

Minutes  
Inland Waterways Users Board  
Meeting No. 66  
June 6, 2012  
Omni William Penn Hotel  
Pittsburgh, Pennsylvania

[Note: The following minutes of the Inland Waterways Users Board meeting No. 66 were approved and adopted at Inland Waterways Users Board meeting No 67 held on August 29, 2012 in St. Louis, Missouri.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 6th day of June 2012, at the Omni William Penn Hotel in Pittsburgh, Pennsylvania, 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. JAMES F. FARLEY, Kirby Inland Marine, Inc.;

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

MR. CHARLES A. HAUN, Parker Towing Company;

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

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

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

MR. W. SCOTT NOBLE, Ingram Barge Company;

MR. BRUCE REED, Tidewater Barge Lines;

MR. MICHAEL T. SOMALES, CONSOL Energy.

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

MS. JO-ELLEN DARCY, Office of the Assistant Secretary of the Army (Civil Works), Washington, D.C.;

CAPT. JON SWALLOW, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Coast Survey, Silver Spring, MD;

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

MR. NICHOLAS MARATHON, U.S. Department of Agriculture, Agricultural Marketing Service, Washington, D.C.

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 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, 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;

MR. MICHAEL F. KIDBY, U.S. Army Corps of Engineers, Headquarters, Operations and Regulatory Division, Navigation Branch;

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

MR. RICHARD LOCKWOOD, U.S. Army Corps of Engineers, Headquarters, Chief of Operations and Regulatory;

MR. BRIAN TETREULT, U.S. Army Corps of Engineers, Engineer Research and Development Center, Coastal and Hydraulics Laboratory, Vicksburg, MS.

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

MR. THEODORE A. BROWN, U.S. Army Corps of Engineers, Headquarters, Planning and Policy Division;

MR. MARK MAZZANTI, U.S. Army Corps of Engineers, Headquarters, Programs Integration Division;

MR. WES WALKER, U.S. Army Corps of Engineers, Inland Navigation Planning Center, Huntington, WV;

MS. JEANINE HOEY, U.S. Army Corps of Engineers, Pittsburgh District

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

MR. JOHN DOYLE, Jones, Walker LLP.

The individuals who provided public comments during the public comment period at the end of the meeting were:

MR. JAMES McCARVILLE, Executive Director, Port of Pittsburgh Commission;

MR. MICHAEL TOOHEY, President and Chief Executive Officer, Waterways Council, Inc.;

MR. MATTHEW WOODRUFF, Director of Government Affairs, Kirby Corporation.

MR. MARK R. POINTON: I would like to welcome everybody to the 66th meeting of the Inland Waterways Users Board here in the city of Pittsburgh. I hope everybody enjoyed our fabulous, informative project tour of the Mon River Locks and Dams at Braddock and Charleroi.

The last time the Board met here in Pittsburgh was in November of 2006. And we actually went and saw the locks and dams at Emsworth, Dashields and Montgomery on the Ohio River. We've been up here a couple times recently. We've seen two of the three rivers here. So maybe next time we'll go see the Allegheny.

My name is Mark Pointon. I am the Executive Secretary and the Designated Federal Officer of 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 for the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterway system. The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended.

This is a “Sunshine in Government” Act meeting and as such, it is open to the public. The U.S. Army Corps of Engineers is the sponsor of the Board and provides the Executive Director, the Executive Secretary and all normal activities.

If anyone wishes to make a public comment at the appropriate time towards the end of the meeting, please submit a statement for the record or let me know or the chairman know, and we'll make sure you get some time during the public comment period.

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

Before I call on Colonel Graham from the Pittsburgh district, I would like to ask Major General Walsh, Deputy Commanding General for Civil and Emergency Operations and the Executive Director of the Board to conduct the oath of office for the new members of the Board.

Can we step over to the flags?

MAJOR GENERAL MICHAEL J. WALSH: Just a moment. First I would like to congratulate the new Board and the new Board chairman, Mr. Larry Daily, the president of Alter Logistics. And the vice chairman, Mr. Mike Hennessey, the vice president of Brownsville Marine Products, LLC.

I'll introduce the other members.

Mr. James Farley, the executive vice president for operations, Kirby Marine.

Mr. Charles Haun, the president of Parker Towing Company.

Mr. Martin Hettel, the manager of American Electric Power, River Operations.

Mr. Mark Knoy, President and CEO of American Commercial Lines.

Mr. Scott Leininger, Vice President, CGB Marine.

Mr. Scott Noble, Senior Vice President of Ingram Barge.

Mr. Bruce Reed, Vice President and COO of Tidewater Barge Lines.

Mr. Mike Somales, General Manager, River Operations and Logistics of CONSOL Energy.

All of these members are newly appointed and so the first order of business is to swear them in as a Board members. So why don't we, the new Board members, why don't we go down to the flag and I'll swear you all in.

(Whereupon, the members stepped to the front.)

MAJOR GENERAL WALSH: Raise your hand and I'll ask you to state your name.

(Members sworn en masse.)

(Applause.)

MR. POINTON: I would like to call on Colonel Graham to provide some welcoming remarks to Pittsburgh. Thank you, sir.

COLONEL WILLIAM “BUTCH” GRAHAM: Absolutely. Good morning. It's great to see so many Steelers fans in one room.

On behalf of Brigadier General Margaret Burcham, my Commanding General and the Commanding General of the Great Lakes and Ohio River Division, I would like to welcome everybody to Pittsburgh. Unfortunately, General Burcham couldn't be here. She's in a mandatory General Officer class today. Despite her best efforts, she couldn't get out of that, the Chief of Staff of the Army.

I would like to again welcome you to Pittsburgh. Hopefully, everybody enjoyed the tour yesterday and you got to see how vital this river transportation system, the inland marine transportation system, is to this regional economy. And hopefully and unfortunately, you all also got a good look at the state, the less than reliable state, of a good portion of that infrastructure.

So the Pittsburgh District is honored to have you here today, to see what we can do to work together and do our best to steward that magnificent transportation system that's served this Nation so well.

So again, welcome to Pittsburgh.

(Applause.)

MR. POINTON: General Walsh will now provide some opening comments.

MAJOR GENERAL WALSH: Thank you. Thank you, Mark. And I wanted to thank those who pulled this meeting together. In particular, Mark Pointon at Headquarters. And just recently accepted a job at the Institute for Water Resources. I didn't know he was slipping out until he had already slipped out. So I've got to -- I see you sitting right next to me.

He does work at the Institute for Water Resources and also is Executive Secretary for this Board.

And also the Pittsburgh District team. We had an excellent tour in the number of different areas. We took a flight. As we came in, we saw different portions of the Pittsburgh district. We took a bus and also a boat ride with different areas to look at, what the infrastructure looks like on this particular area.

And thank the District Commander and his team for putting this together.

I would also like to welcome the federal observers, Assistant Secretary of the Army, Jo-Ellen Darcy. Welcome and glad that you're here.

Capt. Jon Swallow, representing Captain John Lowell from NOAA. Good to have you here. And also Mr. Alan Bunn is here today also from NOAA.

Mr. Nick Marathon, representing Mr. Neal, the Deputy Administrator for Transportation and Marketing for the U.S. Department of Agriculture. Good to have you here.

And Mr. Bill Paape representing Keith Lesnick, the Associate Administrator, Office of Intermodal Systems Development, MARAD. Also good to have you here.

The federal observers will have an opportunity to make a remark before I turn this over to the chairman.

An update on what's been happening since our last meeting over a year ago. The FY12 appropriations, total of \$4.997 billion of which, \$820 million was for inland navigation. The inland navigation construction is about \$170 million, excluding remaining items, which includes Lockport Lock and Dam; Lock and Dam 27 on the Mississippi, a major rehab; Melvin Price Lock and Dam on the Mississippi; Olmsted Lock and Dam on the Ohio; Markland Lock and Dam; J. Bennett Johnson Waterway in Louisiana; Mississippi River between the Ohio and Missouri Rivers; Lock and Dam 2, 3 and 4 on the Mon River; and the Atlantic Intracoastal Bridges at Deep Creek, Virginia.

There's an additional \$13 million for channel improvement under the Mississippi River and Tributaries project.

The President's FY13 budget proposal, \$4.726 billion, of which the inland navigation would get about \$780 million. Olmsted is scheduled for the budget request of \$144 million.

Other construction projects funded would include Lockport; Lock and Dam 27; the Mon River Locks and Dams; J. Bennett Johnson; Mississippi between Ohio and Missouri River.

A lot has happened since the last year. We talked a little bit about it on the vessel yesterday in regards to Civil Works transformation. We have a budget transformation process that's underway. In the past five to 10 years we've been moving away from funding construction projects a little bit at a time and seeing them being delivered slowly. And we're moving towards a more prioritization of the projects which we recommend funding, and are due to brief the Assistant Secretary in the future on those funding processes as we get to them.

This is very consistent with the Inland Waterways Users Board recommendation, and the Board deserves a lot of credit as they put together their capital budget process in the last couple of years, trying to figure out how to fund to a higher level of capability than we've had before so we can get the projects into production earlier.

We also have a planning transformation process that's underway. Many of you guys as we talked yesterday, have heard of the \$3,000,000; three years; and three levels of the bureaucracy in the Corps to get a feasibility study complete. And we've got that product out to the Divisions as well.

We currently have about 365 feasibility studies ongoing right now or at least on the books. And I've asked the Division commanders to come back to me to see if we can reduce that by a hundred. Because we're not able to move those 365 studies forward as rapidly as we should. So we'll go with a smaller portfolio. And I'll be briefing the Secretary on that later this afternoon.

The infrastructure strategy is a life-cycle management. Decisions on repair, rehabilitation and replacement or disposal. We had a pretty good conversation on that yesterday. And for the Board, we'll have Rick Lockwood on the agenda to talk about levels of service and also Jim Walker on the inland waterways modernization strategy.

And then the fourth item in the Civil Works transformation process is the methods of delivery. And we talked about that yesterday as well.

I'm proud of the Board support and the efforts to achieve a holistic plan to manage and maintain inland waterways system. We've identified over a hundred projects in the inland waterways system that require or conceivably could require major work in the next 20 years. About \$18 billion worth of work.

We've also identified about 25 projects that we need to get cracking on right away, about \$8 billion of that. The shift that we seek would move more towards from a budget perspective, more towards a watershed approach as opposed to a project-by-project work. So we're looking at a systems approach and systems investment from a Civil Works transformation process.

We also want, as the Board comes together, there's a number of questions that I hope that the Board gets a chance to review and think about and provide comments to the Secretary as you write up your minutes and your decisions, is "At what levels should we be funding the Olmsted project?" We talked a little bit about that yesterday and in many different meetings and we'll have a number of briefings today, but what levels does the Board recommend to the Secretary that we fund?

What construction methodology should we use on Olmsted? Should we be using "in the wet" or the way we've been currently constructing them, or should we also look at "in the dry", and make a decision to switch that construction and development? I'm hoping that the Board makes that recommendation, a recommendation one way or another to the Secretary as well.

And what options are we going to move forward and what options is the Board going to recommend to the Secretary if there is not a 902 fix to the Olmsted funding problem difficulties. And if we do use a different funding alternative, i.e., not going with the 144 for '13 and on out, what projects other than Olmsted should we be funding? We'll have that discussion and briefing earlier -- later today as well. And hopefully the Board will get together and make that recommendation as well.

We do have Rich Hancock on the agenda today and he'll talk about all those alternatives that we have for Olmsted, provide you, hopefully, enough information to make those decisions. But certainly if you need more information you can also ask me or Rich Hancock for those discussions for Olmsted.

At this point, I would like to invite the Federal observers to make remarks if they wish and then turn the meeting over to Chairman Daily. And I'll ask the Assistant Secretary first if she has any comments.

MS. JO-ELLEN DARCY: Thank you, General Walsh.

Chairman Daily, Vice Chairman Hennessey, congratulations on your new positions and also congratulations to all of the new members of the Board.

As you know, there's been a great deal of scrutiny within the federal government over advisory committees and our ethics regulations. So it took us a while to get the charter renewed and to get our new members aboard. But I think the bright side of what we went through was that I think not only within the Army, but within the Department of Defense, recognizes not only the importance of this Board, but also how vital it is for us to have the Board making recommendations to us. Even though it took us a while, I think that was a good outcome. Not only do we now have our new members on board, but we also have a better understanding not only within the Army, but within the Defense Department of what it is the Board does and I think that's a plus.

As you know, we have a number of challenges ahead of us. Fiscal ones as well as structural ones. And I think I'm here today to listen to what you all have on your minds about recommendations as to how we're going to face the challenge of recapitalizing this aging infrastructure. I'm here to listen and I'm happy to be here.

Thank you to the Port of Pittsburgh for hosting us here today and I'm anxious to get to know and greet and meet all the new Board members.

Thank you.

MAJOR GENERAL WALSH: Thank you Madam Secretary. And from NOAA, Captain Jon Swallow.

CAPT. JON SWALLOW: Thank you, Major General. My name is Captain Jon Swallow representing NOAA. In case you're not familiar, the uniform is similar to the Navy, but it's actually the NOAA cords. The smallest uniform service in the United States. So we're charged with running NOAA's small fleet of research ships and aircraft and helping lead some of the NOAA programs, in which charting is one of them.

NOAA is responsible for charting the coastal waters of the United States out to the Exclusive Economic Zone. We have a significant overlap with the Corps of Engineers. We rely on the data they collect for hydrographic surveys in the channel framework, in particular for updating the nautical charts.

Our directorship is in transition. You mentioned Captain John Lowell. He actually retired on June 1st. We have some good news concerning that, as the Director of Coast Survey has actually been elevated back to a flag level position. It was a few decades ago and we got into a budget crunch and it was reduced. Captain Gerd Glang has been selected, but he hasn't been confirmed yet

so he can't serve in any role as of yet. But I think it's good news. It shows NOAA and the Department of Commerce's commitment to navigation services.

Again, I'm happy to be here today. Thank you.

MR. WILLIAM K. PAAPE: Good morning. My name is Bill Paape and I'm the Director of the Inland Waterways Gateway office in St. Louis. I have responsibilities for MARAD support of commercial navigation on the Ohio River, the upper Mississippi, the Missouri River and inland waterways. I'm pleased to be here and look forward to participating.

MAJOR GENERAL WALSH: Welcome Bill. Thank you. Nick.

MR. NICHOLAS MARATHON: Good morning. My name is Nick Marathon. As a representative of the USDA's Agricultural Marketing Service, I would like to say that the USDA appreciates the importance of the inland waterways to U.S. agriculture.

The latest USDA estimate for 2012 corn crop, a projected record corn production of 14.8 billion bushels is up 19 percent from last year and 13 percent from the previous high in 2009. The corn exports are expected to increase 12 percent over last year to 1.9 billion bushels. This is important to the barge industry as the five-year average indicates that the waterways handle about 53 percent of all corn exports.

As for wheat, an earlier than expected wheat harvest can open the doors to more markets for U.S. wheat during upcoming months.

And finally, the soybean crop, while not a record crop, is significant to U.S. agriculture and that U.S. could export half, nearly half of its production this year. This is important to the barge industry that on average, the waterways handle about 46 percent of all soybean exports.

Again, thank you for the opportunity to be here and I look forward to rest of today's meeting. Thank you.

MR. POINTON: Thanks, Nick. I would like to call on Larry Daily to make some remarks as the chairman of the Board.

CHAIRMAN LARRY R. DAILY: Thank you, Mark. Thank you, General Walsh, Secretary Darcy, and the Port of Pittsburgh for hosting us.

One of the things that I admired about my predecessor Steve Little, besides his work ethic and his ability to get things done that hadn't been done before, was his brevity of comments. And in fact, that he kept things moving on time. So I will try at least to do that part of it.

One of the things that struck me the most yesterday about our tour of the Mon River, which I had not seen since I was a deck hand in the 1970s, the level of activity at certain points like the coking plant that we saw, is still a very major activity and its still almost entirely dependent upon the waterways working for them and supplying them the raw materials and the ability to take out the finished materials that they have.

When you see 1,300 people as regular employees and a thousand people as contractors adding on to that plant, you realize that America works and in a lot of places it works because of the waterways. We understand that particularly in Iowa and western Illinois, because of the numbers that Mr. Marathon just presented us with, if we couldn't get our corn and soybeans out of there, we would literally be drowning in them. Because we grow so much more than can consume domestically, even with ethanol programs and other value added programs. So we've got to have our export capabilities intact. And if possible, improving them in order to improve our ability to get to the world markets.

