your reference. That list of projects and their funding amounts will be updated after an FY 13 appropriation or a yearlong CRA is upon us where we have information for which projects. But because we are operating under a CRA, we are basically operating on last year's funding, the scheme, so that information is still relevant and we have it again in the books for you.

In Tab Five, you'll see the slide presentation that we'll now get into on the status of the Trust Fund. Since we last met, we've finished Fiscal Year 12. So the first slide you'll see is that the final FY 12 cash flow. We started FY 12 with a beginning balance of a little over \$45 million in the Trust Fund. The fuel tax revenue was higher than expected at \$89 million. The

interest still falls behind historically the -- in the current times with a little over \$44,000. We transferred \$81 million of the Trust Fund to the Corps for the projects. A note, we only do the transfer now once a year. We do that at the end of the year, that way we leave as much money accumulating in the Trust Fund so it can draw that interest. Instead of in previous times where we'd bring it once a month, once a quarter, we now leave it there until September where we do one final transfer from the Trust Fund, that way we're getting the best bang for the buck by leaving it there and trying to make some interest, if possible.

So we left the end of the year with a balance of \$45.9 million. Seven-point-three million dollars of that is for previous transfers for projects that were done under the previous accounting method where we would pull money frequently or have money assigned to the projects. So in essence, \$7.3 million of that is already locked up for projects that are underway, leaving about \$38.6 million as the unobligated balance that we've carried into the year. Then FY 13 receipts of -- yes, sir?

MR. KNOY: Mark Knoy.

The math doesn't add up. It seems like you've subtracted the 7.3 twice.

MR. SODERBERG: The 7.3 is not considered available to us. Although from a U.S. Treasury standpoint, it is considered already transferred to us even though it's sitting there.

MR. KNOY: I understand that, but I just took the beginning balance, added the revenue, took out the Corps transfers, that ends up at \$53.2 million. You take out the \$7.3 million, you're at the 45.9. So are we subtracting the 7.3 once again to get to the available funds left? The math doesn't add up, unless I misunderstand it.

MR. SODERBERG: What I will need to do is take that note, get with the Treasury, and make sure our books are balancing between the two of us. The information provided here does come directly from the Treasury, and reports to us a little after cycle.

MR. KNOY: Unless there's some other reason to set aside the additional 7.3, I don't get the math to add up.

MR. SODERBERG: The 7.3 is -- I understand you're saying the 53. The 7.3 is a component of that 45.

MR. KNOY: I understand.

MR. SODERBERG: Right.

MR. KNOY: Because the balance is 53, you got an obligation for seven, leaves the 45. So where does the 38 number come from?

MR. SODERBERG: Valid point.

MR. KNOY: That's my question. I think the number should be 45, not 38.

So then we're going to start next year with a starting balance of 45 again.

MR. SODERBERG: I will contact the Treasury to make sure we're balancing out. Any other questions on that point?

BOARD MEMBERS: (No verbal response)

MR. SODERBERG: Thank you very much for pointing that out.

At the time of printing, with the FY 13 October receipts, only \$933,000 had been obtained in revenue, \$4,000 in interest, which put us a little bit behind last year.

I did contact the Treasury and they have posted for us, a little ahead of schedule, the November results. The fuel tax revenue through November is a little over \$10 million. The interest is about \$10,000.

So we'll have to balance with the Treasury where we are, but a quick result from this morning to review with the Treasury statement, we are about one million dollars ahead in Treasury income than we were at this point last year. October was behind, but we've seemed to have a little more income through October and November. That brings up to about one million dollars ahead of where we are.

The next set of slides you're familiar with, the portfolio of projects within the Trust Fund, somewhat of an end of the year recap for these specific projects starting with Chick [Chickamauga] Lock. The information there that is typically updated for you is if there were any changes in the allocations to the project during FY 13. The Chick Lock that you see that the allocation plan had money in it even though it was not budgeted. Those funds come from previous holdback. The project did not take part of its allocation or Trust Fund monies from previous years, and although not budgeted, we were able to provide the money from those holdbacks.

The status of the cofferdam contract, 99 percent complete.

Also using ARRA [American Recovery and Reinvestment Act] funding, the work on the gates and valves and bulkheads and approach wall, and below that you will see the schedule.

From the last meeting there were questions, looking at where you see the construction complete and the line items that say, "Funding plus 24 months." What that means is that upon the receipt of funding for those phases, the district is projecting that 24 months after that funding is received is when you would see completion of those phases. So those phases are definitely funding dependent, and at this point we don't know when those phases could be funded based on appropriations or available funds in the Trust Fund.

Next is Kentucky Lock. Again, a project where allocations came even though not in the budget. The Kentucky Lock has been the recipient of the majority of the remaining ARRA funds we have nationally. As other projects in the ARRA portfolio around the country are finishing their projects or moving through their work and there may be savings or slippages available, we have been moving them Kentucky Lock to keeping those things working. The big note there is a lot of that superstructure could be completed with ARRA funds. The upstream monoliths were originally de-scoped because we didn't believe we had enough ARRA money. We were able to re-scope those and move forward. And a lot of the rock excavation at Kentucky Lock was done with the ARRA funding.

Locks Two, Three, and Four, the Lower Mon [Monongahela River]. They are continuing to finish out their ARRA work at Charleroi, the river wall, and the guide walls. That money is obligated and will continue to be executed through the next two years while this money is available as long as it stays obligated. There is significant holdback, a little over 15 million, at the Lower Mon, and a lot of that is going to be dependent on monies available in the Trust Fund, only metering that out as the monies come in to the Trust Fund, making sure we don't over commit the Trust Fund.

Next is Emsworth. Emsworth was working on the ARRA funds, has a little bit remaining balance. And that does have a holdback, but Emsworth is in an out-of-balance state, where we have to get it back into a 50/50 because of the previous authorization not to cost share. So we have to be careful as we move forward for the remaining balance and costs at Emsworth to get that back in balance.

Olmsted, you'll receive some more information and we saw the tour yesterday. The more detailed information will come after our break on Olmsted, but again, keeping all the fiscal information together for you, we include it in your package.

Markland Lock, not much information. The project is complete.

Moving down river, you'll see a change in color and that changes our Divisions. The Lock 27 Rehab, again a good amount of ARRA funding supporting this project. All the contracts are awarded and money is obligated. We continue to work in that status. The good news, the lift gates are installed and functional. And we're on track to complete the project this fiscal year.

Lockport, a lot of the structure, the canal walls, as we reported previously, have returned to service. The controlling works are back operational and in service, and then we're looking for the forebay wall to hopefully be finished here in FY 13 or FY 14, depending on the funding stream.

And then finally, the IHNC [Inner Harbor Navigation Canal Lock Replacement]. Still an enjoined project. Hopefully, as we move forward, figuring out how that injunction will affect the project, but we're pretty much on hold there.

That's the end of the slides for the specifics on projects and the Trust Fund.

And I have marked as a take away to make sure that we're in agreement with the Treasury on the closing balance of FY 12. Any questions?

BOARD MEMBERS: (No verbal response.)

MR. SODERBERG: I appreciate your time. Thank you.

MR. POINTON: I'd like to move on to the next item on the agenda. Chairman Daily will now talk about the Board's Annual Report to Congress and recommendations for 2012. Larry?

CHAIRMAN DAILY: Well, thank you, Mark.

Well, our Annual Report, in summary, is the fact that we need to keep having annual reports. We think there's a big loss of momentum when the Board doesn't have a regular membership set up, especially with the rotating membership of half the people going off and half the people staying to provide continuity. And if my understanding is correct, we are also facing our own fiscal cliff. December 31st we are all deauthorized. We urge the Department of the Army to somehow come up and at least give us lame duck status until you can come up with a permanent solution to keeping the Board in order.

With that all being said, the Annual Report still supports our position that all the work done on the Capital Development Plan was valid. We believe that actions in Congress have somewhat validated that with the bipartisan support in the House for what's called Wave 4, and bipartisan support in the Senate for Senator Alexander's proposal to either be a stand-alone bill or as part of a WRDA [Water Resources Development Act] bill. So as far as defining what our national priority projects are, we still believe that the formula used by the Capital Development Plan based on reliability, eminent catastrophic failure, benefits remaining or benefits to be achieved, and the costs remaining to finish the project are all valid points.

With that, I'd like to open it up to the Board to see if there are any comments from the other members on what we've put out.

MR. KNOY: Larry, I make the motion to accept the report as drafted and distributed by Mr. Hennessey.

CHAIRMAN DAILY: Do I have a second?

MR. BRUCE REED: I second.

CHAIRMAN DAILY: Mr. Reed, second. All in favor - or any discussion?

BOARD MEMBERS: (No verbal response.)

CHAIRMAN DAILY: Good. All in favor say aye.

BOARD MEMBERS: Aye.

CHAIRMAN DAILY: Any opposed?

BOARD MEMBERS: (No verbal response.)

CHAIRMAN DAILY: Mr. Executive Secretary, I think you have a draft report.

MR. POINTON: Well, that's good. Thank you.

At this time, next on the program, for discussion will be the Olmsted Locks and Dam, but we're going to take a break. So we're a little bit ahead of schedule, but we're going to take the break right now so that we can keep Rich Hancock talking about Olmsted all lumped together in one concise session.

So let's take a break and we'll adjourn for 30 minutes. Thank you.

(OFF THE RECORD)

MR. POINTON: As we reconvene the meeting, General Walsh had to step out of the room to take a call from the Chief of Engineers. So Steve Stockton is sitting in for General Walsh.

And one clarification on what Steve again -- excuse me -- what Larry Daily mentioned earlier. The members' terms expire February 22, 2013, not at the end of December.

And I'm going to turn the mic over to Rich Hancock now to continue the discussion on the Olmsted Locks and Dam. Thanks, Rich.

MR. RICHARD A. HANCOCK: I'm Rich Hancock. I'm the Regional Business Director in the Great Lakes and Ohio River Division (LRD).

Board members, it's good to see you all again. This is the third Board meeting in a row that I have had the privilege of briefing on Olmsted. The first two times, I ended up talking -- for my hour, I ended up talking for about an hour and a half each. This time we have a half an hour scheduled, and I'm hopeful that we can stick to that since we just spent the day at Olmsted yesterday.

This first slide is just a review of the canalization of the Ohio River. And then you can see the steps here represent every one of the locks and dams in the Ohio River all the way from Pittsburgh down to Cairo. And we have right now -- the system has 20 locks and dams, the lower two being 52 and 53. So after Olmsted is completed and we remove 52 and 53, we will have 19 locks and dams along the mainstem Ohio River.

And this just shows a little history more specific to Olmsted. And you can see here that originally 52 and 53, constructed in 1928 and 1929. And then in 1969, we built the temporary 1,200 foot chamber at Lock and Dam 52 and then in 1980, the temporary 1,200 foot chamber at Lock and Dam 53 was completed and operational. Both of those structures were designed for about a 15 year life, and we have been keeping them going since then. The feasibility report for Olmsted was completed in 1985, and in 1988 the authorization in WRDA '88 [the Water Resources Development Act of 1988].

This slide is a slide you all have seen before, but the areas in white are areas that are either completed, most of them are complete, or in one case, the Operations Facilities, is a future contract. The tainter gate section is the part that we're working on right now. And part of this contract is also the next phase of the dam, which is the navigable pass. That's the wicket section. That's about 1,400 feet wide and that's going to be what lays down in the river when the conditions are right for open water conditions.

Here are the items we're going to talk about today.

I just wanted to quickly review what the Board had talked about in the last meeting. First one, endorse an increase in the 902 limit. That was a great victory from my perspective. I did note the motion this morning. I just wanted to offer my personal -- a little bit of a disappointment on that motion. I think that the tying an increase in 902 to a full federal funding actually increases the risk about getting an increase to the 902. So, you know, I understand why you're doing it. I recognize completely that the current funding model is unsustainable, and we need to do something to fix that. But I would have preferred that we had a separate motion on that rather than putting the condition on the increase of the 902. So that's my opinion of that.

Other items on here, revalidate support for the Capital Products Business Model, and Olmsted is the highest priority. Revalidated that the funding should be put on the highest priority projects, and then acknowledge that the Corps was the experts to make the "in-the-wet" versus "in-the-dry" decisions.

And these are future actions. Help LRD to prioritize. And what we intend to do is schedule a meeting, probably in January, invite members of industry to talk about that, to have a discussion and coordination on what we think the impacts of repairing 52 and 53 would be for the rest of the system because, our assumption is we're not going to get an increase in funding and we hope that we will, but if we don't, we're going to have to try to take out of hide within our already constrained maintenance program. So there's going to be impacts elsewhere in the system. So we're going to invite industry to participate in discussion and understand your concerns for where those impacts are going to have concerns for you.

I already mentioned the sustainable strategy for the IWTF [Inland Waterways Trust Fund]. We're all aware of that issue. We are getting some encouraging support when we talk to members or their staff, but, I think, there's a couple of plans out there floating around. So we'll see what comes of those.

I'm also going to talk later on in this presentation about our plan for slowing down or stopping the project if we don't get an increase to the authorization level.

Okay. So the first section of the presentation is going to deal with construction status. I know most of you were on the site visit yesterday so you have a good handle on that. So I'll breeze through it fairly quickly. I think there's a number of audience members that weren't able to join us. So if anybody has any questions, just raise your hand and I'll address those as we go through the slides.

Right now and as of the beginning of this past season, we had eight shells placed in 2010 and 2011. As you all recall, we had not necessarily good conditions both those years. We had the record flooding last year. The year before that, we had near record flooding with the Cumberland River, the national flood, and all the water that was coming down the Cumberland and Tennessee River.

In 2012, we had planned on placing four shells. We actually are ahead of schedule. We have placed five shells. It was a stretch goal for us to place six. As of right now, we have placed five. And we were hopeful that yesterday you guys were going to see the sill shell, SS-5, being placed. We had actually pulled the schedule back to try to do that in mid December. Unfortunately, with the rain that we got recently, the river conditions aren't conducive to having divers in the water, so we have pushed that back to the 7th of January. And we still believe that on the 7th of January we will place the next shell, which will be our sixth shell of the season. It's that great progress for this year.

This shows the tainter gate section that I showed on the second slide. We have five tainter gates, and then we have various shells that are being placed and they're color coded. For all that's placed in 2010, all that's placed in 2011. What we have placed so far in 2012, which is this darker green, SS-5, the sill shell, is what we intend to place early January. We consider that part of the 2012 season even though it's actually in FY 13.

And then what we plan on placing in the 2013 season is this color. And that will be a total of four shells in 2013. And we're pretty confident that we're going to be able to do that and finish the tainter gate shell placement. That's not going to mean the tainter gate section is completely done. We actually have to still award a contract to construct and install the tainter gates themselves. And we have a contract out on the street through the contractor to do that. We will probably award that contract sometime in January. We have their proposal in hand so we're looking at that right now. We have crafted that contract in a manner so that we're not obligating all the funds up front. And in fact, the plan is we would be fabricating the shells and then placing one per season based on the current funding stream. That's what we plan on doing. If the funding stream improved, we could up that schedule because we're going to have the contract with options to install those one per season. We can exercise those options at any point.