The other thing I wanted to impress that I'm really happy that we're finally meeting again is this Board is highly experienced in the waterways industry. They know the issues. They have shown a willingness in coming here today and joining this Board and taking the oath of office, as well as all the other extracurricular activities that they do in other national organizations and regional organizations.

And while we all have our own little part of the country or part of the industry that we support and that supports us, we have a tremendous commitment to look at the national priorities and to make sure that the decisions we make here are the best things to do for the country.

We look forward to continuing the practices that we have outlined in the Capital Development Plan. We want to get going right away on the ones that we've all agreed are possible. Like planning, private sector involvement with project managers, better cost estimating and all the things that can be done right away without an act of Congress or Presidential Decree, while we continue to work with Congress and with the Administration to come up with the long-term solutions to the commitment that we have to improve the waterway system and to improve its reliability.

So with that, I'll turn it back over to Mark and we'll start the program.

MR. POINTON: Although, most of you have been doing a pretty good job, please identify yourself and if you have a soft voice, please speak into the mic for our transcription of the meeting. Thank you.

I would like to call on Jon Soderberg from the Headquarters. He's the construction account manager. He'll be giving you an update on the programs, financial reports and project summaries. Jon?

MR. JON SODERBERG: Good morning. Thank you for being here and thank you for allowing me to be here. Jon Soderberg, Corps of Engineers Headquarters. I'm your Inland Waterways Trust Fund account manager as well as the construction account manager.

This morning I'll briefly go over the status of the Trust Fund and then we'll touch of six of the projects briefly in our next 10 minutes.

Next slide, please. Starting with the status of the Trust Fund, here you see the FY11 cash flows. This is the final tab in your book for those who want to follow along on paper. It should be tab five. The FY11 cash flows, we began the year with a little over \$58 million in the Trust Fund.

Tax revenues for FY11 a little under \$84 million. The interest that accrued on that was only \$51,000.

We transferred 90 million of that to the Corps for projects ending the balance with a little over 45 million there. At the end of the year, 13 of that 45 million was already set aside for projects the Corps has underway, leaving only a little over 31 million available in the Trust Fund.

So far for the first two quarters in FY12, the tax revenues are a little over \$39 million. Interest of \$10,000. The total receipts together \$39,351,286. This is an increase in revenues, \$1.4 million over the previous year. So the trust fund is increasing its revenues, but not by much.

Any questions on that?

MR. MARK K. KNOY: Mark Knoy, ACL. I just had a question here on the cash flow. The outflows were 6 million more than the revenues, but the balance went down by 13, why is that?

MR. SODERBERG: The outflows of the transfer you're talking about projects where we have encumbered the money where it's yet to be drawn out of the trust fund and applied to the project?

MR. KNOY: So there's another 7 million that's been allocated to be drawn?

MR. SODERBERG: Yes.

Next. Moving on to status of six of the projects, starting with the Chick Lock [Chickamauga Lock on the Tennessee River]. You can see here the updated total project cost. This specific project was not in the FY12. It is not in the FY13 plan. It was being run currently with ARRA [American Recovery and Reinvestment Act] funds.

Below that you can see a status of where we are with the project. Looking at the majority of the things completing, the cofferdam, the miter gates will be completed this year in FY12, as well as the approach wall fabrication.

And looking down at the future, the excavation and lock construction are out in the future. The way we presented it to you this year is, depending upon funding, how long after we received the funding for those particular pieces of the project would it take. So you'll see in this slide and future slides where we show funding plus certain period of time to accomplish that portion of the project.

Next we see Kentucky Lock. Here again, an updated total project cost. This, there is \$2 million in the allocation plan for this project that was all Corps construction general funds. No inland waterway trust funds.

The project also was working ARRA funds. See the remaining balance for that project. For this Kentucky Lock, the majority of that super structure has been completed to the 99 percent level. Monoliths working on the ARRA dollars.

Again, here the previous slide, you can see at the bottom of the schedule, where we're looking is the superstructure will be completed shortly. Then moving out to the upstream monoliths and the remainder of the components are depending on funding. And there's a time frame which to complete after funding received for those specific components.

Next slide. As we saw yesterday in our trip, we were talking Lock and Dam 2, 3 and 4 here on the Mon. The updated costs, \$1.7 billion. The FY12 plan had 9 million in it, which was the 50/50 split between general construction and inland waterway trust.

Looking out to FY13, an increase in the proposed budget. Again, a 50/50 general construction and trust fund. Also working ARRA funds as the project manager described to us yesterday on site, have a ways to go. And here you can see the Charleroi river wall and the upper and lower guard walls as we saw are in process. The guard walls are due for completion. The river wall into next year and then everything else, again, depending on funding, when funding is received for those pieces, and then the time frame thereafter.

Next, please. Looking at Olmsted Lock, the updated project costs. The FY12 allocation, 150 million at a 50/50 share. The FY13 President's budget with 144. We have it shown there as the 50/50 share. Limited ARRA dollars were applied to that project. Again, the remaining balance. Quick status of where we are in the dam with the shell fabrication on season three ongoing. The projected completion out to 2024.

And looking down at the specifics, where we project to complete these projects through the years.

Next please. The Emsworth Locks and Dam. You could see here total project cost, nothing in '12 or '13. ARRA funds with the remaining balance. The 2012 award for the main channel service bridge. We're using most of the carryout from the previous years to fund it in 12.

We're out of balance. The 50/50, however, as we finish the project out through '13 and '14, most of the projects here will be coming from the Trust Fund as we finish it because we're out of balance. And you can see that the projected schedule through '14 for completion at Emsworth.

Finally, Markland, as we finish out the '12, this one was also out of balance. But you can see it was out of balance the other way. At this point, everything at '12 was general construction. Nothing from the Trust Fund. Not in the '13 budget. Moving with few ARRA dollars on the project. And this one we're looking to complete the project by the end of this fiscal year and finish up Markland in its entirety.

For details, for specifics on projects, the budget, President's recommendation, House and Senate line-by-line, as well as the schedule for fiscal budgeting, you can refer to tab 4. It starts with the calendar of where we are in the process of working FY12, working FY13 and developing outyear '14. And then you will see a line item list as previous years of the projects funded, not funded. And where the budget amount from the President's recommendation and House and Senate are.

Do you have any questions? That would conclude my presentation this morning.

Great. Thank you for your time.

MR. POINTON: Before we move on to Mr. Hancock, there are very limited number of copies of most of the presentations out at the registration desk. So anybody in the audience who might be interested in getting a copy, there are very few of them out there.

Also, I got a little ahead of myself. I skipped over approval of the previous Board meeting Minutes. So could I have a motion from the members of the Board on approval of the meeting No. 65 Minutes.

VICE CHAIRMAN MICHAEL W. HENNESSEY: So moved.

MR. POINTON: Mike Hennessey.

Do I have a second?

MR. JAMES F. FARLEY: (Indicating.)

MR. POINTON: Second from Mr. Farley.

Can I see a show of hands? All in agreement on the Minutes?

(Show of hands.)

MR. POINTON: Any nays?

(No response.)

MR. POINTON: Minutes approved unanimously.

Now we'll move on to Mr. Hancock from our Great Lakes and Rivers Division in Cincinnati. He's going to start on the Olmsted Locks and Dams. There's a number of items underneath there that he will be addressing.

So Rich, the podium is yours.

MR. RICHARD A. HANCOCK: Thanks, Mark. It's a pleasure to be here today and an honor to address the Users Board. My name is Rich Hancock. As Mark mentioned, I'm from the Great Lakes and Ohio River Division in Cincinnati and I'm going to talk to you for a few minutes today about Olmsted. We're going to talk about the status of construction, we're going to talk about the PACR. We're going to talk about the 902. We're going to talk about funding alternatives that we have analyzed. And then some construction methodology alternatives.

As we go through this, if you have questions please stop me because I have several slides, I think a total of 40 slides to go through over the next hour and a half to include the discussions of the way ahead. So you don't need to hold your questions to the end. If you have a question, just kind of wave at me and I'll pause.

Next slide, please. This slide shows, it's just a kind of historic slide that shows the 20 locks and dams that we have on the Ohio River and the canalization of this that occurred back in the early 1900s. And then we've been doing modernization really since 1950s era and that's continuing with the construction of the Olmsted project. That's really to replace Locks and Dams 52 and 53, which are two of the older projects that are still on the Ohio River main stem.

Next slide, please. And this is a little closer view of Olmsted and then going up river. Lock and dam 53 and lock and dam 52. And it shows a little bit of a time line. You can see that they were first constructed in '28 and '29, so they are 84 years old.

And then we had miscellaneous, some studies in the mid-1900s. We had the 1,200-foot chamber was constructed at lock and dam 52, which was a temporary chamber in 1969. It was intended to have a life of about 15 to 18 years. Then we had lock and dam 53, the 1,200-foot chamber was constructed in 1980, with the same life expectancy with about 15 to 18 years.

Then we move on to the feasibility report for Olmsted in 1985 and then authorization in 1988.

Next slide please. Most of you have probably seen this slide before. This shows a rendering of the Olmsted project. And it shows, it's kind of hard to read probably, but the locks, the two 1,200-foot chambers are complete. We also completed the resident engineer's office, the dam access road, the fixed weir on the far side of the river.

Under contract right now is the dam section of the tainter gates are under construction. And that's the near side. And then the nav pass section is the next section of dams. That's the wickets, 1,400-foot nav pass. That will be the next phase of construction.

And then the final piece of construction after that will be to build the operations facility on land and then to take out 52 and 53 and put in a few jetties downstream for anticipated sedimentation.

Next slide, please. This just shows contents of what I intend to talk about today. I'm going to go through a status of the project. I'll talk briefly about the PACR. And then go through and talk about benefits. I know there's a lot of questions about benefits and costs. So we're going to talk about that for a few minutes.

Reliability of 52 and 53, some funding alternatives that we've looked at, and I know several of you that participated in the meeting we had about three weeks ago in Cincinnati where we talked about some of the funding alternatives. I'm going to go over that again. And we talked about construction methodologies and then beyond Olmsted.

Next slide, please. So we're currently constructing the tainter gate section of the dam. There are five tainter gates in this section. There are also a total of 18 shells. We have stilling basin shells and then we have pier shells that separate the tainter gates. That's currently under construction. It began in 2010. We did have some high water in 2010 and 2011, as everybody is aware. We have placed eight shells to date. Once again there's 18 shells. Our plan is to place four additional shells

this year. That will have completed two-thirds of the shells for a total of 12. Then we plan placing six shells in 2013. After that we will start placing the actual tainter gates.

Next slide, please. These lines are a little bit off for the 2012, but at 2013, probably about the second quarter, which would be in the January time frame we should be done placing two-thirds of the shells. That's the 12 shells that I mentioned, so that's assuming we place four this year as planned. And then in 2014, about the second quarter, we should have placed all 18 shells. At that point, we'll start our focusing on placing the tainter gates.

We are also going to be starting work, or at least the current plan under the "in the wet" construction, starting some prep work this year for the nav pass section of the dam. And we have later in the year, in the probably October time frame, we're actually going to start doing some significant foundation work. Driving of piles and things like that.

So if we don't change construction methodology, that's what we'll be doing this year.

Next slide, please. This just shows construction of the some of the stilling basin shells. You could see their significant size. The dimensions of these shells are 123 feet wide by about 103 feet long, or the other way around. About 20 feet high. They weigh 3,800 tons each. And the lifting frame weighs about a thousand tons. So we're talking about 4,700 to 4,800 tons of lift for placing each one of these shells.

Next slide, please. This shows the Olmsted cost history and I'll just point out a couple things. We actually had the PACR. It says "TBD", but we had PACR numbers. I just didn't get a chance to update this slide. The PACR number is \$2.92 billion and that's in October of 2011 dollars.

I don't need to read through all the rest of that. I think everyone's probably aware of the funding history.

Next slide, please. This is transitioning between the cost update portion of my briefing and PACR portion of my briefing. The PACR amount \$2.92 billion. The original authorization in 1988 was \$775 million. That was in 1988 dollars. The current 902 limit is \$1.745 billion. We will hit that in 2014 without an increase in the 902 limit. The next slide is going to talk about that in a little bit more detail.

Then we have the benefit to cost ratio at the 4 percent discount rate at 9.9 to 1. The 7 percent discount rate at 3.7 to 1 and then the estimated lock completion which means we will get benefits under the current construction methodology, the "in the wet" construction, after 2020. That's when we'll start getting benefits to the project. And the overall completion of the project will be 2024. That's when we'll have finished the demolition of 53.

Any questions so far?

(No response.)

MR. HANCOCK: Next slide, please.

The 902 limit. This shows the amount of appropriations we've had to date. And if you look at FY12, we have a work plan of \$138 million. FY13 President's budget is \$144 million. So the projected total is \$1.67 billion. The 902 limit that we will hit in 2014 is \$1.745 billion. So we have a delta of about \$75 million as we go into '14. So if there's not an increase in the 902 limit about the second quarter of FY14, we'll need to look at stopping the project.

We would at that point have enough money left to shut the contract down, but if there's not an increase in the 902 limit, that's what we're going to be doing in FY14.

Any questions about that?

(No response.)

MR. HANCOCK: Next slide. Then this shows some of the PACR facts and assumptions. I just wanted to point out a couple of them to you. The dam estimate is based on 2011 re-baseline and productivity from the first year shells.

The next one, that talks about the cost and schedule risk analysis. We have 80 percent confidence level in our costs and schedule risk analysis. That's the method we used to estimate the cost of the project, the \$2.92 billion. So we do have a cost estimate. We have it certified through our Center of Expertise in Walla Walla. We had it independently reviewed by an IEPR contractor through Batelle.

And with that, we assigned risk factors to a whole lot of different things that could impact the contingency amount of the project. To include things like funding stream, things like the dynamic river conditions that we might encounter that could impact construction.

And after the assignment of all those risk factors, we come up with a cost estimate. In this case, \$2.92 billion. And we have our standard is 80 percent confidence level in that cost estimate.

I just wanted to mention that when we did the IEPR [independent external peer review], the IEPR contractor questioned that. They were actually recommending a 90 percent confidence level. At a 90 percent confidence level, it would have increased the estimate by about \$40 million. But the Corps of Engineers standard, what we do is 80 percent. That's what we have.

And then the sunk cost to date, this was through September 2011, was \$1.358 billion. We're assuming, as we did the PACR, that we're going to continue with the funding stream of \$150 million a year. And that was the per the Capital Projects Business Model.

We also assumed that we will submit for authorization the FY13 President's budget that will give us the 144 in that. That the dam contract, including the nav pass will continue "in the wet". That was one of the assumptions that the PACR was based upon.

And then the dam contract would continue to perform as a cost reimbursable contract. That's something we've had some detailed discussions about. Especially if we decide the change the construction method to something other than "in the wet", if we go with a tradition cofferdam construction method. We had talked about switching at that point to a firm fixed price contract.

There are some significant challenges that we would need to overcome if we do that. I'll talk more about that in few minutes.

MR. KNOY: Mark Knoy from ACL. I have a few questions. What is the lead time on the 902 B authorization?

MR. HANCOCK: That's an excellent question. It has gone through OMB to Congress. So at this point, I don't a good answer for you, Mark. But somebody in the audience may. I don't know if Mr. [Steven] Stockton or somebody else could venture a guess on that.

MR. KNOY: So it's before, sitting in Congress' lap today awaiting their approval?

MR. HANCOCK: That's correct.

MR. KNOY: The second question is, what was the level of confidence in the initial estimate?

MR. HANCOCK: At that time, we didn't do the current method of cost and schedule risk analysis that we do now. So I'm not sure, to tell you the truth, if we even assigned a level of confidence back then in the mid-80s when we did that cost estimate.

MR. KNOY: Thank you.

MR. HANCOCK: Any other questions?

CHAIRMAN DAILY: This is Larry Daily.

At what point in the construction process of the dam are we going to have to start going through the locks so we don't interfere with your project out there?

MR. HANCOCK: It will be during the construction of the nav pass, which is going to start in the 20 -- start in earnest in the 2016 time frame. So it wouldn't be right away, but certainly as we go into construction, as we start working our way across the river, there will be times the river conditions require us to lock through. So I don't have real a specific answer for you, but it would be between 2016 and 2020.

CHAIRMAN DAILY: Thank you.

MR. HANCOCK: Any other questions?

Okay. Next slide, please. In this slide is the transition between the discussion of the PACR and discussion of benefits and cost. I know there's been a number of questions about benefits and cost. Once again, the total project cost, based on our most recent estimate and what's in the PACR, \$2.92 billion.

The fully funded cost is 3.1 billion, 3.099. The difference between those numbers, I think people are starting to understand this, I know it's kind of hard to get your head around, the 2.92

billion is based on October 2011 dollars. So we have our sunk cost to date, what we've actually spent on the project, and we have the remaining cost up through completion in 2024.

And the remaining costs are brought back to October 2011 dollars. That's the 2.92 billion. That's the number that we use to build a cost estimate that's then used to justify what we need for the 902 limit. Because built into the 902 process is inflation proofing that number as you go into the future.

Then the fully-funded cost, the 3.1 billion, is the actual dollars that we expect to spend as inflation happens up through the completion of the project. So it's the sunk cost to date and the actual dollars that we will spend up to 2024 to finish the project.

Are there questions about that? Mark?

MR. KNOY: Mark Knoy, ACL.

Why is there a different discount rate on the authorization versus the budget development? And it's a pretty broad difference.

MR. HANCOCK: Right. And I believe I stated that that was a 7 percent versus 4 percent. I think there's another difference between those two numbers, the 9.9 to 1 and the 3.7 to 1. I think one is the remaining benefit to remaining costs, the 9.9 to 1; and the other one is the total benefit to cost ratio, which is the one that OMB uses.

I don't know exactly why we have a different discount rate, but I'm sure that there's probably others in the audience, Planning folks that perhaps may be able to answer that question. Perhaps, Mr. Brown or Mr. Walker might be able to answer that.

MR. THEODORE A. BROWN: This is Tab Brown, Corps of Engineers. I guess succinctly the 4 percent rate, it changes every year in terms of what the economic conditions are. That's what we use to do analysis for benefit-cost ratio.

With respect to the budget development, OMB uses a standard for 7 percent to do the evaluation to rack and stack projects.

MR. MARK MAZZANTI: Mark Mazzanti, Corps Headquarters. That 7 percent rate at OMB is applicable to all federal agencies for comparison purposes in formulating the President's budget.

MR. HANCOCK: Thank you. Any other questions about any of that?

(No response.)

MR. HANCOCK: Okay, next slide, please. This slide gets into some detail of annual benefits versus the net annual benefit. I think everybody has heard the numbers, talked about the \$875,000,000 of annual benefits; \$640,000,000 of net benefits. What I'm going to attempt to do here

is explain the difference between those two numbers. So if you look at the 875 million, that's based on the benefits of the project and the cost of the project.

And it's actually based on a 50-year period. So it's from when we first start accruing benefits which will be 2020, that's when we first get benefits under the current construction schedule, up through 2069. And they compute the benefits over that period of time, the costs over that period of time and annualize that to 875 million.

And if you look at that number, that is, the biggest piece of that, that 94 percent of that is transportation benefits. 823 million of that is transportation benefits. And that's based on savings to transportation industry for transiting through the system, with anticipated delays, going through 52 and 53.

I want to explain just a little bit more. Because I've asked about this number, too. I'm not an economist. That's probably a good thing because anybody that's talked to an economist will get very confused very quickly. So I may be able to explain it a little bit better than some of the economists might, because I was asking from my simple perspective.

The \$823 million has a couple of components in it. Like I said, the major component is the 94 percent transportation savings. There's also fuel tax revenues. Then there's the cost of normal O and M. And then the cost of anticipated repairs to 52 and 53. Those are all components of that benefit.

One thing I wanted to mention is, the 823 million, the piece that is directly related to transportation benefits, the major portion of that is related to anticipated or predicted river closures for 52 and 53. But there's another component of it that is not based on river closures. It's based on assuming that Olmsted is fully operational, versus 52 and 53 are fully operational. There's still some benefit just based on when we anticipate operating navigable pass on Olmsted, versus 52 and 53. How long it takes to transit the locks at Olmsted versus 52 and 53. And if you compare those two things, that piece, that component of that number is \$114 million. So assuming Olmsted is fully operational versus 52 and 53 are fully operational, this transportation savings of 114 million. And then we start rolling into that anticipated closures of 52 and 53 for maintenance that's escalating over the years, over this 50-year period, then that number rolls up. It adds another 709 million because over that period of time we do anticipate we're going to have significant maintenance closures. And that totals up to the 823 million.

Are there any questions about that?

(No response.)

MR. HANCOCK: And then comparing that to the net benefits. The net benefits are looking at, I'm trying to read the small print, annualized cost of construction. So this is taking out the cost of building Olmsted as the biggest component of that. They have the total construction cost of Olmsted, they annualized that, subtract that out. Also subtract the normal O and M of Olmsted and then the maintenance for the dam, the maintenance for the lock chambers of Olmsted. So those are costs. And you take that out of the overall gross benefit and you get the net benefit of the 640 million.

Questions about any of that?

(No response.)

MR. HANCOCK: Next slide, please.

MR. KNOY: This annualized benefits, did you say out through 2069?

MR. HANCOCK: Out through 2069.

MR. KNOY: So 57 years looking forward?

MR. HANCOCK: It starts in 2020. It's 50 years.

MR. KNOY: Once it's in place?

MR. HANCOCK: That's correct.

MR. KNOY: It just seems like that construction cost annualized over that 50 years is too much.

MR. HANCOCK: I noticed that. And I don't have an answer. I just noticed that this morning as I was kind of going through this and anticipating questions I might get.

MR. KNOY: Don't you take \$3 billion and divide it by 50 years simplistically?

MR. HANCOCK: That's how the way my simplistic mind would do it. I'm sure there's a better answer that I don't have for that. I did notice that inconsistency.

I don't know if anybody that is an economist. Mike, Wes? Wes is going to take a stab at this.

MR. POINTON: Wes, can you please step up to the podium. Thank you.

MR. WES WALKER: We also take, in addition to the just the construction costs, we also charge interest on the money we're spending. I think we talked about this a little bit during the capital IMTS stuff, but the interest during construction, I think that's been issue before, too. The longer the project runs, the more interest you pay on the money that you're borrowing. So it represents an opportunity cost.

So in the cases like Olmsted where this thing's gone on for many, many years, I don't know what the IDC is off the top of my head, but it gets to be a really significant number.

MR. KNOY: The 3 billion does not include interest cost of the investment prior to the...

MR. WALKER: Right. Because there are two different things going on as Rich was trying to work with us here. The fully funded, that's just outlays. I have to go to Congress and get this outlay.

When we talk about benefit cost ratio and benefit cost analysis, now we're talking about resources. It's really an economic concept, so you're having to pay interest on the resources that could be used someplace else. Sorry, it's so complicated.

MR. HANCOCK: If you look at the fine print on the slide, Wes, the interest during construction is shown as \$19.1 million. And so that's the component of that that's a cost.

MR. KNOY: You would seem like you already picked that number up.

MR. HANCOCK: Any other questions?

(No response.)

MR. HANCOCK: Next slide, please.

This is just kind of showing summary. We have the primary benefit categories and the primary cost categories. One of the things I didn't talk about was the fuel tax revenues. When I first looked at the fuel tax revenues as a benefit, I was a little confused as to what that meant. I thought that meant savings or savings to industry fuel tax that they would be paying. I guess that's not what it means. I have been now informed that it's actually based on fuel tax revenues, but because there won't be delays where industry is sitting there not moving, there will be actually an increase in revenues that will come in based on more efficient use of the system.

So that's what that -- and it's a very small component of benefits. But apparently, that is a small, like, 1 to 2 percent that is a little piece of benefit that's rolled into the calculation.

And then Wes already talked about the interest during construction as a cost category.

That's all I have on this portion, the benefit to cost. I know it's a confusing subject. Are there any other questions about that before I move to the reliability discussion of 52 and 53?

MR. KNOY: Mark Knoy, ACL again.

Depending on whether or not the benefit cost ratio is acceptable to keep the project funded, I don't have any other questions. But if it's not, I would sure like to understand under the hood the annualized costs. Because we've got interest as a separate line and now we're saying the 211 million contains interest again. And I would love to have my CFO explain this to me with your folks to understand it.

MR. HANCOCK: We probably should set up, and we've met a couple times now and there have been several questions about this, we probably should set up a one-on-one type discussion of how we calculate benefits and costs.

MR. KNOY: It could be a moot point if the 3.7 cost benefit ratio keeps the project at a of priority level, but you know, it's really a significant difference in the cost benefit ratio of 3.7 versus 9.9.

MR. HANCOCK: Absolutely.

MR. KNOY: Significant benefit ratio difference. If we need to understand that, we need to. If not, so be it.

MR. HANCOCK: Right. I understand, Mark.

MR. FARLEY: Excuse me. Jim Farley with Kirby. We need to. We need to understand that. Because I don't.

MR. HANCOCK: I was just going to mention that the BCR for authorization purposes is the 9.9. I do understand the need to understand the difference. We will follow-up on that and try to set up a more detailed discussion.

Next slide, please. So now we're talking about reliability of 52 and 53. Just a couple of key points. As we're looking at 52 and 53, they are classified as in a failed or near failed condition right now. If you look at our, 52 is actually a DSAC-1 project. Dam safety action classification.

There's a section of the dam that's significantly sagging. It's built on wood cribbings. We haven't done a lot of investigation to determine how bad it might be, but we know it's settling. It's classified as a DSAC-1; 53 I believe is still a DSAC-2. Which is the next lower category.

Not, no signs of failure in progress, but failure could be imminent. So that's the next classification. There are five levels of dam safety action classifications and one is the worst.

O and M costs, we mentioned the typical is \$4.7 million a year. We have extraordinary O and M that's \$3.4 million a year, so a total of \$8.1 million for O and M costs. And then looking at 52, it's used about 40 percent of the year; 53 is used about 10 percent of the year. So the river conditions are such that the rest of the time the nav pass is laying down at the bottom of the river, it is essentially open river flow.

And some of the uncertainties, I mentioned the dam foundation. We don't really know how bad that wood cribbing is. We do know it's sagging and it's been there for 84 years. Also, some of the hydraulic piping and corrosion through the locks is a little bit unknown right now.

Next slide, please. This just shows pictures --

Mark did you have a question?

MR. KNOY: I'm just curious. Can we measure if it's worsening on an annual basis or has it been in that condition -- because from an operator's standpoint, it is one of the most reliable locks we have.

MR. HANCOCK: Yes, we could. I would say we can measure if it is getting worse. Our feeling is it's getting worse. Our experts tell us it's getting worse. I don't have a quantification of if it's decreasing by 5 percent a year or anything like that. But we are seeing, and we are expecting to see increasing outages and boat river closures.

This shows some of the wicket repairs that was occurring in 1990 and what it looked like at that point. We have not done a major rehab report for 52 and 53. We are expecting that 52 and 53 will come out when we're done with Olmsted. That's the plan. There's a couple points, 52 and 53 do not meet current seismic requirements. That's a concern if there is an event. It is fairly close to New Madrid. If there is an event, we're concerned about that.

And then extending these for 50 years cannot be achieved. That's one of our going in assumptions. They are already 84 years old. So the feasibility report alternative looked at full replacement of 52 and 53.

Next slide, please. This shows 52 and 53 on a 10-year, 20-year, and 30-year basis. We are assuming that for 52 that we're going to be spending an increased amount. I mentioned that we're spending about \$8.1 million a year. Over a 10-year period we assumed it was going to be up over \$15 million a year for 52. Over a 20-year period that \$15 million will go up to \$22.5 million a year. These are some of the assumptions that we had rolled in.

And then for 30 years, we think that it's not going to last 30 years. We're going to have to do a major rehab. And 53 likewise, \$10 million a year is what we think it's going to go up to over a 10-year period. About \$15 million a year over a 20-year period. And we think that a major rehab would be required before we get to 30 years.

Questions?

UNIDENTIFIED: Rich, O and M would be \$15 million a year for the next decade.

MR. HANCOCK: That's what we assumed. That's not assuming that we think it's going to last that long. That's just saying that we think if it does last that long, because we have those unknowns about the condition of the dam and foundation, if it does last that long, we think with this increased O and M cost we could keep it operating.

MR. MARTIN HETTEL: Rich, Marty Hettel with AEP. This 15 million dollars a year to keep 52 operational, is that beyond the 2020 time frame of Olmsted or is that from now looking forward?

MR. HANCOCK: That is, I believe now looking forward. I'm not real sure, Marty. David is shaking his head so I think the answer is yes. It's now looking forward.

Next slide please. There's been some questions about what are we going to do if the dam does fail. And the answer is, we'll know when it happens. And I only half joke when I say that. It really depends on the severity of the failure. There is high potential that if we have a dam failure because of the wicket construction of the dam, that it could unzip the dam. If we have a major failure that causes the dam to unzip, that would be significant.

If we have a smaller failure that just a portion of the dam fails, we would go in and dump rock in the hole so we would regain the pool. And then we would start determining based on the extent of the failure what our fix is, whether or not it's to leave the rock there because we have enough nav pass that's still usable, that we could develop a plan to stabilize that section that failed, using rocks or maybe using some sheet pile. And have a nav pass that's still usable.

Or if it's not usable, we'll have to come up with another plan. But our initial plan would be fill the gap with rocks to reestablish the pool. And depending on the extent of the failure, we would design the longer term plan that may include going back and taking out some of the rock as we stabilize the dam. And then we would evaluate the likelihood that that would stay there for a while. We would try to make a fix that would be long enough to get us to where we're actually going to remove the projects.

Then if we had a lock failure, it's not as significant. We're really more concerned about the dam failure. But if we have a lock failure on the 1,200-foot chamber, because those were both intended for temporary facilities, we would use the 600-foot chambers. So there would be additional delays, but there would still be an ability to get through the locks.

MR. HETTEL: Marty Hettel with AEP. And your contingency plan for failure of the 1,200-foot chamber is to use the 600-foot chamber, is that a limited time frame or is that throughout the year or operation of the dam or until you complete the repairs on the 1,200-foot chamber. Because the 600-foot chamber at 52 is not a very good contingency plan for industry. We went through that in 2010. And I believe we have 52 tow boats lined up to go through there when the 1,200-foot chamber was down.

MR. HANCOCK: Yeah, that would be a significant impact and it would be situational. It depends on what it would take to repair. We would be looking at repairing the 1,200-foot chamber, but depending on the extent of the repairs and what it would take, it's hard to really give you a definitive answer.

But our plan would be to repair the 1,200-foot chamber and use the 600-foot chamber in the interim.

VICE CHAIRMAN HENNESSEY: Mike Hennessey, Brownsville Marine.

Has there been a dam failure?

MR. HANCOCK: There has not been a dam failure. We do have signs of active failure. So I would say it's characterized as failure in progress. But there hasn't been a major failure.

VICE CHAIRMAN HENNESSEY: As opposed to the Lower Mon Dam and Lock 3.

MR. HANCOCK: I'm sorry. I thought you were talking specific 52 and 53.

VICE CHAIRMAN HENNESSEY: Yes, I am. I mean there has been a failure at Dam and Lock 3 on the Mon.

MR. HANCOCK: Okay. Any other questions about this slide?

(No response.)

MR. HANCOCK: Next slide.

Now, we're getting into the funding alternatives portion of my presentation. And once again, I think several of you have heard some of this discussion. We have been, in fact, General Walsh directed that the Great Lakes and Ohio River Division look at funding alternatives because we are not real sure at this point whether or not we're going to get the 902 approved. And we need to be prepared to have other plans to divert funds to other priorities.

We do have the Capital Projects Business Model that was developed several years back that prioritized projects. We have the top 23 projects is the world of what we are looking at for this analysis. So I'm going to go through and talk briefly about what we did in looking at alternatives at the various scenarios and options that we looked at and what the results of that analysis showed us.

Some of the key assumptions. We went down through and used the priorities from the IMTS Capital Projects Business Model. We did revalidate those priorities. In fact, Mark Pointon I think sent a tasker out to all the regions that had these 23 projects that we're talking about and just asked, if things had changed that we needed to roll into, to re-prioritize the projects. If there had been significant condition changes or if we completed something, whatever that might be. Out of doing that, the priority stayed the same except for two projects.