This is the navigable pass portion, the wicket portion. You can see that we have these nav pass shells, which are the largest shells in this section. They're smaller than the tainter gate shells, slightly smaller in overall horizontal dimensions, significantly smaller in the vertical dimension. They're actually easier to install for a couple of reasons. One is because they don't

have as big a vertical dimension, they're not going to be as affected by the water trying to push it downstream. The other is this is not quite as deep as the outside bend where the lock is, and we don't have to excavate 20 feet below the existing surface of the bottom to place the shells. These are pretty much almost on the existing bottom. We have to prep it and do some consolidation and things like that and put piling down, but we don't have to do a significant amount of excavation. And we also only have to line up one side. With the tainter gate shells, we actually have to line up all four corners to a pretty close -- within an inch or so. On this one, we only have to line up one side. So it's easier to construct. We think it will go pretty quick, and we are learning lessons as we go. So we're confident that this is going to be done.

You can see, if you look at this closely, and I know you can't read this, but we show '14, '15, '16, '17, and '18. We show the last two shells, nav pass shells, being placed in 2018. That's the contractor's schedule. I just wanted to emphasize this. Our schedule is to finish this in 2020. We anticipate that it's quite possible that we will see some water conditions that may impact our placement schedule. You know, the contractor is basing his schedule on being able to place this amount every year. It would be very nice. We hope that happens. But our schedule is 2020 for completing the dam and getting benefits out of the dam.

We talked about this last time, the duration of the shell movement.

And this just shows us some photos of what the water looks like right now. You can see we have these pier shells. Four of them are placed. We have five and six on shore right now. I'll show you in just a minute.

This shows some work that was being done in December. Stilling basin shell five, we're setting here. It's very heartening to me to go out there with all the work that we have been doing to actually see something going out into the river.

This is the pier infill and trunnion anchorages. This is the trunnion here. For those that were on the site visit yesterday, you can see the amount of rebar in there. It's very tight and we actually have designed an improved process using self-consolidating concrete to in fill this area that's going to allow us to essentially do it in a lift instead of with cold joints and multiple lifts along the way and vibration and all the other things that were previously required. It saved us a significant amount of effort, so that's one of the betterments that we have incorporated.

This shows Sill Shell five (SS-5) being constructed. And this is work in the casting yard. For those that were out there yesterday, Lower Pier 5 (LP-5), Lower Pier 6 (LP-6), those are the pier shells. This one was in essentially a plastic sheet so it could remain warm and cure. This one is still being fabricated for placement next season.

Okay. So that concludes the status of construction.

Once again, I mentioned that we have a contract out there to award the tainter gates. We have another contract out there to award the wicket construction, and we think that that will be awarded within the next couple of months too and it's set up the same way with options. So we'll have a base contract, and then we'll have options that we can exercise as funding becomes

available. That is a possibility for -- once again, if more funding became available, we could exercise those options earlier.

This section, I'm going to talk about the risk assessment of 52 and 53, the existing two locks and dams on the lower Ohio River. I briefed this in detail last time, so I'm not going to cover as much detail this time. We did a risk assessment and really looked at a 10-year, a 20-year, and a 30-year period and tried to determine what are the credible and significant failure modes that we think are going to fail within those periods of time.

And we define failure as losing pool, having an outage that affected navigation for 24 hours or more, or a potential loss of life. That was our definition of failure. We identified 39 failure modes. And then, as we had our experts look at that, we culled that down to the ones that we thought were significant, that we really needed to deal with.

And out of the 10-year period, which is the plan that we are operating under, because we're going to take another eight years to finish the dam and get Olmsted operational, and then we will start demolishing 52 and 53. So we think we need to incorporate and take action on the 10-year plan.

There are 11 of these significant failure modes that we think we need to address for Lock and Dam 52 under the 10-year plan, and there are 12 for Lock and Dam 53 under the 10-year plan. And we have an estimate of about \$96 million to address those failure modes. We think we need to address them over the next five to six year period. We would like to address them all at once, but we don't anticipate we're going to get a slug of money to do this. We have not, at this point, identified funding. We are looking at a plan to try to take that out of our maintenance budget.

These are examples of the failure modes. I talked about that last time. This is pretty much repeat information.

This shows for Lock and Dam 52. These PFM, those are probable failure modes. And you can see the numbers, 22, 28, and 31. We had, as I mentioned before, identified 39 failure modes, and then we culled that down to the ones that we thought were significant failure modes likely to happen. That's what these numbers are related to. It's just the number that we have tagged to that failure mode for wickets, for wicket-embedded hardware. It's interesting. This hardware mode, we actually had not - that wasn't on our list. It was identified as something we thought was a concern, but we didn't have it tagged as a significant concern until one failed. So while we were doing this analysis we had a failure, but that made us more aware of how significant that one might be.

So I won't go through all of those, but the thing I wanted to point out is we do have repair costs associated with each one of these failure modes, and we have impacts to navigation. These repair costs and the impacts to navigation, if we deal with these in a proactive manner, that's what we think it's going to be. If we deal with it in a reactive manner, if we wait until we have the failure, both the cost and the impacts would go up significantly. So that's the reason why we

think that these are significant, that these failures are likely to happen in the period of time, and we think we need to address them in order to only have that amount of cost and impact.

And this is for Lock and Dam 53. The same list. It increased by one versus Lock and Dam 52 because we had one additional failure mode.

And then the key points of the summaries. I already talked about this. We do think that we need to address these 11 modes for Lock and Dam 52 and 12 modes for Lock and Dam 53. That's the ones that we think are likely to occur in a 10-year period. We have a plan that we are developing to do that right now. We are trying to understand the impacts elsewhere in our system to try to address these things over a five to six year period, which would be somewhere around \$15 million a year, if you do the math.

Already talked about that. And once again, I mentioned this earlier, but we are planning on scheduling a meeting with industry sometime in January, and we should have a better handle on what the potential impacts are going to be elsewhere in our system. And we'll talk to you about that to make sure we understand from your perspective what the impacts might be.

The next section of the presentation is talking about the PACR [Post Authorization Change Report]. I have culled this down significantly because we have talked about this a couple of times already. But just to summarize, our current cost estimate is \$2.918 billion. We believe we will hit the 902 limit in the second quarter of FY 14. Benefit cost ratio. I'm not going to go into details. We talked about this in agonizing detail previously. This is actually a remaining benefit to remaining cost ratio of 9.9. This is the overall project benefit to cost ratio for budget development purposes, 3.7 to one. And then we estimate the lock and dam to be operational in 2020, so we'll start getting benefits of the project. The overall completion date is 2024 because that includes demolishing Locks and Dams 52 and 53, doing some other work constructing some dikes in the river and some other things, so that's why that's a later date. Funding will start getting freed up before 2024. We don't anticipate we're going to need a \$150 million a year through that date, probably through 2021 we will, but in 2022, it starts dropping significantly.

And these are the PACR recommendations that Olmsted is the highest priority. That we continue to fund Olmsted at an efficient level. I mentioned this already. We're looking at slow down, and I'm going to talk about that in more detail later on. We looked at various scenarios, so I'll cover that in a little more detail later on. I'll pause for questions before I go into the "in-the-dry." Anybody have any questions at this point?

MR. STEPHEN D. LITTLE: I do, Rich. Steve Little, Crouse Corporation. I would encourage you, as you look at Lock and Dam 52 and 53 options to broaden discussion to the industry, and I think in your PowerPoint you mention that a time or two, but you also seem to be using the Users Board necessarily as synonymous with the industry. So that may be a fine point, but the Users Board's purview, I think, is to concentrate on new construction and the fuel tax that goes toward O&M [Operation and Maintenance] and Lock and Dam 52 and 53 questions are different. So I would encourage you to think in terms of having an industry discussion when you start to look at your Lock and Dam 52 and 53 options.

MR. HANCOCK: Yeah. Right. Thank you, Steve. And I think that's a great point. And actually Mark Pointon made me aware of that when he was looking because if we have more than three Board members together at a time, it's considered an official meeting and we have to invite the public. So we do intend to do industry coordination, and I'm sure that you guys will probably have some involvement in that.

MR. LITTLE: Okay. We can help you with that, and then one other observation I would make, and that is, what we're talking about with the issues of Locks and Dams 52 and 53 is really a consequence of Olmsted not being completed.

MR. HANCOCK: Right.