Previously, Chickamauga and Kentucky were in that order. When we revalidated, Kentucky now is higher in priority than Chickamauga. But the rest of the priority is the same. Olmsted is the top priority. Lower Mon is the next priority. We're really not talking about Emsworth, because Emsworth is getting fixed any way. It's a dam safety issue. So that's going to be repaired. And then we get down to Kentucky and Chick. And Upper Miss projects. And I have a list here on another one of the slides that show actually the priority of the top 23 projects.

We assume for this analysis because we had about 120 days to do this analysis of alternatives that we're continuing with our "in the wet". We also assume that we're going to continue with the current contract, cost reimbursable contract.

We assume that the 902 limit was going to be increased. Some of the assumptions you'll see were based on funding mechanism or funding amount that is not probably realistic. Because one of the questions General Walsh asked us is, how fast could you finish the project if you had more money? So we looked at that.

We assumed that 52 and 53 were going to continue to operate through these various alternatives. That may be a bad assumption. If we start pushing back Olmsted too far, the risk to will go up significantly from 52 and 53. But for purposes of our analysis, that was our assumption.

Next slide, please. So we really looked at four alternatives. Alternative one was we were proceeding with Olmsted, \$150 million a year. We have the current estimated cost of \$2.92 billion. The remaining amount is about \$1.5 billion at FY12 price levels. So we're assuming we have the

current funding flow of \$150 million a year coming to Olmsted. And I mentioned before that that would give us benefits in 2020. And then we'll finish the overall project in 2024.

Just to extend that, looking at that funding stream and we just heard earlier today that it's actually a little bit more revenue than that. That's good news. But looking at \$150 million a year, which is the assumption we used, we would have Lower Mon benefits, not completing the project, but 85 percent of the benefits in 2027.

Now, that's finishing the main lock chamber of Lower Mon. That's a significant amount of benefits. I think it's 187 million a year for finishing that main chamber of the Lower Mon. We would finish the overall Lower Mon project in 2033. And we would finish Kentucky Lock in 2040. We're looking at the top 23 projects at \$150 million a year, it would be 2040 before we would finish the top three of those 23 projects.

Any questions about that?

(No response.)

MR. HANCOCK: Next slide, please. So this alternative two. And this was once again General Walsh asked us to look at what could you do if you had more money. We think we could finish the project two years earlier if we have \$215,000,000 a year versus \$150 million a year. So it would be operational in 2018 versus 2020. We think we could do the overall completion in 2020 versus 2024.

And if you look at our, I have other slides that I didn't show here, but we have funding analysis that shows for the current status quo, \$150 million a year. We need that through about 2021. It starts dropping off significantly after 2021 to finish the demolition. So in 2022, 2023, 2024 there's sequentially a lower amounts of that 150 million that are needed for lower -- or Olmsted.

That's alternative two.

Next slide, please. Alternative three and four are where we start looking at slowing down Olmsted or pausing Olmsted completely. So I'll just describe what those are and then I'm going to focus a little bit more on alternative four in discussions. I think it better illustrates some of the results that we got.

So alternative three, we looked at slowing down. Not a complete pause, but slow on Olmsted for a two-year period, for a four-year period and a six-year period. Once again, we had to pick something to do our analysis and that's what we chose. We assumed that we were going to continue putting about \$50 million a year on Olmsted. And the other hundred million, once again based on the 150 million total, the other hundred million would be diverted to other priorities from the Capital Projects Business Model.

And then we looked at options for under those various alternatives, we looked at what other new construction projects could you complete in total? We looked at what other major rehabs could you complete? And we looked at just flat out what could you complete off of the priority list? If you didn't constrain yourself to new construction or major rehab, just go down the priority list and

finish what you can based on the amount of funding that is freed up by those slow downs for two, four and six years.

And next slide, please. We did the same thing, same methodology except a complete pause on Olmsted. And we still had to keep some money for caretaker status. Because you still have to exercise the locks and dams. You have to provide site security. We probably have five people or so on site to do maintenance and security functions. Still have to do things, depending on the length of the pause. We have environmental requirements, that will go down and test for muscles downstream and things like that that are part of the EIS. So there's still some ongoing activities.

We just assumed for comparison purposes that we're going to need about \$10 million a year to do all those ongoing things. So the other \$140 million would be put on other projects, other priorities. Once again, we looked at two, four, and six year pause.

Next slide, please. Okay. Some of our assumptions. As we did this and we went down through the Capital Projects Business Model, not all the projects had the same level of cost estimate. Some of them had major rehab reports done. Many of them didn't have major rehab reports done.

Some of them, like Olmsted, had been updated recently using our current cost and schedule risk analysis that assigns risk factors to all the things that we think may impact the cost. So we made some assumptions based on the level of estimates we had for comparison purposes.

If we had a risk based cost estimate, we did not make any adjustments. That's the best that we think we can do. If we have a project that has a detailed cost estimate in our MCACES system, which is our Corps of Engineers Cost Estimating System, but it wasn't risk based. We hadn't updated it with risk factors and assigned risk levels to those. We increased the estimate by 15 percent.

If we had a rough order of magnitude estimate, it wasn't even an MCACES estimate, we increased the estimate by 25 percent. Then once again, Emsworth wasn't included in the analysis because it was going to be completed any way.

Next slide, please. This slide is very busy. But I just wanted to show you the realm of the projects that we were looking at. On the far left column you see rankings from 1 to 23. Those are the order of priority based on a revalidated Capital Projects Business Model. Once again, it's just exactly the same as the other one, except for the Kentucky Lock is now up higher than Chick Lock.

This column shows new construction and major rehab. The middle column shows the ten new construction projects in order of priority. And the far right shows the 13 major rehabs in order of priority. So the far left is the melding of that middle and that far right column.

Any questions about that?

(No response.)

MR. HANCOCK: Next slide, please.

MR. W. SCOTT NOBLE: This is Scott Noble with Ingram Barge. A couple of things. Mark [Knoy] and I were talking here a little surprised to see the flip flop with Kentucky and Chick. As we understand it, if something isn't done with Chick within the next couple years, it's going to be closed.

MR. HANCOCK: That's right. Actually, we have some people in the audience that were more directly involved in revalidating. I can tell you my answer and maybe I'll ask Jeanine or someone if they want to kick in too.

The priorities were based on risk which includes risk of failure and consequences of failure. So it's not just how likely it is to fail. It's if it fails, what does that mean? What are the consequences of that failure? I think that it was probably related to that more than the risk of failure.

Jeanine, do you have anything that you wanted to add to that?

MR. NOBLE: In essence, it concedes that you close Chick?

MR. HANCOCK: It concedes that if Chick closes, the consequences of that are lower than the risk that Kentucky would close and the consequences of that.

MR. NOBLE: I guess the other thing, if I go back to alternative two, which I understand the General has asked you to do. Do I understand this that if you accelerate this by two-years you save 1.7 billion dollars in benefits, and 250 million dollars in construction costs or interest or whatever it might be?

MR. HANCOCK: Yes. We estimate that we would save 250 million dollars. The 1.7 billion, we probably could talk about that some more. I was planning on doing that in one of the later slides. That's just using the 50-year annualized benefit. Really, you could make an argument, it would probably be a justifiable argument, are you really going to have \$875 million worth of impacts for a two-year period. The answer is probably no.

But I mentioned before that just looking at the flat out, not even assuming that you're going to have other closures of 52 and 53, if you just do the comparison of Olmsted, versus assuming 52 and 53 are operating all the time, all the time they are needed, there's still \$114 million worth of savings.

So the real answer is going to be somewhere between 114 million and 875 million.

MAJOR GENERAL WALSH: That's a big difference.

MR. HANCOCK: It is a big difference. That's absolutely true.

There will be, I can tell you that there will be some closures. I don't think it's going to be the same as what we assumed over a 50-year period. So it's going to be less than what you would see for the full.

MR. NOBLE: It sounds like it's a matter of managing your cash flow. It would be the sensible thing to do. Now the question is, again one of funding? I would think if it were left up to the Corps, certainly you would accelerate this project.

MAJOR GENERAL WALSH: I think we've demonstrated in a number of different areas, but particularly the Hurricane Storm Damage Risk Reduction, having full funding on hand, an abbreviated NEPA and the President's commitment to get it done, you can do \$10 billion worth of work.

MR. HANCOCK: Thank you.

Any other questions or comments about this slide?

(No response.)

MR. HANCOCK: Next slide, please. This slide once again is very busy. I just want to point out a couple things. This shows some of the projects for alternative one, two and once again, I skipped over three, because I think four is more illustrative of what we're trying to show the results were. But it shows how early we can finish some of the projects in our comparison.

Some of these, if you look at the major rehab, some of these are pulled forward by 70 years. That's because you're looking at \$150 million a year funding pool that's going to take over well over a hundred years to finish the 23 projects we're talking about. So some of these rehabs that were lower on the list that we could get to if we had a pause on Olmsted would pull forward 60 years, 70 years. You start achieving the benefits that much earlier.

We did roll that into our comparison. So we looked at the total period of time that you would save benefits when we did our comparison. Just to mention, even if we finished all the projects below Olmsted, all the rest of the projects, we finished all of those, that would give us \$488 million a year in benefits.

So if you wanted to question whether the 875 is an accurate number or the 640 is an accurate number, we could try to pick that apart. And we might and you might be able to justify changing some of those numbers some, although that's based on our methodology. But looking at all the rest of the projects, if you use the same methodology, if you combined them all, you could get \$488 million worth of benefits.

MAJOR GENERAL WALSH: I think, Rich, I would agree with Mr. Farley, I think we need to understand where we get the 800 from in more detail. I heard the cost of interest, on that large amount of money for 50 years versus small amounts of money. How many outages are we looking for 52 and 53 that adds to the 800 million. Probably not looking at outages at other areas.

Just comparing and contrasting the 800 million versus added to all the rest of them. I don't know the level of detail I need to know.

MR. HANCOCK: I'm not prepared today to --

MAJOR GENERAL WALSH: You need to fully understand that before we start making decisions. We need to put it in Olmsted. Because the others, even added, don't add up to 800 million.

MR. HANCOCK: I understand. We will provide the level of detail you need, sir, to help make the decision.

MAJOR GENERAL WALSH: I'm hoping we'll be able to provide that to the Board so they can make recommendations as to this.

MR. NOBLE: This is Scott Noble again. Looking at these various alternatives, it's sort of intriguing to see what you can do. I think I can probably speak for the Board. We're all interested in the legislation that's making its way through Congress called Wave Four. I don't know whether we could make a request. I think we would be anxious to see in terms of an alternative five, what Wave Four would, in fact, do for this whole program.

MR. HANCOCK: We did not look at that as an alternative. That's something I would be interested in looking into.

MAJOR GENERAL WALSH: I think we did, Rich, by looking at capability funding.

MR. HANCOCK: We certainly did that.

MAJOR GENERAL WALSH: If the Wave Four went forward and it was a hundred percent federal or whatever legislation says. We already looked at capability funding and that was option two.

MR. HANCOCK: Two, the \$215 million a year.

MAJOR GENERAL WALSH: Right. I think we answered that question, but perhaps not.

MR. HANCOCK: Well, it didn't go to all the rest of the projects. I think that's the question.

MR. KNOY: Yeah, Rich, staying on that project on Olmsted. When we met in Cincinnati, Mark Knoy with ACL, I asked the question if you had all the money you had, and thought we had not done that alternative. So if the project was literally federalized and you got all the money you could, is 215 the maximum capability on an annual basis that you could spend?

MR. HANCOCK: That would be close. And we really didn't say if somebody gave us \$1.6 billion and said finish the project, we didn't really look at that in great detail. It would be something less than probably the 2018 schedule that we briefed on the 215. So we think that would be an efficient funding about as best as we can do, assuming we have a funding stream.

We would probably be able to find some additional benefit if they just handed us all the money.

MR. KNOY: The second point I just want to make. This slide you have up from page 26, while it's very illustrative, in reality, it's not how the world is going to work. If Lock 25 needs a major rehab, we're not going to wait 60 years to do something about it. It's going to fail, something will happen, right?

MR. HANCOCK: That's right.

MR. KNOY: I just think we need to understand this is for illustrative purposes, most likely not how the world would work.

MR. HANCOCK: Thank you, Mark.

And I think one of the points that I hope everyone will get out this is that what we have is not a sustainable model. If we're looking that something that's going to take over a hundred years to finish the top 23 projects, that's not a sustainable project.

MR. KNOY: I think we all understand that. I appreciate that.

MR. HANCOCK: Okay. Other questions about that?

(No response.)

MR. HANCOCK: Sir, I am going to get into a little bit or more on alternative four, which shows what we think we can finish. Which is I think is much more compelling than saying, if we did all the projects, this is what the benefit would be. We can't do all the projects. What we can do is a much smaller portion of the projects. That's what the next couple of slides are going to talk about.

MAJOR GENERAL WALSH: Rich, I would like to, what we just went over was very significant. The model is not sustainable. And there was a period out there and it's not sustainable ought to be a comma, and this is what we're going to do about it.

It goes to, you know, from an industry perspective and from a Board perspective giving recommendations to the Secretary, what type of inland water transportation system do you want? If the model we have is not sustainable, what is it that you want, and then give a recommendation to the Secretary in what you want. You just can't go through this not sustainable, period.

MR. HANCOCK: The next section of my presentation is beyond Olmsted. And I think we'll get into that dialogue at that point.

MAJOR GENERAL WALSH: I'm whetting the appetite.

MR. HANCOCK: Thank you, sir.

Next slide, please. This is getting into looking at alternative four. I'm going to kind of breeze through the two-year and four-year pauses. So if you could flip two more slides to get to the six-year pause. I think this really probably makes the point of what we could do if we had a significant pause, diverted \$140 million a year to other projects.

And looking at the alternatives, the first alternative was what new construction project could you complete? And the answer was, I mean we were just going to go down to the next priority. And we couldn't complete the next priority, which is Lower Mon. But we could complete the main lock chamber which would give us 85 percent of the benefits. So that's the one new construction that we could complete if we had a six-year pause in Olmsted and that would give us \$187,000,000 a year of annual benefits.

Looking at the next alternative, which was option two, which was finishing major rehabs. We could actually finish nine major rehab projects. And we threw one new construction in there because it was so small. It was High Island, very small benefits, but it was also very small costs. So we rolled that in. So we could finish ten projects looking at option two.

You can see what they are, Lower Mon -- or excuse me, Lock and Dam 25 on the Upper Miss could be pulled forward 38 years under the current funding scenario. And that would give us 9.6 million of annual benefits. La Grange, the Lower Monumental, O'Brien. I won't read through the whole list, but it shows the project, how far earlier it could be completed than the current funding stream would allow, and then annual benefits it would achieve from that.

And option three was looking at the six-year pause and that was just trying to finish whatever we could finish, new construction and major rehab. And going down that list, we show that we could finish Kentucky, which is \$66 million in annual benefits, Lock and Dam 25 on the Upper Miss, La Grange, Lower Monumental, O'Brien and Myers could all be completed and pulled forward.

What we didn't do, which was what we would probably do in discussing whether or not we would really pause Olmsted is look at, I'm just realizing this as we're talking, look at what are the most benefits we could possibly achieve which might be a combination of some of these alternatives. I'll use this Lower Mon, the main chamber would be something we would want to do. Because it's a significant amount of benefits. So I would say we would do that and then we would see what other major rehabs or something we could roll in with that. Even though we're not completing it, we're getting a significant amount of benefits from that.

MR. KNOY: Mark Knoy, ACL.

Olmsted is the gateway to the Ohio River and its many tributaries. And if the President talks about doubling exports, 40 percent of these projects you can't get to if you can't get through to the lower reaches of the Ohio River.

How does it make sense for us as a Nation to spend money on upper tributary locks if you can't get to them through the gateway? It's kind of like the thought about building Lock 23 before you build 25. It just doesn't make sense to me.

And here again, you talk about if you don't have a gateway to access those upriver facilities, what good have they done you? That's a statement I guess.

MR. HANCOCK: Thanks, Mark. I don't have an answer for you.

VICE CHAIRMAN HENNESSEY: Mike Hennessey, Brownsville Marine.

Mark, I agree with you on those points.

General, you asked as an industry, our existing projects listing is not sustainable. As an industry, what we would like to see is the Capital Development Plan and the Wave Four legislation. That's what we would like to see. I think Scott, you said that. I think everybody on the Users Board, if you want to know which way we want to go, that's the way we want to go.

MAJOR GENERAL WALSH: Certainly. And we won't comment on proposed legislation. But I think industry also needs to take the grounds that a viable piece of legislation moving forward in five years could be two years. And it could be this year and that also ends in the year... discussion in relations to the Secretary.

I mean the other issue, Congress needs to make a decision on the 902 issue, or Mark we'll never get to this project. And we'll just start moving -- I mean, if nothing happens, 902 doesn't go forward, we'll be starting to move to other solutions.

So again, what we're looking for, I'm looking for the Board to recommend to the Secretary, does the Board support 902, not support 902? If the Board doesn't support 902, what else? What's option B?

MR. NOBLE: This is Scott Noble again.

One question that I keep going back to is this concern we have about the dam at 52. And I imagine that there has been more done than simply assessing that the dams is sagging in the middle. Considering the critical nature of 52, is there more that can be done or is being done to try to make that assessment? Because again, if something should happen, I see you've got a contingency plan. Those don't sound very exciting to me. But I guess I would like to know more. I think we need to know more. What is the risk there?

I mean is it just a case that we can't tell other than knowing it's on wood cribbing and it's sagging. What can or will be done in that regard?

MR. HANCOCK: Thank you. I'm also a proponent of doing what investigation we can do. So far when I start talking about that, our engineering staff gets very nervous. Because they think that going in there and digging around in this 84-year-old wood cribbing could actually cause a failure. But I'm with you. And I understand your point.

Additional investigations I think are merited. I don't have an answer for you on what we might find from that, other than we know it's already in a failing state because it is moving. And it wasn't designed to move. But I would like to have more information about that, too.

MAJOR GENERAL WALSH: Mr. Noble, I'm not satisfied with the answer that its in a failing state. I'm in a failing state. I'm at 57, that's nice. But I do go to the doctor once a year. And he said, yes, you're in failing state, but you'll live another 30 years.

So I've ask my engineers to present to me the question I need to direct to these guys to figure out what I need to do with 52.

But again, as I'm asking that question and as you asked that question, it's not sustainable. We can go and say it's going to last three years and it will be maybe. Or to last seven years it will be maybe. Once it goes down, it's your system. What's the impact on all of ya'll. That's Pittsburghese.

MR. NOBLE: Yes. I think it has a significant bearing on whether you can legitimately look at these alternatives of pausing, slowing down or pausing.

MR. HANCOCK: Next slide, please. This slide just shows for the projects what the annual benefits are. And not going down through the whole list, but if you look at, Olmsted is the highest. The next one on the list is Lower Mon at 220 million a year. The next on the list is the Inner Harbor lock replacement in New Orleans, which is 160 million a year. Then it starts dropping off significantly after that.

Once again, the same methodology is used for all of this and I understand the desire to dig into the \$875 million a year and understand the assumptions. I would just suggest that if we're going to do that and try to use that as a comparison purposes, we probably ought to dig into all the rest of them too because it uses the same method.

MR. KNOY: Mark Knoy, ACL. I think the point there was whether or not the 3.7 cost to benefit ratio supported the project. If it does, yes, we need to understand it. But I'm not sure we need to raise the hood on everything else. I think that was more of the point. Does 3.7 benefit ratio keep it at the top of the priority list where it has been?

MR. HANCOCK: It does.

MR. KNOY: Then, yes, I would like to understand the numbers, but I don't see any reason to go forward beyond that.

MR. HANCOCK: Are there any other questions? I'm about to move into the construction methodology portion of my presentation. Any other questions about the funding alternatives?

MR. NOBLE: Again, Scott Noble. Looking at this slide you have and I realize under the column entitled "source" one says "estimate" and one says "report". But here you have Chick showing an average annual benefit, looks to be significantly above Kentucky. Yet from what I understood, you flipped those on the priority list. Am I missing something here?

MR. HANCOCK: Yeah. Chick is showing 93 million and Kentucky was 66. Once again, I wasn't one of the economists that was involved in revalidating the list.

So Jeanine, do you have something you can offer or do we need to look into that a little more?

MS. JEANINE HOEY: Jeanine Hoey, Pittsburgh District.

I was the one that re-evaluated the priorities and we had the several criteria that was used to set the priorities. And just the change between Chick and Kentucky. And I don't know off the top of my head what it was that changed that made Kentucky go above Chick, but it was more than just one criteria that made it flip.

But there were several criteria that were used to prioritize it and one of them was changed from the original report that made Kentucky a higher priority than Chick.

MR. HANCOCK: I guess before I move into the next slide, I'll just offer, because General Walsh asked a question at the beginning when he was making opening comments. He said that he would like to see the Users Board make a recommendation.

And from my perspective, having looked through the funding alternatives, I believe that it's compelling that we continue with Olmsted. We have looked at various alternatives. We could finish up to ten projects on the list, but if you look at those ten projects on the list, I think it's significantly lower benefit than Olmsted. So that's the conclusion that I have come to. But I let the results of the analysis speak for themselves.

MR. KNOY: Mark Knoy, ACL.

I don't think we're disagreeing. We should continue forward, but I think Mike just reiterated that. That's the way that we worked together with the Corps over a period of 18 months to prioritize these projects.

I think the issue of the challenge back to us as industry and advocates for the Civil Works program is to figure out how to get you more money faster. I don't think we disagree with whether or not we should be moving forward.

MR. HANCOCK: Next slide, please.

Now, we're going to talk about construction methodology. We did do a fairly detailed look at "in the dry" versus "in the wet". The "in the wet" decision was made back in the 1997 time frame. At the time there were three factors that really led into that decision. At the time it looked, realized or remembered that we were being asked to be innovative.

What can you do to save money, to save time? Our engineers looked at it and they came up with an "in the wet" method that we thought were going to do two three things for us. One was it was going to save us money. As it turns out that maybe that wasn't the right assumption. Because the effort to put these things in this section of river was a little more than what we were originally estimating.

The second was, we thought it was going to be easier on the environment. We still think that that's probably true as compared to building two significant cofferdam sections in the river. There will probably be less environmental impacts to doing the "in the wet" method. So that assumption we still think is true.

The third was going to be less impact on navigation. We still think that that one is true. Although, in the “in the dry” is feasible, and you'll hear through the discussion that we have developed a design that shows two phases of cofferdam construction. We think it is feasible. We think it will allow navigation to continue. So it is a feasible a design to go “in the dry”.

Looking at some of our other points here on this slide, we did look at conventional cofferdam construction. We did not do a hundred percent design. We didn't do a concept level design. It's, probably closer to feasibility level design. Once again, we had about 120 days to do this. But we do have experience building cofferdams.

And once we had the design developed enough that we could do some take offs, we actually did a validated and certified cost estimate. Using the same cost risk method that we used for “in the wet”. So we do feel confident that the cost estimate is comparable in terms of looking at apples to apples comparison to the in the wet. You'll hear the results of that in just a minute.

We also, in doing this, prepared a construction schedule. That's one of the things we have to do when we do a comparison. And then we determined economic benefits based on the schedule.

Next slide, please. Some of the key assumptions. It's essentially the same configuration. We still have tainter gates, we still have wickets. Is the same configuration with either construction method.

We didn't constrain the alternatives and this is a significant point. We didn't constrain the alternatives based on incremental funding or continuing contract clause or acquisition method. We assumed that we were going to be able to award a construction contract and proceed with the “in the dry” construction at the end of the tainter gate project. Which would mean we would be awarding something in the 2016 time frame. Because we would be working on the current tainter gate section, placing the shells and placing tainter gates up until 2015.

The reason that's significant is one of the recommendations the team had is if we go with this “in the dry” construction method, they recommended that we go with the firm fixed price contract. And actually, we go with two firm fixed price contracts.

One would be for the first, to build the first phase of the cofferdam. And the second firm fixed price contract would be to build the dam features in that and the second phase of the cofferdam. So that's the two firm fixed price contracts.

In order to do that, with our current rules, we would need to accumulate enough money to award the full contract up front, which means we would have to delay things by probably two years, but certainly a year, to accumulate enough money in the fund to award a firm fixed price contract.

So under the current rules, with the incremental funding and continuing plus, et cetera, that's a delay that we didn't roll into our schedule. We assumed for purposes of our comparison, that we would be able to award this firm fixed price contract, we would have the money needed to award that first phase in 2016.

We assumed we were going to continue with \$150 million a year. We assumed that the tainter gate section was going to be completed “in the wet”. So we were going to continue with that and complete that in 2015.

Then I mentioned this earlier, but I'll mention it again. Under the “in the wet” construction method, we are starting to do some work this summer to prep for the nav pass work. It's not significant until the October time frame. The stuff we're doing that is relatively inexpensive. In October it starts to get more expensive. So we're hoping that we can make a decision before October 1st on whether we're changing from “in the wet” to “in the dry”.

Next slide, please. This is just talking briefly about the cofferdam height. We had a lot of questions and discussions about this. The original study showed that it should be 327 feet. We actually built, when we used a cofferdam to build the lock chambers, we used 329 feet when we did that. That worked. It was over topped. During that period of time we did over top the 329 once. It caused some delay. It caused some additional cost. I think it was around \$7 million and a couple months delay. I don't have the numbers specifically but it was in that range.

So when we rolled in the estimate for “in the dry” and we based it on a 329 and we also assumed that we were going to over top. So we assumed we were going to have one over topping event and we assumed we were going to have one near miss that was going to have us moving equipment because we were fearful that was going to over top. So that was rolled into the cost estimate.

Any questions?

(No response.)

MR. HANCOCK: Next slide. This just shows some of the schematics of what it would look like. We would build the first cofferdam on the far side of the river. So we would have 790-foot opening for navigation. Once again, there are certain river conditions where we think, the navigation, the velocities through there would be significant, 11, 12, 13 feet per second. But we've had our ERDC, our Engineering Research Development Center, look at that. In fact, they are still looking at that. We have them proceeding with doing some 2D modelling simulation testings. It looks like it would be workable. There are conditions where you need a helper boat.

So what we did for comparison purposes, we did roll in the cost of having a helper boat on-site year round. So that was part of the estimate.

Next slide, please. This would be the next, the second phase of construction. This would be the part right next to the tainter gates. Really not a lot else to add to this. It would leave a 700-foot opening for navigation. So we would have the wicket section done on the far side of the river at this point. We would be able to lay it down and have navigation in the 700-foot wide section.

Next slide, please. Some of the findings. The cost for the “in the dry” construction, using a traditional coffer dam would be competitive. I know you want more specifics. So I'll give you more specifics. I can feel comfortable doing this, Kristen [Budzynski], because this is not the official government estimate. This is a less than feasibility design. We did it for comparison purposes, but this is by no means an official government estimate.

If we go with this, we would have to finalize a design and prepare an official government estimate. But it was about \$110 million cheaper to go “in the dry”.

MR. KNOY: How much, Rich?

MR. HANCOCK: About 110. I know I briefed three weeks ago, and we at that point had not done our risk analysis. That was the next step. We've done the risk analysis now. It's about \$110 million cheaper to go “in the dry”. That's our estimate.

MR. KNOY: But it also slows it down by 12 months.

MR. HANCOCK: It slows it down by 12 months to two years. That 12 months is probably a minimum. We're thinking it would be somewhere between one and two years.

Once again --

MR. HETTEL: Richard, one clarification, Marty Hettel at AEP. The 12-month slow down and the completion of Olmsted, 12-plus months, does that include the one-year waiting for your contract phase?

MR. HANCOCK: It does not.

MR. HETTEL: So it is an additional 12 to 18-months should you didn't --

MR. HANCOCK: That's right. It --

MR. HETTEL: So it could go to 24 to 30 months.

MR. HANCOCK: That's absolutely correct.

I would say at this point, without some type of change to our model, it would go to that. We would have to change the funding stream or change the legislation that we have regarding incremental funding or continuing contracts clause before we could avoid that additional delay.

Any other questions or comments about that?

MAJOR GENERAL WALSH: I guess I look at, Rich, “in the dry” is going to be 12-plus months more than “in the wet”. But we've been assuming we would get four shells a year and we've really gotten something less than four shells a year.

MR. HANCOCK: We got five the first year. We got three the second year. So the average has been four. But you're right. And we were hoping to get six per year. And we haven't gotten that yet. We're planning on finishing four this year, only because that would get us to a logical stopping point before we start the next phase.

MAJOR GENERAL WALSH: So that 12-plus months, is that with the assumption of six shells per year? Something that we haven't done before.

MR. HANCOCK: The shell placement is a little different from the nav pass. The shells are almost the same size. They are a little smaller for the nav pass shells. They are, I think, about 115 or 120 – by - 100. So they’re almost the same length and width. They are only 10 feet tall or maybe 14 feet tall instead of 20. So they are almost half the height. They are a little bit lighter. The lifting frame is a little bit lighter. And the other difference is, you only have to match up one side. So the placement is actually significantly easier. So instead of having to match up two sides like we do right now, we only have to match up one side. So we think it's going to go smoother.

The other factor that we think will help being “in the wet” is it's the shallower section of the river. Right now we're working with tainter gates at the outside bend that's the deepest portion of the river. The nav pass is going to be significantly shallower. So there are a couple of things that we think are going for us. But once again, we haven't hit what we planned or what we projected originally yet. We haven't hit six shells a year yet. We got five the first year; three the second year. There was some significant flooding. We think we learned some lessons, but we still haven't hit what we were hoping to hit.

MAJOR GENERAL WALSH: So again, the comparison of the 12-plus months “in the dry” versus “in the wet” is optimal...

MR. HANCOCK: It assumes we're going to hit -- do you recall, David, how many --

MR. DAVID F. DALE: This is David Dale from Louisville [District].

The answer is that the schedule for both scenarios have similar risk delays built in and they assume some delays already. So the schedule assumes that you're going to have some problems, hazard conditions, those things, and that's reflective of both models.

You truly are comparing apples to apples. I think you do have a good comparison that what we're talking about is the 12 to 24-month delay going “in the wet”. And that's not being optimistic on one side and pessimistic on the other. It's balanced across the board.

MAJOR GENERAL WALSH: Does that include, I think I heard you say 110 million in savings?

MR. HANCOCK: That's right.

MAJOR GENERAL WALSH: That's a year's worth of trust fund.

MR. HANCOCK: That's right.

MAJOR GENERAL WALSH: Is that involved in the delay? Do you take that, you're saving a year's worth of trust fund going “in the dry” versus “in the wet”, so that would delay...

MR. HANCOCK: What ends up happening is, we tail off quicker with the “in the dry”. You end up delaying getting completion or benefits out of the main lock and dam section. But then the other sections finish about on the same schedule.

It's the, 2024 is still the completion date of the overall project. So it drops off fairly steeply after that.

MR. KNOY: So in summary it extends the project by two years?

MR. HANCOCK: It extends the benefits of the lock and dam by two years.

MR. KNOY: When would it go operational, is your estimate "in the dry"? When would it go operational versus 2020 when?

MR. HANCOCK: 2020 versus about 2022.

MR. KNOY: So two more years and we save \$110 million?

MR. HANCOCK: That's correct.

The other side, just to be completely honest about this, I mentioned this earlier. A lot -- it's easy to say you have to add in the \$875 million a year of lost benefits to that, to that two-year period. But really, it's going to be something less than that. That was based on the full 50-year comparison. It would be something less than \$875 million a year. It would be something more than \$114 million a year because that would be assuming you have no outages in 52 and 53. So the real answer is going to be something between that in lost benefits.

CHAIRMAN DAILY: This is Larry Daily.

When you're looking at the diagrams you have here with the two cofferdams, "in the dry" you'll still be able to go over the pass all the time. I go back to my other question. If you're doing it "in the wet" and you've got the shell placement crane and other things out there in the middle of the channel, we're going to need to lock through the locks from 2015 until 2020?

MR. HANCOCK: No, not all the time. There are times that you will need to lock through. Actually, you're going to need to lock through on the "in the dry" construction, too. The nav pass isn't always going to be open. I've been told that construction activities will impact navigation even during the cofferdam construction. So there is going to be periods of time under both scenarios that you have to lock through.

CHAIRMAN DAILY: And those costs are factored into the overall cost of the project?

MR. HANCOCK: Yes, sir.