MR. LITTLE: So, this may not fit in the budget world and how we look at things, but it is a cost overrun that we're having to spend dollars today for the next eight years, spending dollars at 52 and 53 to make some O&M decisions, which is 100 percent Federal. That's a consequence of the Olmsted project not being completed. So if we look at overruns at Olmsted, those dollars being spent at 52 and 53 are additional overrun dollars because of the lack of completion at Olmsted.

MR. HANCOCK: Right. Yeah. That's a good point too. I mean, we had not planned on maintaining 52 and 53 for this long.

MR. LITTLE: Right.

MR. HANCOCK: So those failure modes that we think we need to address now are because we have a little longer schedule. That's right. Any other comments at this point?

BOARD MEMBERS: (No verbal response.)

MR. HANCOCK: Okay. The next section I'm going to talk about is the actual "in-the-dry" versus "in-the-wet". We did a risk-based cost estimate for "in-the-dry", and we based it on a feasibility level design.

I talked about this in some detail in the last meeting. I just, kind of, wanted to quickly go through it again. We made some assumptions, \$150 million a year would be continued. We were going to continue the tainter gate portion "in-the-wet". And then we actually had made a decision now, and I'm going to show you the memo in a minute, to continue "in-the-wet" based on a lot of risk factors that we have considered.

Quickly, I'll summarize the "in-the-dry" design concept that we looked at. Here is the tainter gate section. Here's the fixed weir that's already constructed. So we were going to build this in two phases. This cofferdam would be constructed and this would be open for navigation. It's about 790 feet wide. The second phase would be this cofferdam construction, and this would be actually already constructed. The wickets would be installed and this would be open to navigation, about 700 feet wide. We actually had our lab down in Vicksburg, ERDC (Engineer

Research and Development Center) model this for us, mathematical modeling, two-dimensional, three-dimensional modeling. And we think that there are probably some river conditions where we might need a helper boat, but in general, this would be doable. We can navigate under these conditions.

So the findings are the “in-the-dry” construction using traditional cofferdams with all of the assumptions that we made was going to save about \$100 million. There are many things that weren't considered in that because we had to make some design assumptions. Things that weren't considered are, “What are the termination costs for the existing contract?” The likelihood that we would have adverse river conditions that would affect the cofferdam is fairly high, just as high as they are for the traditional “in-the-wet.” In fact, one of the reasons why we went with “in-the-wet” was because we thought it would have less impact in navigation. We did factor in the cost estimate having an overtopping in the cofferdam construction, but it's going to take longer. And to me, that's one of the most compelling pieces of the argument because we'd have to construct the cofferdam, and then we'd have to do the work inside. And then we would have to remove that cofferdam, construct another cofferdam, do the work inside, and then remove that. And if you look at the total schedule, it's going to add up to two years to the completion schedule and we're going to not realize the benefits from having Olmsted completed. And that coupled with the fact that the “in-the-wet” method this year, I think, has been proven out. We actually have executed ahead of schedule this year. We had some more reasonable river conditions. So we think the risk is much lower to continue “in-the-wet.” We will get the project completed sooner.

I'm not going through all the considerations. There were several other considerations for “in-the-dry”, such things like funding stream. We wouldn't have money to award a fully-funded contract so we would still need to either use a continuing contracts clause and incrementally fund it, which makes the contractors very nervous, or we would need to go with a cost reimbursable contract, just like we did for the current contract that we have awarded. So those kind of considerations enter into the equation too.

I'm not going to go through this. This just talks about some of the efficiencies that we found with the “in-the-wet” construction.

CHAIRMAN DAILY: Rich, I'm going to make a quick interruption here.

MR. HANCOCK: Oh, sure.

CHARIMAN DAILY: We have coffee service being brought in and more being prepared. So if members of the Board would like to come and get a cup of coffee, they can. I would like to thank Ingram Barge Company for that.

MR. HANCOCK: Thanks, Larry. I hope that doesn't mean I'm putting everyone to sleep out there.

CHAIRMAN DAILY: No. No.

MR. HANCOCK: Okay. So the memo that we got from General Walsh, and here is an actual copy of the memo dated 19 November, two pages long. This last section, Recommendations and Direction, he actually endorsed the “in-the-wet” recommendation and directed us to proceed in that manner.

There were also some other things in that memo that you can't read. So I kind of summarized them in this last bullet. Develop an improved cost and schedule metrics. This is Earned Value Management for large construction contracts, and we have things called CPI [Cost Performance Index] and SPI [Schedule Performance Index] that are related to cost indexes and schedule indices. So we have been developing those metrics along with headquarters staff and are briefing those in IPRs [In Progress Reviews] on a monthly basis.

One of the things that Congress asked us to do was an independent review of our “in-the-dry” cost. We had already an ATR [Agency Technical Review], which is another set of eyes look at that, and it was prepared by our Cost Center of Expertise in Walla Walla, which is outside of our region, risk-based, same methods, so we think it's an apples-to-apples comparison. But Congress or the Congressional committee staffers actually wanted us to go through CAPE, which is the Cost Assessment and Program Evaluation office, C-A-P-E, of the Department of Defense. And they told us to go through them to get this cost estimate. I coordinated with them over a period of about a month. At the end of a month's coordination, CAPE said, "We don't really have the capability to look at large Civil Works projects." They're more familiar with weapon systems and things like that, but they do understand the methods to do independent reviews. So we're going through Batelle, going through our traditional contractor, to get an independent team, a non-government team, to look at the cost estimate comparison. And then we're coordinating with CAPE so that they can at least understand the process and give their endorsement of the process we're going through and wheel that back to the subcommittee staffers in January. I'm going to go back with Mark Mazzanti and probably David Dale, brief them on those results. At this point, we don't anticipate we're going to find any surprises in that, but that is one of the do outs that we had by 30 January.

By 15 February, we're going to have a contingency response plan developed for a failure of Locks and Dams 52 and 53. So if we did have a failure that impacted navigation, we will have response plans on how we would deal with the various types of failure that might occur. And then also by 15 February an orderly shutdown plan if we don't get a 902 increase.

Once again, we talked about that in a little more detail. We have a plan that we're operating under right now. We looked at various scenarios. Our plan right now is to continue constructing at an efficient level, which is \$150 million a year, and then shut down when we have to shut down before we hit the 902 limit, which would be essentially the first quarter of 2014. We would need to shut the project down and put it in caretaker status. But I'll talk about that in some more detail in a minute.

I left this slide in here. This is the next phase of my briefing, just to be able to show some of the alternatives that we looked at for funding stream. I'm not going to talk about this in detail. I'm going to summarize the process. I talked about this in great detail in June and then again in August during our meetings.

This was alternative four that we looked at. And what we were doing is looking at various scenarios of slowing down Olmsted, pausing Olmsted completely, and freeing up funding from the Trust Fund and the federal share to fund other priorities in the system. This alternative four, the reason why I show this is because that was the one that offered the greatest benefit out of the ones that we looked at. It was still significantly less than the benefits from Olmsted, but we looked at 4-C, option one, which was divert construction funds to the Lower Monongahela Locks 2, 3, and 4 project. And actually looking at the Lower Mon project, most of the benefits come from completing the main lock chamber. So we wouldn't complete the full project, but we would complete enough to get most of the benefits out of the project. So that would give us \$187 million a year of benefits.

The other thing that a six-year pause would allow us to do if we decided to was to address these nine major rehab projects (Alternative 4-C, Option 2). I show the amount of annual benefits next to each one of those that we could achieve by addressing those. Or we could address one construction contract and five major rehabs (Alternative 4-C, Option 3). So these various options are all part of alternative four, and these show the benefits that we would achieve from addressing those projects.

Once again, the benefits from Olmsted are much higher than any of these options so that resulted in our recommendation to continue with Olmsted.