CHAIRMAN DAILY: Those won't be trust fund costs, those will just be delays to the industry?

MR. HANCOCK: That's true. The impacts based on delays are trust fund costs.

CHAIRMAN DAILY: Let me flip that around then. Is that part of your \$250 million in savings by not impacting navigation during construction if you get full funding?

MR. HANCOCK: No, it's not.

CHAIRMAN DAILY: Right. That number is bigger than the 250 million.

MR. HANCOCK: Right. The 250 is just based on our estimate for the construction costs. So the contract cost is what that's based on and the Corps of Engineers effort to manage the contract.

MR. KNOY: The level of confidence, Rich -- Mark Knoy again. The level of confidence in this estimate is similar to the level of confidence that the apple to apples that David talked about?

MR. HANCOCK: That's correct. They are both 80 percent confidence levels.

MR. KNOY: We're trading off in the end a two-year delay to save \$110 million, is that the bottom line.

MR. HANCOCK: Right. That's kind of the bottom line.

MR. KNOY: I don't know if this is the right time to ask the question, but I'll throw it out there now. As we're looking at all these other alternatives, have we taken a look at an alternative walking away from the sunk investment of \$1.3 billion at Olmsted and doing major rehabs on 52 and 53, the lock and the dam?

MR. HANCOCK: I would say yes. But it's been kind of a conceptual thinking on it. We haven't put things on paper. I mentioned earlier in my presentation that we assumed when we did the original feasibility, and it's still our contention that you can't do a major rehab that's going to last over more than a 30-year period. It would take replacement. That's what would be required.

CHAIRMAN DAILY: All right. Would the replacement then of 52 and 53 be greater than the 1.7 or 1.8 billion dollars --

MR. HANCOCK: Yes.

CHAIRMAN DAILY: -- that we're looking at on forward construction--

MR. HANCOCK: It would.

CHAIRMAN DAILY-- replacement of 52 and 53 would be greater than that?

MR. HANCOCK: That's correct.

CHAIRMAN DAILY: Mark, because you can't build them the way they were built before. You have to build them subject to seismic shock and all the other new requirements.

MR. HANCOCK: That's right.

Any other questions or comments?

(No response.)

MR. HANCOCK: This is the end of my construction methodology discussion. I'm about to go into the part about beyond Olmsted. So any alibis or closing comments or thoughts on the construction methodology?

(No response.)

MR. HANCOCK: Next slide, please.

Beyond Olmsted. How am I doing for time? Just about out of time.

General Walsh has already kind of got us thinking in this direction. I'll just summarize a couple of points that we already made. At the current funding level, it is going to take to 2024 to finish Olmsted. That's actually under either scenario to completely finish the project, "in the wet" or "in the dry".

It's going to take to 2033 to finish the Lower Mon, the second priority list. It will take to 2040 to finish the third priority list, which is Kentucky. So we're quickly getting out to something that's unrealistic. If you're not even getting to finish the top three projects until 2040, and you look at all the rest of the projects, the 23 projects that I mentioned, it's going to take a hundred years or more to finish those projects.

There's an obvious conclusion to that. We need to do something to change the model. It's not sustainable the way it is. The projects we're talking about replacing now that are in such serious condition, are the ones up in the Pittsburgh area that are a hundred years old. These lower Ohio projects are 84 years.

And we're talking about a hundred more years before we can even replace these top 23 priorities. It's not sustainable.

Next slide, please. This slide is actually an older slide. We put it in here just to kind of emphasize the same point. If you look at the 2012 numbers there, it's showing there's a 110 projects in our inventory. We only talked about 23 of them, but there are a 110 projects that we need to be concerned about maintaining and operating.

Once again, it's unsustainable.

Next slide, please. And I'll jump this just so we can start having the dialogue. I just put a couple of points on here. The Capital Project Business Model showed the \$380 million a year as being kind of an optimum or needed funding stream. Not optimum. That's what we need to maintain the system.

I would contend that based on some more recent analysis, it would be nice to have 445. Because that would give us the two year early completion on Olmsted. That would be the difference between 150 million and 215 million.

So at least through 2018 it would be nice to have that funding stream. Then maybe it could drop back down to \$380 million a year and continue on for the rest of the system, based on the Capital Projects Business Model.

There has been discussion about public/private partnerships. I think those are healthy discussions. I think we need to continue having those discussions.

I went to Panama about a month ago. I was privileged to go down there for this conference we were having and to look at mega projects. And actually, got a tour, a personal tour. CH2M Hill took us around to the Pacific side. And one of my big takeaways there is they have the national will to invest to in their infrastructure. They gave them \$3 billion up front. They gave them well over a hundred million dollars a year just to do the Pacific side. That doesn't include the Atlantic side. So they're a hundred million dollars a month, not a year.

So they are investing. Panama has somehow figured this out. They are investing in their infrastructure. And they are getting the job done in a seven-year period versus what we spend on some of our high priority projects.

I'll throw this out just for some discussion. There are other models out there. Military model has been for private companies to come in and upgrade or build new housing units, utilities, power plants. And then they have a contract afterwards to operate those facilities. With a guaranteed lease period essentially. You build it, we're going to allow you guys to operate it for 20 years and earn revenue based on that and then turn it back over to the government. There's various ways to look at that. But that's the model that's been out there for the military program. And they've had some success with that. That's something we could consider.

And something else I'll just throw out here. I didn't put it on the slide, but I know you guys are well aware of this, but look at inflation proofing the trust fund. I mean the trust fund. When it was established, had a twenty cent per gallon revenue in there. And I'm making these numbers up just to make a point. If fuel costs \$2 a gallon back then and you had a twenty cent fuel tax, that's 10 percent.

If we had a 10 percent in there instead of 20 cents a gallon, we would be looking at a lot more than 20 cents a gallon right now. So a percentage is one way to look at it.

Another way is consider tying it to an inflation index. Maybe the same index that the Corps of Engineers is uses to inflation our 902 limits for our projects. If you tied it to something like that, then you have something that's going to follow the construction index for projects. So maybe that's a way to do it rather than just leave a flat 20 cents a gallon. Tie it to an index so that it would be inflation proof. That's something else to consider.

At this point, I would like to pause and maybe General Walsh wants to make a few comments, have some dialogue among the Board about where do we go from here? We know we have an unsustainable system.

MAJOR GENERAL WALSH: From this point, we're about ready to take a break and then we'll come back. So if there's any questions that you have of Rich, now's the time to bring them up.

Certainly, the recommended -- the Board will be making recommendations to the secretary some time later this summer on funding, zero, 150, capability, somewhere in between, pauses, as well as "in the wet" and "in the dry".

So it was discussions that -- questions that Rich is here. And he's got other people in the audience. If you need anything before we take a break.

MR. HETTEL: General, Marty Hettel with AEP.

There are a couple of things. Number one, I'm not sure how we can make any recommendation when we don't even know the viability of Lock 52 on how long that would last.

And then there's the cost to benefit ratio that's in question that we just discussed.

Rich, as far as additional funding, we have a plan out there for additional funding. It's called the Capital Projects Business Model. I think Mr. Hennessey has made that statement before. I guess it's more than a statement. I don't know how we can make the recommendation when we don't know the viability of current lock 52 especially.

MAJOR GENERAL WALSH: I understand. And there's lots of data points that are not there. Decisions are going to be made this summer, because we can't stay on where we're at.

So the Board has an opportunity to make a recommendation or not. We know it's not sustainable. We could make an assumption on 52. The assumption that we've been working on for the last decade is it's in a constant state of failure. When's it going to fail? I can do significant engineering analysis on it, when it fails, it's going to fail. We could say 10 years, we could say 2 years with regard to sustainability.

With regard to the 800 million, I think I heard enough that it's spread over 50 years. And that you're looking at a number of outages from 52 and 53 during that time frame. But what I also heard is in actual savings it's about 140 million a year and then the economist do a bunch of stuff to it. I heard enough there where I got...

MR. HETTEL: General, are you telling the Board here that a decision is going to be made in October of 2012, regardless of what the Inland Waterways Users Board may suggest?

MAJOR GENERAL WALSH: Right. Right now with no action from Congress on the 902 issue, there will be no additional funds in '14. So I've got to make a decision on who gets what. What am I going to recommend to the Secretary if we don't have a 902 fix?

If we do have a 902 fix, I still have to recommend to the Secretary how do we want to move forward and at what funding stream or do we want to do other portions of the capital funding list.

I'm going to be making recommendations to the Secretary. I'm sure, before she makes her decision, she would want something from the Board on how we would proceed.

VICE CHAIRMAN HENNESSEY: General, Mike Hennessey, Brownsville Marine.

Our plan is that industry is to move forward with the Capital Development Plan vis-a-vis the Wave Four legislation. And sometimes I just think that we have to go through the political process. I know it takes some time. But I'm wondering if we're actually hurting ourselves as an industry by trying to go to -- robbing Peter to pay Paul, instead of letting the political process work its way through to try to get the capital Wave Four project done. So I know that there are some timing issues, but if the politicians in Washington, DC look at us as an industry saying that we're willing to piecemeal this project instead of what we've all said before, we're all behind Wave Four and the Capital Development Plan, then we should move down that road. We should let politics have a chance to play itself out.

Because in all those projects, we get the money to be able to take care of everything, at least the top 17 projects.

So I'm just wondering, from an industry standpoint, if we're hurting ourselves by going down these different scenarios and like I said, robbing Peter to pay Paul.

MAJOR GENERAL WALSH: Good point. And certainly working the political system is a process. It's something that all of us need to work with. Industry needs to look at it from the perspective of what's the chances of passage and when in the year. At the same time, we're on a model that's not sustainable.

If 52 goes down, where does that...

MR. KNOY: Mark Knoy, ACL. I guess I'm little bit along the lines of Mike there. Just over the last two years we worked hand in hand as we thought we were partners with the Corps going through the Capital Development Plan process. And was supported by the Corps at that point in time when we were doing that. And now it seems like all of that work we're being asked to set that aside and put something forward, an alternative, when we really haven't gotten a legitimate answer. Although, inaction seems to be the answer that we're getting.

And what has changed significantly in that partnership that we were asked to put together by Bo [Major General Merdith WB "Bo" Temple, former USACE Deputy Commanding General for Civil and Emergency Operations], today that wasn't there before?

MAJOR GENERAL WALSH: I agree and the Corps and the Board and industry worked together to put a proposal and recommendation forward. And that recommendation was responded to. Okay. So we've got the response of that recommendation. What's the next plan?

VICE CHAIRMAN HENNESSEY: The political process is the next plan.

MAJOR GENERAL WALSH: That's fine. In 2014 without a 902 fix, we're done with Olmsted --

MR. HANCOCK: Actually, under the Capital Project Business Model, Olmsted was the top priority. Maybe you feel comfortable making a recommendation on the 902 fix.

VICE CHAIRMAN HENNESSEY: As Mark said, as an industry, we all agreed to that. And with the Corps' advisement and consent, agreed with it also. We're in concert. It's just a matter of we have this opportunity through the political process to try to get this fixed. And to jump around and start taking money away from Olmsted and giving it to Lower Mon or Chick or -- we haven't even got an answer yet politically. Maybe I could call on John Doyle.

John, from a political standpoint, where does Wave Four stand?

MR. JOHN DOYLE: This is John Doyle. The bill's been introduced in the House. Has 15 co-sponsors currently, additional co-sponsors are being sought. And that number will be added to. On the Senate side, progress is being made developing support on that side as well. So the political process is moving forward. The Wave Four bill is moving towards the goal line, but that's not to say that it's going to happen tomorrow. This is a difficult year politically. Virtually nothing is happening on the Hill. Most folks think that that will continue to be the case before the November elections. And what happens after the November elections depends on what happens in the election.

VICE CHAIRMAN HENNESSEY: I'm just thinking the politicians in DC would look at us and say, we want, as an industry, the Capital Development Plan, Wave Four. If we go back and say we're willing to change things, they're going to say, why should we vote Wave Four through? Why don't we give that an opportunity to go through? If it does go through, then all the projects that we're talking about or a majority of them will be handled.

MAJOR GENERAL WALSH: I would certainly think that's part of the Board's consensus recommendation to the Secretary. It is a decision as well that we'll go through the process. Political process.

Any other questions for Rich?

MR. HANCOCK: I'll be around the rest of the day if anybody thinks of anything. It's about time for us to have a break.

MR. KNOY: I just want to say that was one of the best reviews we've had.

MR. HANCOCK: Thanks.

MR. POINTON: There's a break scheduled on the agenda. We were supposed to return at 11:30. We're a little bit behind schedule. Can we try to get back here at 11:40.

(Whereupon, a break was taken from 11:19 to 11:46 a.m.)

MR. POINTON: We're going to resume the meeting now. I would like to call to order.

Next on the agenda General Walsh will be discussing the recommended way ahead. That's kind of a follow on from what Rich Hancock has been giving you some information on earlier.

MAJOR GENERAL WALSH: All right. I open up the floor for discussions or recommendations. The big item that we'll be addressing at the Headquarters on what we have

presented to you guys, New York terms. Or you'all from a Vicksburg term. I just opened it up and see what you --

MR. FARLEY: General, this Jim Farley with Kirby.

From a recommendation point of view, as a newcomer to the Board, certainly not a newcomer to an interested participant in trying to keep up and understand all that's being done and said here. At this point in time, I would not be doing anyone a service to make any specific recommendation. I need some time to look at some of the things I've been given today. I've also been promised some additional information which would be helpful to me. I do want to go on the record saying that I don't -- I as one member of this Board am not prepared to make a recommendation of anything firm. I'm going to have to have some time to study what I've been shown and to assess what I think. Thank you sir.

MAJOR GENERAL WALSH: I would certainly not and if you think I'm pushing you for a request today, then I'm not correct. What I'm looking for is, perhaps, the next meeting I think is in August. And after that if the Board wants a recommendation -- you're not required to make a recommendation. But if you want to make recommendation I think between now and then, the additional information provided, the additional information that you need will be provided to you so that the Board, if it wants to or chooses to can, make a recommendation.

MR. FARLEY: Thank you.

CHAIRMAN DAILY: Thank you. This is Larry Daily.

We do have a duty to provide you with an Annual Report. We will start that tomorrow. Looking at previous reports, taking the information that you provided for us, leaving some place markers for the information that we're looking for. And probably developing a few more questions for things that we haven't thought about today. And we will try and at least get that on an accelerated track for a draft of what we think the highest priorities and the way forward might be.

MAJOR GENERAL WALSH: Thank you, Mr. Chairman.

And certainly, again, this is my first time as the Executive Director as well. As the Commander of three different divisions, I've been involved, but never part of the Board or at least the Executive Director of the Board.

So a lot of question goes to me as I was thinking about it last night is, what type of inland water transportation system do you want and do we as a Nation want? Certainly, we want everything to be running and functioning and they're ready and able to function as soon as our barges get there. The funding stream, we know it's not sustainable. So what's plan B. So that's the big question that I ask myself as the Deputy Commanding General for Civil and Emergency Operations. Working within the constraints that I've seen for many, many years, with regards to how much we get in from the Trust Fund and how much we can do with the matching funds. And that's it. We're done.

Certainly, lots of discussions from many different areas that some people are supporting the 902, some people are not supporting the 902. Some people want to do the Capital Business Plan and do the Olmsted. Others in the different parts of the system don't. So I think the Board making a recommendation will help the Secretary decide. I hear a lot of these individual voices, but what does the Board want to do to make those decisions?

Any other --

MR. FARLEY: Well, Jim Farley with Kirby. I'm honor bound to say is part of the problem that we have here is the lack of continuity of this Board. In fact, we've not been able to meet for 18 months. Which it's no one in this room's fault. The fact of the matter is that we have not had that continuity of the last 18 months. So it's going to take us a little bit of time to catch up sir.

MAJOR GENERAL WALSH: I absolutely agree and understand that. And certainly, the efforts of this Administration to put the Board back together and we'll go through all of the hoops that it needs to go through to put that together shows the Administration's position on the Board.

It could have easily have lapsed on and on, because there was, as you guys know, you had to fill out all that paperwork. There's a ton of hurdles. Any one of them could have stopped, but the Secretary pushed all of us to make sure we went through and made sure she influenced the folks. And I didn't even know the GSA was involved.

Any other comments or questions?