In addition to those four options, we looked at a couple of other options, three other scenarios. One was full funding. If we got all the money, what would that do for us? And we think that if we got all the money for completing Olmsted, it would allow us to complete the total project four years earlier. We'd get use out of the actual lock and dam two to three years earlier. So it would provide some significant benefits. We haven't dived into a great level of detail in this plan because getting full funding right now, to me, is probably not real likely.

A more likely plan is probably this. We talked about the PACR is getting more money than \$150 million a year, and up to \$215 million a year would still allow us to pull the contract back by a year and a half to two years, we think, because we would be able to construct and place more of the nav pass shells. Right now the plan is three nav pass shells a year. We could do five and maybe six per year if we got an increase to \$215 million to \$220 million a year, somewhere in that range. And, I think, that's probably a more likely scenario than full funding.

But we looked at various slowdown scenarios. And actually a super slowdown scenario that would get us all the way through FY 15, continue working on the project, have the contractor out there so he doesn't lose his expertise, but if we didn't get an increase in the 902, we could get through, under these various plans, FY 14 and even FY 15 and still have capability onsite.

And then we looked at the current pace, \$150 million a year, and this scenario is actually the one that we are operating under. Based on our discussions with staffers and members, we feel like there is support out there for an increase in the 902. And based on us being optimistic that the 902 will get addressed, we are proceeding under this scenario because this allows us to

complete the project as soon as possible. Any of the slowdown scenarios means you're slipping the completion date, so you're not getting benefits out of the project. This one, as long as we get an increase in the 902 limit before the second quarter of FY '14. And actually, I would say, before the first quarter because the first quarter would be when we would start going into a shutdown mode. So we're going to have to have an increase to the authorization limit by the first quarter of FY 14 or we're going to start shutting the project down to put it in caretaker status.

I put here, "suspend or terminated." Really it would be essentially suspended, but it would be what we call "caretaker" status. We don't intend to terminate the contract unless it becomes apparent that we would continue for multiple years without an increase in the 902. In that case, we would have to terminate the current contractor which incurs some significant additional costs.

So our plan, the current plan that we're operating under, is to continue on full speed ahead through 2013, and then if we don't get an increase to the authorization by the first quarter of 2014, we would stop the project and put it in "caretaker" status.

Any question about that?

BOARD MEMBERS: (No verbal response.)

MR. HANCOCK: Okay. So we're getting close to the end of my half an hour. How am I doing for time, Mark?

MR. POINTON: You're all right.

MR. HANCOCK: Okay. Good.

So the key message is, once again, the benefits of completing Olmsted are compelling, \$875 million a year are the estimated benefits for completing Olmsted.

We need to fix the Trust Fund issue, to the funding stream issue is probably a better way to put that, for the IMTS [Inland Marine Transportation System]. We all recognize that and we're hopeful that that gets addressed. In my mind, the increase to the 902 doesn't need to be linked to fixing the overall funding stream for the Inland Marine Transportation System. If you link those things, I think it increases the risk that you don't get an increase in the 902 for Olmsted. So it increases the risk that we actually may have to shut down the project and put it in "caretaker" status. But that's my opinion.

And then this number came right out of the Capital Projects Business Model, \$380 million a year, and we think that's about right. That would be a sustainable number for our system. We would be able to get to our highest priority projects and address them with that kind of funding stream.

And then the last message is that Locks and Dams 52 and 53, excuse me. The second to the last message is that 52 and 53 require some fixes to these significant failure modes, and we intend to implement those.

And then I mention a full funding option here. Once again, it would save us significant time and money. I think probably more likely is that if we got an increase in funding, up to about \$215 million a year, we'd still realize most of those benefits, and we could still pull the project back up to two years with an increase in funding.

And that is the completion of my presentation. Let me see what kind of discussion we generate.

MR. WOODRUFF: One question I had, that \$250 million you're saying we save, does that include the money you might not have to spend at 52 and 53 if we get it done in a timely manner?

MR. HANCOCK: No, it does not include that. And once again, I guess, I'll clarify that there are different kinds of money.

MR. WOODRUFF: Well, no, I understand, but in terms of the cost to the nation and all of its taxpayers, that's money.

MR. HANCOCK: Right. Absolutely.

MR. WOODRUFF: Ninety-six million dollars that we might not have to spend if we could speed this up a little bit by providing the resources to the Corps to allow you to expedite completion of that. And that \$250 million doesn't include the benefits that would be realized to the nation by having that project completed and increase transportation efficiency.

MR. HANCOCK: Absolutely right. Yeah. Good point, Matt.

MR. NOBLE: Rich?

MR. HANCOCK: Yes, go ahead.

MR. NOBLE: Scott Noble.

I can appreciate your personal disappointment with the resolution, the clarifying resolution that I asked for. It doesn't diminish – we recognize the value of Olmsted, but maybe a way to relate to this, it's sort of, like, we've maybe created in our minds a fiscal cliff where we've reached that point where if this issue is not resolved, we'll not find a better point in time to take a stand.

MR. HANCOCK: Right. Right.

MR. NOBLE: Now, obviously, within Congress and both the House and the Senate, there seems to be even bipartisan support, initial support, for solving the problem.

MR. HANCOCK: Right.

MR. NOBLE: And what we certainly would hope is that the Administration now, and certainly with the Corps, as represented, will push hard to go forward with it because again, we don't want to see it stop, but at some point we've got to say enough is enough.

MR. HANCOCK: Right. I understand. Thanks, Scott. Any other questions, comments?

MR. LITTLE: Yeah. Rich, I just have a couple questions. We have the General's memo in the handout.

MR. HANCOCK: Okay.

MR. LITTLE: Would the preceding memo from General Burcham to General Walsh that would help us understand the decision process here?

MR. HANCOCK: Actually, I think we did a detailed briefing. I don't know if we actually built a memo for that, but we had a slideshow presentation. There were several memos that exchanged hands since January of last year. That was when that we got the first memo from General Walsh that told us to look at funding alternatives and contracting alternatives and methods of construction. So we have that memo. I think it was dated 30 January. We replied to that with a memo. General Walsh sent us another memo. We then replied, I think, with a slideshow presentation that looked at the "in-the-wet" versus "in-the-dry", and then we got this memo from General Walsh in November.

MR. LITTLE: Right. And here's my question. We saw an excerpt from the memo of General Walsh yesterday during the briefing, and then, I think, we had the memo itself here, which I haven't read yet because we just received it.

MR. HANCOCK: Right. Yeah, it's kind of hard to read.

MR. LITTLE: Yeah, I can read it, so I'm asking. Do we need more information than this to understand the decision process? I'm not sure what this memo says, but I'm just asking for the Board's ability to assess the decision and how it was derived, but do we need something more than just a legible copy of the memo but any preceding memo?

MR. HANCOCK: Right. We can certainly provide whatever information we have used to inform General Walsh in his decision. That's not a problem from my perspective.

MR. LITTLE: Okay.

MAJOR GENERAL WALSH: And the reason why I asked them to put the memo in here is just so it would be part of the record. So, I mean, you're welcome to have the official record.

MR. LITTLE: Okay. Thank you.

MR. WOODRUFF: Yeah, I'm just looking at the references set out in the memorandum. It looks like there's references A through E, and maybe that's what you were looking for is some of the background that led up to this and, I think it would be – I can sort of read this, but maybe we could get, like, PDF versions of all of those so that we can have a better understanding of the process.

MR. HANCOCK: Oh, sure.

MR. POINTON: Yeah, a copy. A copy will be provided for the record, and I'll send it to the Board members as soon as I can get a copy and get it out to you all.

MR. HANCOCK: Thank you.

MR. POINTON: Tomorrow most likely.

MR. WOODRUFF: Okay. Thanks.

MR. HANCOCK: Yeah. Thanks, Matt and Steve.

MR. WOODRUFF: I appreciate that.

MR. LITTLE: And then Rich, I think at the last Board meeting, there was reference to a sources notification, what you all refer to as a sources sought notification. And it may be the “in-the-dry” versus “in-the-wet” issue. Did you all do that?

MR. HANCOCK: I don't recall off the top of my head what the status of that is.

I don't know. Anybody from Louisville? I see people shaking their heads.

I don't know off the top of my head, Steve, what the status of that is. I'll have to get back to you on that.

MR. LITTLE: Okay. Yeah, if you could for the record.

MR. HANCOCK: I know we did have some conversations with contractors about this, and that's why we're aware that we would have probably some of the same issues that we had when we advertised the first time around where we got no bids. And some of the concerns that the contractors expressed at that time were a very long duration contract, high risk, dynamic river, and an unsure funding stream. And that's why for that large of a contract we got no bids, and we ended up having to go back and re- advertise with a cost reimbursable contract which

shifts risk from the contractor to the government. So we would still have those types of issues. David, do you want to say something?

MR. DAVID F. DALE: Yeah. I think we didn't do a sources sought. We did recognize what the Board had asked to do. We went back and talked to the Office of Counsel and they said you really can't go out and do a sources sought for existing work that's already under contract. That's why we haven't done that sources sought because we have a contract. And Counsel basically said you can't go solicit sources for stuff you already have under contract until you terminate that contract and we haven't done that. So that's why we haven't completed the sources sought.

MR. HANCOCK: And we don't intend to at this point.

MR. DALE: Correct.

MR. HANCOCK: We don't intend to terminate the contract. Thanks, David.

MR. LITTLE: So the answer is you're precluded from doing that, Mr. Dale?

MR. DALE: That's our Office of Counsel position, yes.

MR. LITTLE: Okay. Thank you.

MR. HANCOCK: Thanks. Any other questions or comments?

BOARD MEMBERS: (No verbal response.)

MR. HANCOCK: All right. I think I'm done then. Thank you. Mark, what's next on the agenda?

MR. POINTON: There is an opportunity for some dialogue with General Walsh and the members about some of the issues that have come up from the presentation on Olmsted. I think they've actually mostly discussed their issues with Scott Noble's motion earlier today. But the floor is open to the members and General Walsh for any dialogue concerning Olmsted and the Inland Waterways Trust Fund.

BOARD MEMBERS: (No verbal response.)

MR. POINTON: You did a great job, Rich. Not a word coming out of the Board.

CHAIRMAN DAILY: Third time's a charm.

MR. POINTON: I understand. Seeing no discussion along this item, we're going to move on to the next item on the agenda. We'll have Mr. Joe Kellett from the St. Louis District talking about the Mississippi River Locks and Dam 27.

MR. KELLETT: Good afternoon. I'm Joe Kellett, the Deputy for the St. Louis District Corps of Engineers in St. Louis.

Thanks for inviting me here to talk about Locks 27. I actually learned something this morning actually from Mr. Daily from your opening remarks. I even wrote them down, sir. You said that when you were talking -- your description of the navigation industry you said, "You hardly ever hear of us unless we've done something wrong." And I thought to myself, I can kind of identify with that. I've been in that same spot. It's kind of like an offensive lineman on a football team. He never gets his name called by the announcer unless he's done something wrong. And actually, I thought about it a little bit further. I think working for the Corps of Engineers is more like being a referee. And I would say you hardly ever hear of us unless someone thinks we did something wrong. So I did appreciate your opening comments though, sir.

I'm going to talk to you about something that I think that the Corps of Engineers did actually very, very right, and that's our work here at Locks 27. I think you'll see, as we go through it, that it's really been a terrific project for both industry and the Corps of Engineers.

If I could, I just wanted to talk a little bit about the history of Locks and Dam 27 and, kind of give you all a little background about it. I know many of you know much about Locks 27, but if you'll bear with me as I go through. Lock 27 is the last lock that was built on the Upper Mississippi River. So much of what the Corps learned as they were constructing the other locks was incorporated into its design. It was finished in 1954. I'm willing to say that that's one of the points that I'm very proud of the folks in the Corps of Engineers. It's really been operated now -- we started our major rehab in 2008. So it was really operated for about 54 years without any major rehab. And that's really a tribute to our folks in operations. In fact, I will tell you, toward the end when we raised the lift gate, this end of it, when we raised the lift gate to the very highest, to actually pull the chain up, the links would no longer bend so one of lock operators had to stand up there with a sledgehammer and hit each link as it passed onto the cob. So our operations folks did a terrific job just keeping this lock operating until we got to the point where we could do the major rehab.

It is constructed in the Chain of Rocks canal. It's located downstream from the confluence of the Missouri and Mississippi Rivers. And a very important point -- it's just above St. Louis which, as you know, is where most of the tows are made up after they come through the lock and dam system. So it is a very critical lock on the Mississippi River. There is no dam associated with this lock, as many of you know. There is an overflow structure in the main part of the river through the Chain of Rocks, but the canal, it actually circumvents that part of the river. So there actually is no dam associated with it.

It operated all those 54 years without much work until we got into the '90s. We did some significant work on the lift gate there when it started to fail. We had to go back in and weld that, add some additional plates, to bolster that lift gate. And we also took out some of the embedded metals, some of the rubbing surfaces at that point in time, and replaced them. And then, of course, through the years we've done some lock control modernization, which we put in electronic controls rather than the old switch gear we had. And finally, in 2002, we had a major

rehab report approved. And then in 2008, we received our initial money, and we actually had to break that down.

I'm going to show you the next slide. We actually had to break that down into components for the major rehab. And the very first component we were able to start with this major rehab was lighting, and we could start it because the benefit to cost ratio for it was 40 to one. So a tremendous payback, that's what allowed us to start it initially. And then actually I think we were in a great position when ARRA came along in 2009 to say we had a started project and this is what it's going to take to complete it. So if you look at -- I'm going through this first and then I'll go through the project, but you'll see that ARRA -- actually, when we picked it up, we actually picked up about \$28 million in ARRA funds to work through this lock rehab.

This gives you a breakdown of all the things that we're actually performing. Everything that you see there with the blue arrows was actually performed under ARRA. What you see with the red arrows was actually performed, as we went through this, with Operations and Maintenance funds. It actually wasn't part of the major rehab. I'm putting it altogether because at the end of the day, we're going to have a lock that is essentially completely modernized. And then you can see the actual work that we did as part of our normal Construction General along with the funds from the Inland Waterways Trust Fund was really only that lock lighting and lifting. The vast majority of the work here was actually performed with ARRA funds and O and M.

And then finally, what you see down there at the top left corner of the picture is we actually improved the dikes under the regulating works program, actually the same program that's removing the rocks there at Thebes. Under that the regulating works program, we actually improved the dikes at the entrance to the canal so it was easier for tows to line up and get into the canal and come on up into the lock.

So overall we've pulled funding from a variety of programs to actually put together a total rehab package that's going to make this lock be able to stand up hopefully for another 50 years.

One last point. As you can see, the one item that we are working on right now is on the main lock miter gate. We actually have those -- I'm going to talk about that a little bit more in a second, but we actually have those rehabbed and we're in a de-water stage right now.

MR. WOODRUFF: Before you move off of this picture -- this is Matt Woodruff. There was some damage to a cell. I know there's been some discussion. Is this a good picture to tell us what that cell is, or are we going to see that somewhere else?

MR. KELLETT: Yes, you're going to see that at the end.

MR. WOODRUFF: Okay.

MR. KELLETT: I thought we'd have a little discussion about that.

I just wanted to show you the funding sources again that I've been talking about. By the way, I took this picture on Monday when I was out there. So the lock is de-watered and we've got our contractors mobilized and we're starting to work on the site. We're actually doing two things under this de-watering. We're replacing the downstream miter gates, and we're going to replace the embedded metals here also.

But again, you can see how that funding breaks down. And you can see for about \$53 million total from all those programs, we're going to have a lock that's going to serve this nation for a long time to come. So, I think, really a terrific bargain for the taxpayers, and, I'd say, a great piece of work by the Corps of Engineers to design something and construct it this inexpensively. And I will add we also will have completed the work over the course of about four years. So, I think, we got through that work fairly quickly. It's a great news story.