MR. NOBLE: Just as a member, but not speaking for the Board, I think speaking for one of the large carriers, and I think for our customers' reliability, you're asking what kind of system we need probably ranks at the very highest point. And maybe I'm a little off script when I say this, I think there are a lot of people out there that there have been efforts made to suggest that we as an industry should bear the entire cost of our inland waterways system. We wish that we could. We wish we felt we had the financial strength to do that. The truth of the matter is, if we accepted that, we are confident that we would fail. And in turn, all the other beneficiaries of our river systems in turn would either have to step up to the plate or they would lose all that they have.

And the Wave Four and the Capital Development Plan, we stepped up and we're willing to put more on the table. I want to reiterate that these other beneficiaries are at the trough benefitting from what the system has to offer. And somehow that message has to get through that this system has to be supported and sustained. And we will certainly put our share in it. But we've got to come together and make this happen.

MAJOR GENERAL WALSH: I certainly agree. But again, the budget at the end of the day speaks what's available. The 85 million a year matched with the general fund is what's there and that's what I see in the foreseeable future. Yes, there may be some legislative changes. Those discussions have been ongoing probably for as long as I can remember in different pieces of legislation. How it moves forward.

We know it's not sustainable. Reliability is very important. You've seen the slides for at least five years. Unscheduled outages are tripled than they were two decades ago. And the main reliability issue is not -- I can't provide that.

So from the Corps of Engineers perspective, we're going to continue operating as best we can with the funds we have but that's not sustainable. So let's plan plan B.

And frankly, you know, plan B is I take my wife to Georgetown. We have a little restaurant there called Filomena's. We park the car there and you have to walk over the C & O canal. There's no water in the C & O canal. It hasn't locked anything but a barge that goes up and down two or three blocks. That's it.

MR. MICHAEL SOMALES: As a new member, I've been on the perimeter or peripheral of this issue for many years. I've worked in the industry for 35 years. I just want to support what Mr. Noble just said. We were asked these same questions, the former iteration of this Board was asked the same questions several years ago and developed the capital plan. The capital plan addressed a couple of things, including costs, which is out of control. Never, just run away thing. Earlier some of the presentations we talked about a 50-year plan. We didn't do a very good job of managing a one-year plan at Olmsted. It went from two billion to three billion projection.

It also addressed increased revenues with adding fuel. And it was worked on with the Corps by a lot of good folks that was put forth. But we didn't get an answer back. I heard earlier, that is your answer. No answer is your answer.

So are we being asked the same question again or are we being asked for a plan to move forward? This industry as Mr. Nobel iterated, can't support this. This is a small industry. The benefit to the Nation itself, whether it's corn growers, truck drivers, the Ohio River Valley, the utility valley, which means electric utilities and what it provides, including the electricity and the capital. From coal and the jobs that the farmers have, the petroleum industry. Just the every day things that we as citizens enjoy, but don't see why it happens comes from these rivers. Its unsustainable for small industry to shoulder all that cost.

We're willing to step up and pay more, but in return for that, we need some help from the government, we need some help from all stakeholders. So I guess it's pretty much an iteration of what Mr. Noble had to say. Thank you.

MAJOR GENERAL WALSH: And I appreciate that and the Capital Business Model was presented and the letter was sent back answering that. So presentation made and response back.

MR. SOMALES: I don't think officially there was a letter back to this Board, was there? I did see a letter. I don't think it was addressed to this Board. It wasn't addressed to this group.

MAJOR GENERAL WALSH: Okay. I'm happy to present the letter to the Board for the record.

MR. NOBLE: If I could, Scott Noble, Ingram Barge. The effort that went into that plan and was presented, presumed supported. And you know, usually in negotiation you get a response back

in terms of a counter. And I guess we're sort of anxious to know where the Administration would be other than it sounds like either what we have today, what goes in is what will get spent or is there some counter short of industry has to pay for the whole thing.

We seem to be making some progress in Congress, but I guess we would be curious if the Administration would provide anything other than what's put in the plan, the Corps will try to efficiently use that money.

MS. DARCY: I know I'm supposed to be an observer but I'm going to say a few things. Jo-Ellen Darcy, Assistant Secretary of the Army.

The letter that you referred to, I think people are talking about or around here is a letter that Congressman Oberstar, who is the former chairman of the House Transportation and Infrastructure Committee sent to me, asking me about the position of the Administration on the Capital Development Plan that the Users Board submitted. My response to that letter laid out the Administration's position or reaction to that plan.

And secondly, the Administration has put forward on two different occasions, including in the President's budget a proposal for a fee on the inland waterways. So that there has been a response and a proposal put out there.

MR. SOMALES: I think our position has been clear all along that a lockage fee is unacceptable because it doesn't fairly remedy the problem. It doesn't spread those fees out across to the right users. So a fee is not acceptable, at least from our position.

MS. DARCY: It's also the position of the Administration that the fee can be worked on with the industry as far as how it should be developed and how it should be distributed. And we made that clear on several occasions.

MAJOR GENERAL WALSH: Any other questions or comments?

(No response.)

MAJOR GENERAL WALSH: Most of the discussions that I've seen in the past year have been about Olmsted and that's why we put that as the main portion of our presentations. We will have additional presentations after we close this portion of the discussion.

But I think we, the Secretary already mentioned this, we're going to operate with the funds available on a system that is continuing to have unscheduled outages. So it goes back to what kind of system does the Board want? I will leave that as a rhetorical question and move to the next agenda.

MR. FARLEY: Excuse me, before we move on, this is Jim Farley with Kirby. One piece of the further information that would be helpful to me at least would be any more specificity that we could have concerning the analysis of the repair "in the dry" versus "in the wet". Anything more detailed we could get around that piece of analysis would be helpful to me.

Anecdotally, I've heard that the greater benefits have been found by others. So I would like, for my own edification, I would like to be able to see some more specificity than what was presented today. So if we could do that, that would be helpful, sir.

MAJOR GENERAL WALSH: I think we could do that to the Board. There's specific questions that will be useful, otherwise, they are going to drag you through 400 page report.

MR. FARLEY: Right.

MAJOR GENERAL WALSH: Certainly, there was a lot of discussions previously. At what height do you put the dam at. And I asked that question and the response to that is that it is at the top of the lock walls, as I recall. So even if we put it up higher, it's going to go -- it will spill over the concrete as well. So there's a lot of questions that I think I got in the past year that I passed along to Rich.

So if there's specific questions, we'll answer those. Otherwise, I'll make sure Mr. Hancock gets you as much data as we have.

MR. FARLEY: I assure you, I'll have some specific questions. Jim Farley.

MR. POINTON: I don't think I need to remind you, please identify yourself and talk into the mic for our transcription of the meeting.

MAJOR GENERAL WALSH: The lady in white over there.

MR. POINTON: She'll beat me up first and then she'll come get you.

I would like to call on Jim Walker to talk next on the Port and Inland Waterways Modernization Strategy.

MR. JAMES WALKER: All right. Thank you, Mark. Members of the Board. Pleased to be able to make this presentation to you today on the modernization strategy and what's taking place within Congress as far as taskings to the Corps of Engineers. We'll get the slides up in a moment.

Let me start with the Congress, as far as its Fiscal Year '12 appropriations included language that requested a report be developed and submitted to the Congress within 180 days after passage of the legislation to address how Congress should address critical need for additional port and inland waterway modernization to accommodate post-Panamax vessels.

They tasked this to the Institute for Water Resources. They said that they wanted this report within 180 days of enactment of the legislation. They laid out some factors that they were looking for the Corps to address in this report. Summarizing those factors, they wanted to consider the cost associated with deepening and widening of the deep draft harbors.

They wanted to explore waterways and ports to be able to enhance export initiatives. They wanted to look at current and projected population trends and then distinguish both proximity to these population centers, and also the availability of inland intermodal access as one of the factors.

Lastly, they wanted to address, the report should address the environmental impacts of this modernization. It was a fairly ambitious undertaking in terms of what Congress was expecting. Again, they asked for this within 180 days. The legislation was passed on the 23rd of December 2011, which gave us until the 20th of June 2012 to present the report to Congress.

In the months of January through April, the report was drafted and the months of May and June, the report's being reviewed. In terms of the report and how it's being organized, the present draft has eight different chapters. We're getting close to being able to show you that. The first chapter is a demand on future capacity.

The second chapter is existing U.S. and port inland waterways infrastructure.

The third chapter is evaluating the critical need for capacity, maintenance and expansion.

The fourth chapter on environmental impacts of modernization.

The fifth chapter is on the historical review and vision for the future.

Sixth chapter is financial financing options.

The seventh, the future federal role of navigation.

And the final chapter, considerations and a modernization strategy.

Shown here is a map of the United States and showing this connection between coastal ports and inland waterways. It's important as far as the educational opportunity to show the interconnectivity of this and just how vital this will be, especially on the exports, opportunities in enhancing those exports.

You'll see that traditionally, this is the following for the general public to better understand. And this, the audience knows this, but this predominantly a north-south movement of these goods. One of the things being pointed out is there's presently no Panamax ports along the Gulf Coast that make full advantage of the depth of the new Panama canal locks.

Shown here, the dimensions as far as the Panama Canal locks, both the existing and the new locks that are under construction. The major piece here is both the increased width and length of the locks from 110 feet long -- I'm sorry, 110 feet wide by a thousand feet long. Its current 40-foot controlling depth. Most people focus on the depth. But you'll also have an increased length and depth on the new locks that will basically enable much greater cargos to be moved through. In the area of containerized cargo, which has been most people's focus, you're able to triple the size of the number of containers that are able to move through the Panama Canal lock in single lockage.

Next slide. Shown here would be the various generations of the container ships. And what you're seeing is the trend within the industry is to be building ships that are capable of greater, larger number of containerized vessels that can hold. However, they are not getting much deeper in terms of again the 50-foot depth that the new Panama Canal locks will be enabling. As being taken advantage of with ships that are mostly of a box design, instead of the V hull. And they are getting

wider. So they are kind of maxing out on their depth but increasing the size on their length. Ultimately, not shown on this slide, but the wording at the bottom is how the Maersk E-3 will have an 18,000 TEU capacity, with a design draft of 47.5 feet. So when you're talking about the free board underneath that, that's where the 50-foot clearance in the Panama Canal and they're looking at comparable navigation channels in the United States.

Next slide. Shown here major freight corridors. How we're working with the Department of Transportation and with MARAD on the evaluations of interstate connections, rail connections as well as our inland marine transportation system. And taking a more holistic view of distribution centers for imports and how we'll collect the exports and get those to the coastal ports to the global markets.

Next slide. Here you see a forecast nationally of exports and imports over the next 30 years. You'll see that they are fivefold increase over that 30-year period, so that there's an expectation of U.S. exports participating in the global marketplace and how critical this transportation freight movement strategy will be.

Next slide. This slide shows the Gulf Coast containerized imports and exports. You see a tripling of that in a 16-year period. Again, focusing that there's predominantly greater growth on exports than there are imports at the present time.

I should mention the source of the data was IHS Global Insight in terms what was used.

This slide I think was helping illustrate to a number of stakeholders when I have these discussions as to the importance of freight movement and efficient, freight movement in the global marketplace. You see here three different routes of getting commodities to Shanghai. One is coming from Davenport, Iowa, coming down the Mississippi River and through the Gulf port to go over to Shanghai.

The second is Sioux Falls and a rail route that will take you to the West Coast and shipping into Shanghai.

And third is Mato Grosso in Brazil and how its products would get to Shanghai.

The comparison there is that you see the land truck costs an enormous cost for Brazil. This agricultural area, they've now been able to bring irrigation and can grow crops, their challenge is getting those goods to the coastal ports to get them to the global marketplace. Right now that's being done entirely by truck.

Whereas, in the United States, we are blessed with a good rail and inland marine transportation system abilities to move these commodities.

So you'll see the truck costs, the barge and rail costs and ultimately the ocean costs as far as getting these landed to Shanghai. You see the total transportation costs and the savings on the U.S. product over that of a Brazilian competitor and ultimately that landed cost. So that what makes this U.S. product globally competitive are the transportation savings that are realized through using

things like using the inland marine transportation system. This has been very eye opening to help people understand the role of this freight movement in the global marketplace.

Next slide. Getting back to the report, the initial report was drafted. It was posted to the web. You see here the internet connection to be able to take a look at the first draft. There were also listening sessions held as far as coordinating the opportunities for public comment.

We received the comments on the first draft. The second draft has been developed and is currently under Administration review. Originally, it was scheduled to be issued as far as another review of public to be able to see this and comment.

Right now we're under, it looks like a very tight time frame to get this completed and still deliver this to Congress on the 20th of June.

Next slide. With the idea that Congress is asking this question on addressing this, historically, they've looked project by project. The individual merits of the project, the benefit to cost ratio. What we're seeing here is a new willingness to consider looking at something in the way of a national strategy, which could become a freight movement strategy.

The willingness to look at these alternative approaches looks like a major policy shift within Congress. You couple this with the White House navigation task force and the navigation -- I'm sorry, the national exports initiative. And so you are seeing what looks to be taking shape in the way of the national freight policy. You see this already in place in Canada and Mexico, but it's not in place in the U.S.

But if you see the opportunities here to be able to bring these documents together to have this discussion on, for both coastal and inland navigation, these intermodal considerations. And it goes back to the urgency of resolving the inland waterway trust fund, so that we are keeping the IMTS viable.

Next slide. So in closing, we kind of what I remind our folks in navigation for the Corps of Engineers, when we're asked what we do and why is it important? We are saying that we are providing these navigation channels, this infrastructure that's going to be enable these goods to be delivered. And it's so important for the American goods to be competitive in the global marketplace. So the more we can do in the way of educating the public to understand and appreciate this, I think the better off we'll be both within Congress and the Administration. So subject to any questions, this just gives you an overview of where this report stands.

MR. NOBLE: This is Scott Noble. One question on the slide you have here that's titled "Why farmers should care about transportation". I assume this is prior to the expansion of the Panama Canal?

MR. WALKER: Yes, sir. It's current cost in terms of the 2011.

MR. NOBLE: I'm curious if you have a number that would reflect the ocean costs after the new system opens?

MR. WALKER: We don't because of the projections. Right now there's no ports planned or in the immediate stages of being deepened to take full advantage of the Panama Canal locks. So that you're looking at projects can take partial advantage of that. If you think about the existing 40-foot and then you have some 45-foot projects. But we haven't run those numbers yet as far as what projections might be there.

Thank you.

MR. POINTON: Thank you Jim. Next on the agenda we have Mr. Rich Lockwood. He's going to talk about inland marine transportation system levels in service.

MR. RICHARD LOCKWOOD: Good afternoon. I'm Rich Lockwood and I am privileged to serve as the Chief of Operations and Regulatory in the Army Corps of Engineers.

First slide, please. I always like to start out with looking at our mission and reminding ourselves what it is we set out to do. With regard to navigation, I wanted to stress that not only are we in the business of moving commerce, but we also are in the business of national security and recreation.

Next slide. This is a slide of the President's budgets for the last few years, what I really wanted to point out here is that just overall, and this is for all navigation, it's been a downward trend with the exception of FY13 when there was a little bit of a budget spike when OMB was trying to address the dredging needs.

The next one. As we talk about levels of service, there's some terminology that we need to make sure that we're all using consistently. First, I would like to point out that we are funding based upon the tonnage of the river and the river segment. That is how we've been doing it for the past few years and that hasn't changed. The level of service is actually based upon the effort it takes to move that tonnage.

So when we're talking about river systems, the definition of a high use river system is anything over 3 billion ton-miles per year; a moderate use river system is 1 to 3 billion ton-miles per year; and a low use system is less than 1 billion ton-miles per year.

With regard to the locks, the navigation locks, full service locks are anything that has more a thousand commercial lockages per year. And what we are proposing based upon the work of the Inland Marine Transportation System Board of Directors working group is five levels of service less than full service, depending upon the effort it takes to make those commercial lockages. Just to make it a touch more confusing, it is possible to have low use locks on high use systems.

Next slide. This is the reality of our FY12 inland navigation budget. You can see that there are five high use river systems, six moderate and 16 low use systems. We have 173 locks, most of the traffic, 95 percent of it is on the high use systems. The low use commercial projects took about a 50 percent budget reduction in FY12.

In implementing our Inland Marine Transportation System Level of Service Initiative, there will be 22 river systems affected. All 16 of the low use systems are affected. Sixty-five locks will

be affected. Of those 65, 38 of them are already operating at reduced or partial service and 27 are still operating today at full service.