If I could talk a little bit more. We actually have fabricated these miter gates. They were fabricated down in Tennessee, and we have them ready to go. We're getting ready to ship. We are somewhat concerned about the low water, but we think we've overcome that, and we think we'll be able to get them up to Lock 27. We'll install the new miter gates on the main lock, and then we'll continue on with replacing the embedded metals.

We closed the lock on the 10th of December, and the de-watering was completed on the 13th of December. And we're going to re-water it back on the 27th of February, and it will be back in service by the 1st of March. And I feel very confident with these dates that we do have two very good contractors out there working. J.F. Brennan, who has done quite a bit of lock rehabs for us up and down the river over the years, and then Massman is actually out there as a sub and they are working on that cell you asked about earlier. But two very good contractors that are working in tandem here to make sure that this goes off without a hitch.

Now, if I could, I'm going to talk about that downstream guide cell. The downstream guide -- you can see it here. Actually, it split open earlier in the year, about midsummer. And what happened was because of the extreme low water, parts of the cell, the rubbing surface of the cell, actually were exposed. So normally we have a portion of the cell in which the barges can rub up against and then get into the lock.

What happened was the water dropped so low that we were actually down below that surface. So as a tow came in, it actually caught one of the sheet pile and then essentially unzipped the sheet pile where they are joined together. When that happened, the rock that was inside that cell came out and that that essentially weakened the cell to the point that the barges could no longer rub up against it.

Currently, during the shutdown, we have that cell -- there it is. I took that picture also on Monday. We have that cell ready to go. You can see off on the right, that's actually the rock that we took out of the cell. So we've taken all the material out of the cell.

Beginning next week, Massman is actually going to pull that cell, and it should be completely out of the way.

Now, the next phase, of course, is when are we going to replace it? That's the next question, when are we going to replace that cell. We put this into our conditional assessment, and it does show out as a critical item, but in these days of doing less with less, there are many other things -- not many, but there are other things that are actually going to go to the -- that are in a more critical state than this cell for this fiscal year. We have put a package together with the expectation that we would get some funding next fiscal year to address putting a new cell or some type of surface in there that the tows could use to align themselves before they go into the lock.

Actually, here are two more shots from Monday. You can see that's the upstream sill there that's de-watered. I think that's scaffolding for the folks to go down into the chamber. And then on the downstream side, you see the bulkheads in place where they de-watered. So we are making progress on finishing out the rehab for Locks and Dam 27. Yes, sir?

MR. HETTEL: Joe, Marty Hettel with AEP. What's the cost to replace this cell?

MR. KELLETT: A rough guess, rough guess, a total of pulling the old cell out to put a new one in is about two and a half million dollars.

MR. HETTEL: All right. And it's not going to be installed while you have the lock closed now. Is that correct?

MR. KELLETT: No. It's not going to be installed while we have the lock down.

MR. HETTEL: And installation takes how long?

MR. KELLETT: I would guess for a cell like that, probably two weeks to 30 days, depending on --

MR. HETTEL: So we'll be looking at another closure to install the cell?

MR. KELLETT: I'm not certain of how we're going to handle that. We haven't gone through exactly how we'd handle that operation. I'm certain there's going to be some restrictions. It may be that we're able to work it where we allow certain hours of operation for locks to move in -- or for navigation to move in a lock, and then we'd work on the cell in those off hours.

MR. HETTEL: Certainly, and I know the fund monies we've been discussing here today, two, two and a half million dollars doesn't sound like a lot to avert another 15 to 30 day shutdown. I would certainly hope that we could get this done while the lock is shutdown before you reopen in March of next year.

MR. KELLETT: Okay. Anymore questions?

BOARD MEMBERS: (No verbal response.)

MR. KELLETT: No. Thank you for your time today. I appreciate it.

MR. POINTON: Moving on with the agenda. Jim Walker is going to give us a brief update on the IMTS Level of Service for our lock operations.

MR. WALKER: Okay. You won't have slides in your package for this presentation. It's an update of a presentation that was given at the last Users Board meeting. It'll just give you a real quick run through as far as any changes that have taken place since the last briefing. So really we can get through these slides quite quickly.

Here you see the mission statement for the navigation program -- just to make sure that we are all keeping our focus on providing you with a safer, reliable, efficient transportation system out there.

Our background behind what we're doing for those who weren't at the Users Board Meeting 67. Our present approach is unsustainable driven largely by the Fiscal Year 12 budget reductions where we had the low commercial use navigation projects identified as a low-performing program and subject to a 50 percent reduction.

This action is not resulting in any closure of locks, but rather that we're adjusting the operating hours of service. We look for it to extend the life of the asset, to reduce our operating expenses and be able to apply those savings into lock maintenance so that we can keep these locks functioning into the future.

As far as terminology goes, you've got a different set of definitions for river systems based on the commercial cargo in terms of ton-miles, and then you've got the navigation locks that have their levels of service established on an individual lock basis based on the commercial lockages.

You see that the full-service lockage -- full-service locks are those with having greater than 1,000 commercial lockages a year. And then we've got varying levels below that. Five levels of service below that. And so that actually there can be low commercial use locks on a high-use river system.

Our process that we used to do these evaluations was to go in and pull the Lock Performance Monitoring System data associated with commercial and recreational lockages at those individual locks, came up with our criteria, the locks that have less than 1,000 commercial lockages, there's 54 of those on 19 different systems, and establishing this review of the present practice across the nation, across the IMTS.

Here you see the six different levels of service starting with the Level One being the full level of service, 24 hours a day, seven days a week, 365 days a year. You then drop to Level Two having two shifts; Level Three with one shift; Level Four with set times per day; Level Five, weekends and holidays; and then Level Six is the service by appointment.

On the performance guidelines as far as the actual number of commercial lockages associated with each of these levels. Again, 1,000 or greater is the full service, 500 to 1,000, less

than 500 commercial lockages, then we see the limited commercial locks, little to no, and then no consistent pattern of lockages.

So this is a method that is very transparent in terms of the data that we have and our ability to, based on this information of actual usage, apply these different levels of service. And what we've seen up to this point had been that various parts of the country had undergone some level of service adjustments, but there wasn't any national consistency to it so that you saw, in the various parts, what places had done some changes in levels of service, but the fact that they hadn't been consistently implemented, was the basis of us taking this initiative on.

As far as seeking results on the levels of service, what we're seeing is the reduced wear on the lock operating components in terms of individual recreational craft or not having to operate the gates as often. You're seeing the reduced lock operating expenses that can be applied to the maintenance funding. This is mainly a higher labor savings of our lock operators, where we are currently operating with more lock operators. And so you're seeing a full burdened cost of around \$150,000 a year of salary plus benefits and everything that could be for every one of those going down, you're seeing that much more money converted over to the maintenance program.

We're looking to extend the service life of these infrastructures and to keep it functioning. And you'll see the graph at the bottom there has to do with our trend of scheduled and unscheduled closures. The green that you're seeing, and the numbers are quite small, but that's in thousands of hours of scheduled closures. The red are unscheduled closures, and the black is the unscheduled closures due to mechanical failure of the components.

And that's the real issue that we are -- as far as our high priority goal with OMB is tracking the mechanical failure unscheduled closures that are out there. And our trend has been on the increase over the past 10 years.

In terms of the implementing these levels of service changes, we did it in three different stages. This was really to make sure -- we tried to minimize any sort of adverse personnel actions on our hired labor workforce, and it gives us time to do retirements, attrition, potentially moving people to other locks, and so it was a three stage for those low use locks on low commercial use systems we were implementing in October. We did the moderate use systems effective 1 January, and we'll implement those changes on the high commercial use river systems on the 1st of April.

Feedback since the last Users Board meeting. The Alabama and the ACF (Apalachicola, Chattahoochee and Flint) Rivers System, there was significant interest in that. It really led to a clarification of level six where that was commercial lockage by appointment and how we addressed it. There was no mention of recreational lockages in the guidance that came out. So one line of thinking was well, if there's no mention of it that means there are no recreational lockages. What we've said is that we'll still have opportunities with exercising the gates to be able to do some lockages, but it won't necessarily be on a set basis. They're going to work that at the district level with their stakeholders and resolve that. This isn't something we're going to try

and establish from the national level, but we're going to leave that to the districts to work that out.

We did have a Congressional inquiry on the MKARNS [McClellan Kerr Arkansas River Navigation System], where they were looking at wanting to stay with 24/7 as opposed to dropping to level two that was two shifts a day. At this point, we're showing good flexibility in terms of the -- with the Montgomery Point lock closure and getting that back up. We are showing that flexibility of going to 24/7 operations for a couple of weeks after that lock reopens to be able to move the backlog of traffic, but we're staying with that two shifts a day designation at this time.

And then the Allegheny system, I think is a bright spot in that the users are understanding the situation that the federal government is in, and they're looking at opportunities, creative ways of trying to improve or increase the level of service at some of their locks. They've come to us, talk about possibility of contributed funds or even providing the lock operators, if they could pay the salaries of retired lock operators or something. But at least it represents coming to us and we appreciate that creative, innovative ideas on how they can address the level of service issues that they're having.

So really that's it. We haven't seen -- for the most part, I think, that we've seen that the basis of doing these lock levels of service adjustments has been a reasonable approach. People have seen that the data on which it's based. This is our first year of implementing. We're going to try this for a year, see how it works. We're saying it's not set in stone, but we'll be able to make adjustments and tweaks. We'll also be doing evaluations as a new year's data comes online. Our long-term plan is to take a three year average of that. So in this case, it would be Fiscal Years 12, 11, and 10, and then as the years increase, we'll drop off the low year, the last year, the oldest year, add the new year to that data, and reassess and make adjustments.

Also, we've said that if new industry comes on, we won't force them to wait three years before we would make the level of service adjustment. It's not just a marketing ploy, but if they're really building, they are coming online, they'll begin to use the system, then we'll take that into account in terms of our adjusting the level of service accordingly. So, I think, there's good flexibility there. It's one of those, you know, difficult situations as far as constrained funding and its impacts, but by and large, I think, it represents a reasonable approach that can be put out there, understood, and discussed, and we'll make our adjustments as we go forward.

That concludes my remarks on that topic, unless there are any questions.

MR. LITTLE: Question, Mr. Chairman. Jim, thank you for the presentation. So about the data that you argue, what year's data are you basing these decisions off?

MR. WALKER: This particular year's effort was based on the Fiscal Year 10 data. We decided -- we opted not to go back to Fiscal Year 09 because of the recession that was in place and the lower numbers that were there that year. We've been able now to go back and add our Fiscal Year 11 data to that and saw that there was very little change. And now we're getting into Fiscal Year 12. We've just finishing getting the numbers. There's still preliminary numbers from

our data systems as far as getting the final quality assurance check on the data, but again, seeing not substantial change. What we've seen is a slight increase in trend of the use of the waterways, which we're seeing is a bit of a rebound of the recession that we were experiencing in Fiscal Year 09, but not to the point that it leads to significant changes in what we have identified from levels of service.

MR. LITTLE: All right. Thank you.

MR. WOODRUFF: Mr. Chairman?

CHAIRMAN DAILY: Yes.

MR. WOODRUFF: As an observer today representing a member who couldn't be here, I don't have, I believe, the discretion or the ability to offer a motion, but it was mentioned earlier by General Walsh that Mr. Walker is going to attempt to retire at the end of this year. And, you know, in his position as the Navigation Branch Chief and the Navigation Business Line Manager, when this industry has had a concern or a problem, he's generally been the first person that we'd call and he's always taken those calls and, I think, worked very hard to serve the Nation and serve the navigation industry.

And so I'd like to suggest to one of the members of the Board who can make a motion that perhaps they make a motion to thank Mr. Walker for his 36 years of service to our Nation through his work at the Corps of Engineers and to also thank him for the professionalism and the partnership that he's shown to our industry and this Board, especially as we've worked to find solutions to the problems before us in terms of the recapitalization of our waterways and working to help us figure out the best way to deliver safe and efficient system of inland waterways to the Nation. And, I think, we should also wish him fair winds and calming seas should the General see fit to sign that sheet, if it ever makes it to his desk.

MR. NOBLE: I'll make that motion.

CHAIRMAN DAILY: Second. Mr. Noble. Any discussion?

BOARD MEMBERS: (No verbal response.)

CHAIRMAN DAILY: All in favor say aye.

BOARD MEMBERS: Aye.

CHAIRMAN DAILY: And no opposed. Thank you much, Mr. Walker.

MR. WALKER: Thank you. I appreciate that.

MR. POINTON: I don't believe Chairman Daily or I have had anyone indicate they wish to make a public comment. We are now at the public comment period. If you wish to make a public comment, please identify yourself, and step up to the mike and make your brief statement.

AUDIENCE: (No verbal response.)

MR. POINTON: Seeing no movement in the audience, I'll move on to the closing remarks by the Chairman and General Walsh.

MAJOR GENERAL WALSH: Well, I'm sorry. I was out on a good portion of the meeting. I was working on some drought issues that we have particularly down at Thebes and what we're going to work there in some future meetings that we're going to have to have tomorrow. But I find these meetings very useful to me and, I think, the Administration as well as we take your recommendations on what we should be doing with your marine transportation, Inland Marine Transportation System.

I think it's also important that we continue to remind folks that we live in a maritime nation and that our water and our seas and our harbors, inland as well as coastal, are a treasure that we've put together over the last century, and we need to make sure that we maintain them and put new ones in effect so that we can support the economy of this nation. Thank you.

CHAIRMAN DAILY: I want to again thank everyone for coming to this meeting. I take the personal guilt on not setting up the coffee beforehand. Mark Pointon had asked me about it, and in the process of cleaning out the office after 30 years of accumulated junk and Christmas and a half a dozen other excuses I'm not going to give you, it slipped my mind. I will urge the next chairman of the Users Board not to let that happen again.

But other than that, it is important what we do, and, as I told Mark at the break, that we are all willing to volunteer whether we're official or not to provide guidance, opinions, support, or whatever we could do to help the Corps and to Congress to keep the greatest water transportation system ever made operating. Thank you very much. Martin?

MR. HETTEL: Thanks, Mr. Chairman and General for those comments. I'm looking at our agenda, and while we're finishing up with closing comments, a summary of follow-up actions. I think one thing that we need to stay on top of is the 2013 selections for this Board. As we've heard, they expire February 22nd. So, I think, that ought to be a follow-up action before the next Board meeting of course. So, Mark, if you can keep us apprised of any developments, the Board will certainly appreciate it. Thank you.

MR. POINTON: Any comments from the members?

BOARD MEMBERS: (No verbal response.)

MR. POINTON: Hearing no other comments, the meeting is duly adjourned.

(MEETING CONCLUDED AT 12:10 P.M.)

CERTIFICATE OF REPORTER
COMMONWEALTH OF KENTUCKY AT LARGE

I do hereby certify that the witness in the foregoing transcript was taken on the date, and at the time and place set out on the Title page hereof by me after first being duly sworn to testify the truth, the whole truth, and nothing but the truth; and that the said matter was recorded stenographically and mechanically by me and then reduced to typewritten form under my direction, and constitutes a true record of the transcript as taken, all to the best of my skill and ability. I certify that I am not a relative or employee of either counsel, and that I am in no way interested financially, directly or indirectly, in this action.

MCKENZIE DADISMAN
COURT REPORTER/ NOTARY
MY COMMISSION EXPIRES ON: 07/16/2016
SUBMITTED ON: 01/09/2013