Next slide. So why are we doing this? Increasing costs, decreasing funding levels, and deteriorating assets have made what we are doing unsustainable. It's pretty analogous to having the car sitting in the drive way with the headlights on and the engine running, just so that we're ready if someone needs to go to the market or take the car out.

We've lost the initiative in terms of maintenance of our facilities. The river now has the initiative, the river picks the point of engagement and the river is picking the scope of engagement. We've become reactive and our ability to react is decreasing every year. So the goals of this level of service initiative are to provide levels of operating service at the locks across the entire system that have a consistent logic.

We want to optimize our O and M expenditures on these assets, and we want to extend the service life of navigation locks by optimizing that service. You'll note nowhere does it say we're trying to save money. And I've heard that over and over again about this initiative. That's not really what this is about.

Next slide. What the initiative is about and it says reductions, but it really should be addressing funding changes in a consistent and transparent manner. We want to adjust the level of service to be consistent with the effort necessary to lock the commercial tonnage.

Our district operations folks will be analyzing each lock, each river system and coming up with a program for that system and those locks that's appropriate for that area. And it has to be done in concert with, of course, our employees, with our unions, with all of our stakeholders and of course with our elected officials.

MR. SOMALES: Rich, could I interrupt you?

MR. LOCKWOOD: Sure.

MR. SOMALES: I want you ask you a question. Do you want to back up a couple of slides? Thank you.

Mike Somales. I'm with CONSOL Energy. Backing up to the terminology slide. You got the first two bullet points, river systems and navigation locks. For clarity, you're going to use these two guidelines to decide the level of use a river has whether it's high, moderate or low use river?

MR. LOCKWOOD: First of all, Mike, the river systems, the stuff that we have there, that's what we've been using in our budget preparation for a couple years. So really, the levels of service talks about the effort it takes at the individual locks to pass that kind of commercial traffic. So there's high use locks and high use river systems. I just wanted to make sure we didn't get confused between all those things.

MR. SOMALES: The concern I had and just for clarity this is the backward look. In other words, if you had a low use river, a river that dropped below one billion tons in calendar year '12 then you would adjust the budget for '13 to reflect that low use.

MR. LOCKWOOD: Actually, the budget cycle is a three-year cycle. We're already preparing the '14 budget, so that's probably when it would hit.

But you're right, it's a backward look. We're looking in the rear-view mirror. As some of these systems, and Brian. Brian [Tetreault] is here, is going to talk about some of the electronic systems that we're bringing on LOMA and some of the other stuff. We're using two-year old data now because that's the best we've got. But as Brian's stuff comes on-line, it will be more or less real-time data.

MR. SOMALES: My concern was that locally we had heard that when it drops below one billion tons then the funding level is cut by fifty percent.

The concern I have is, we already know the Allegheny River locally doesn't have that. It's well below that and we schedule around that. But rivers like the Mon River and the Kanawha River that are just a couple hundred -- a thousand -- 1.2 billion ton-miles, precariously close to the one billion mark, if we have an economic slow down like we had in '08 and maybe we're having this year, we're reacting to as a reactive business, we only move what we're asked to move. And our tonnage will drop below a billion ton-miles on the Mon. And you guys react with funding accordingly. As we come back into better economies, we have a system that's really not or at least a service budget that's not geared to take care of our needs.

MR. LOCKWOOD: First of all, the fifty percent was just in FY12. That's not an automatic. So, yes, we will look at funding every year based on the budget EC, budget Engineering Circular. That's our instruction to ourselves about how to build the budget. We look at that every year.

MR. SOMALES: One more quick question before you go on. Is there any mechanism in place if this happens, if we do see, like I said, down turn that triggers this low use as the economy gets going, can we get the funding back in place to get the service we need?

MR. LOCKWOOD: Since I'm not talking to my boss, I will ask that you be patient as I get there. I know that I wouldn't do that with my boss.

And that actually, if we look, it says reductions and I used changes. And it's specifically for the reason you're talking about.

Okay. The District commanders get to approve the analysis of the appropriate level of service for each lock and each river segment. And then District commanders will request exceptions to that baseline level of service, based upon unique circumstances of that lock or that river system. Nothing is off the table, exceptions are approved by the Division commander. That gives it a particularly regional perspective, but it also allows annual review of that level of service. So that if tonnage goes down or up, you can begin to adjust the level of service.

And we're using older data, but as that begins to change, the budget will also become a little more responsive to that.

The way we have it set up, exceptions will compete with routine and non-routine maintenance within the normal funding of the project. That means no project can get to increase its normal funding through the approval of exceptions. That kind of keeps us from gaming the system. And within our system each exception gets treated as a separate work package.

This table is just a definition of those levels of service. You'll see that the first level is full service. That's 24 hours a day, 7 days a week, 365 a days a year. Then there are five levels below that of varying amounts of service from two shifts a day to service by appointments. What are called "appointment lockages."

This table tells you how on a baseline level you reach that level of service. You'll see that to get a full service, you need a thousand commercial lockages per year. While that may sound like a lot. If you think about it, that's about two and a half lockages a day. Not a great deal of traffic, but the working group thought that that was a great place to start.

We'll continue to look at this as we go along, but that was the starting point recommended and approved by the Board of Directors of the IMTS.

Next slide. This is our implementation schedule. We plan to implement this on the low use commercial locks by the end of September of this year, on the moderate commercial use river systems by the 1st of January, and on the high commercial use systems by the 1st of April. And we actually, internally, we use a thing called an Operations Order or OP order. That's an instruction from the General to the Division commanders implementing that and we're in the process of moving that out.

Next slide. So for the FY14 budget build, the operations level of service is budgeted in increment one. That's part of what we call basic operations. The additional funds for MSC commander approved exceptions are budgeted in increment three, which is critical non-routine maintenance.

And that competes with other major work in that same category, including major maintenance. So they are the responsibility for creating that balance between service and maintenance falls to the region.

Next slide. And I think pending your questions, that concludes my presentation.

Did I get what you wanted, Mike?

MR. SOMALES: Thank you.

MR. LOCKWOOD: Scott?

MR. NOBLE: This is the Scott Noble. You probably have shared it with industry, but I don't know that I've seen it, which would show the historical data that is now going to be the basis for this. In other words, the number of lockages that will now drive this process.

MR. LOCKWOOD: Yes. We're using the FY10 data out of our LPMS, lock performance monitoring system.

Did I get that right, Jim?

But as I was saying, as some of Brian's stuff comes on-line, the data will become almost real-time.

MR. HETTEL: Rich, Marty Hettel with AEP again.

I know you don't like to use this term savings, but have you estimated the savings for the reduced operations of these locks, a number on that?

MR. LOCKWOOD: No, I haven't. Because and this is a generalization, but the way our process works, each lock, each project will get 100 percent of increments one, two and three, add up to 100 percent of the average of the previous five years expenditure.

So moving something from increment one to increment three, doesn't actually change the amount of money the project gets. It changes how it gets spent. So there's really no savings. That's why I was trying to make that point.

MR. HETTEL: So a change in operation of maintenance or operation at a lock is going to be reduced cost. Does that reduced cost then go into other O & M categories?

MR. LOCKWOOD: It goes to that project to more maintenance.

MR. HETTEL: More maintenance at the current project. Okay.

Second question, how are you going to handle, and I'll make an example, I believe there's two locks on the Arkansas River that are slotted for this 501-1,000 lockages that are right in the middle of that river. How can you limit the lockages at two locks right in the middle of a whole transportation system?

And the reason I asked that is has there been any input in the industry on what the cost to industry would be to minimize these lock hours?

MR. LOCKWOOD: The district is supposed to be working with industry to set up these lock hours. Just because it says two shifts, doesn't mean it has to be, you know, 8:00 to 4:00 and 4:00 to 12:00.

I know on the Ouachita-Black there is a proposal to do, I think four hours in the morning and then a six-hour window when there is no service. And then another eight-hour window when there is service. And they've done that just based on an analysis of the transportation.

On I think M-KARNS [McClellan-Kerr Arkansas River System], that's actually a moderate use system but there are two locks in the middle of that system that are high use. And I assume that that's sand and gravel, kind of pool traffic. They will remain 24/7.

MR. HETTEL: Okay. And the last question I have for you is, recreational usage. How are you going to pass recreational traffic? Are they going to be under the same restrictions as commercial traffic?

MR. LOCKWOOD: Yes. Actually, recreational traffic is not an authorized purpose of the project. The projects were all built for commercial traffic.

The lawyers will tell me that recreational traffic is a project purpose. In other words, the project is there. We're operating it, so we can pass recreational traffic. So if you look in the table for how to figure out what level of service you fall in, it does address recreational traffic. But are they going to get separate hours, was that your question? No.

MR. HETTEL: So they'll be under the same restrictions that industry will be?

MR. LOCKWOOD: Right. And presumably, they'll be at the table when that discussion about what are the appropriate hours.

VICE CHAIRMAN HENNESSEY: Rich, Mike Hennessey.

Could there be an alternative metric used than ton-miles to come up with a level of service say, i.e., the value of the cargo? I mean would that be something that could be incorporated with the ton-mile metric that you're using now?

MR. LOCKWOOD: Ton-miles is actually the funding metric. I was trying to make that distinguish between the two.

But is there another metric that could be used? We don't have one. Nobody likes ton-miles.

VICE CHAIRMAN HENNESSEY: But if we came up with one, would that be something that could be used?

MR. LOCKWOOD: Yeah. I think that the Peter is here some place. Peter Stephaich.

We actually had that discussion with AWO [American Waterways Operators] a month or two ago.

VICE CHAIRMAN HENNESSEY: So it would be, from your perspective, if someone came up with a different metric, that would be of value that could be used?

MR. LOCKWOOD: Yes.

VICE CHAIRMAN HENNESSEY: We're planning on trying to do that as an industry.

MR. LOCKWOOD: I kind of took that.

MR. CHARLES HAUN: Charles Haun. I had a follow-up on Scott's question. The lock performance monitoring system, I looked at that a couple weeks ago and noticed that there are a number of locks with, the ones that was on the web site that had zero lockages or lockages where the lock, number of lockages was less than half what I could identify for my own company. How confident are we in the accuracy of the data being used?

MR. LOCKWOOD: Jim, do you want to get that one?

MR. WALKER: The data that's out there as far as LPMS is supposed to be scrubbed by the districts as far as awareness of where there's potential data entry errors.

I know that what it has revealed in some cases is where we weren't keeping all our records in terms of the uppermost lock, we were looking at the southern most lock or the downstream most lock was doing the data collections. But we do think if someone is demonstrating -- let me go back.

We think the LPMS data is accurate in terms of what's out there. We think that the report that got pulled on it may be published, there may be some questions about it. And we've gone back and asked the district as far as verifying the lockage information.

In some cases there's issues with the data entry and getting that cleaned up. But for the most part, we think that we've got a good data base that we're working off of as far as keeping track of those things. I've saw several in the southeast that I've gone back and challenged.

MR. HAUN: We'll get the opportunity to comment on the accuracy of the data?

MR. WALKER: (Nodded.)

MR. LOCKWOOD: As we do bring these new systems on-line, since the data entry will be from the dispatcher at the companies rather than our lock masters, the data should be much more accurate.

MR. FARLEY: This is Jim Farley with Kirby.

On slide 11 it says that under implementation, that the directive establishing the levels is going out, that the low commercial use systems will be impacted the 30th of September.

I'm just wondering, if I'm correct in my memory, the Ouachita River has already begun to have limited use.

MR. LOCKWOOD: I don't think they've actually implemented that yet. Understand, however, that the actual instruction through the military chain of command is what happens through this OP order thing.

The documents themselves describing how to do this and so forth have already gone to the ops chiefs back in April. So I know Vicksburg district has already had a number of meetings, public

meetings trying to figure out what right looks like. And they have a plan. That was why I knew that they had this unique shift structure that they had developed.

MR. FARLEY: Okay. Thank you.

CHAIRMAN DAILY: This is Larry Daily. Has there been any discussion about the some of the highly seasonal rivers, like the one I live on, that we have nine months navigation. So maybe I need something more like an earned run average than just a thousand lockings.

I think most of the main locks on the Upper Miss will be fine, but as you get farther up the system, you get less than nine months. Sometimes we get seven months of operating, if we happen to have a flood during the summer. So is that part of the discussion and will be taken into consideration?

MR. LOCKWOOD: Yeah. The seasonality of the river, the river segment or the lock won't actually the change the level of service that's intended to be offered. But the district may want to allocate that level of service differently.

CHAIRMAN DAILY: I don't need anybody out there in December or January.

MR. LOCKWOOD: I think Colonel Graham can actually explain that to you. The same problem here on the Allegheny.

MR. SCOTT LEININGER: Scott Leininger with CGB. I understood the flexibility in terms of an annual review as things may change, but what about, I mean we found things to be very dynamic in recent history with some of the changes that are going on in the coal industry, from domestic to export. Some of the petroleum things and some of the movements coming out of the shale. And certainly, from a grain aspect of when another country may step in such as China to make purchases. As things spike or it looks like we really have some major changes that are coming up, will the flexibility be there to change some of those lock schedules or once it comes out, are we locked in until that next annual review?

MR. LOCKWOOD: I can't imagine that any operations chief would not be willing to talk to you about a unique situation. The same question comes up with what happens if we have a hurricane? Can we get 24/7 service to get stuff out the area. Yes, of course. Unique situations require unique solutions.

Just understand, however, that ops chief gets a certain amount of money every year to operate his system or his locks. So if you change the level of service, then there's something you're not going to do so you can go do that.

MR. WALKER: This is Jim Walker with the Navigation Branch. We recognize that the performance evaluation is looking in the rearview mirror as far as the past usage. We look at a need to make sure that we are addressing potential for change. There's two stages to that piece of it.

First would be the immediate change as far as somebody's going to come in, locate a plant, begin operations and you got to try and look at making adjustments. That's done during the course of the time frame that you're looking at, which may be shorter than our budget development timeline.

The second piece of that would be in the next year's budget development cycle, we could take advantage of looking at that. I think that's something we still need to look at formalizing how we will do the look ahead as far as the anticipated new customers coming on-line and higher utilization that's in that future. But I think we're going to have to look at both. As Rich was pointing out thinking very short term addressing until we get to the next budget cycle, what we'll do in the interim period until we can make budget adjustments to fix that for those future years. Like I said, that's almost a two-year look ahead where we are right now in '12 putting together our '14 budget.

MR. FARLEY: Richard, Jim Farley. Follow-up question on the Ouachita. Just want to be sure, so there's not going to be reduced use until September, this fall? Because I'm really hearing that this could be this summer, so what's the date?

MR. LOCKWOOD: They have to have it done by the 30th of September. The district could conceivably implement that sooner. If they can get all of the coordination and all of the approvals done, you know, in less time, they could conceivably implement it sooner.

MR. FARLEY: Thank you, sir.

MR. NOBLE: Rich, this is Scott Noble with Ingram Barge.

If I understood the way this funding is going to work, the dollars you might save from an operations perspective would be funneled back into maintenance at a facility?

MR. LOCKWOOD: Yeah.

MR. NOBLE: And I would presume this would happen, but speaking from private industry, from our experience, we have some facilities that we have that are fairly low activity. And what we've done over time was done a lot of cross training. We have the advantage, of course, that we are union free. We have that flexibility to cross train.

I'm curious from the Corps' perspective, are you constrained in that way where instead of having to do it either on a reduced basis or on a scheduled basis, with the right kind of cross training, a guy can lock and then he can go do other maintenance things?

MR. LOCKWOOD: Yeah, we have that condition in a lot of districts. Actually, I know here in Pittsburgh all of the mechanics are also certified to be lock operators.

Was that the whole question? Did I get it all?

MR. NOBLE: Yeah. Like I said, I would presume that the Corps is doing that, but I do know that sometimes in a union environment, all this guy does is lock, all this guy does is maintenance and that can be a constraint that somehow you need to get beyond.

MR. LOCKWOOD: I know here in Pittsburgh it was a matter of drafting the position descriptions to make that a possibility.

Thank you very much.

MR. POINTON: Next on agenda we're going to have Mr. Brian Tetreault talk to us about e-Navigation in the navigation field.

MR. TETREULT: Thank you, Mark. General Walsh, Mr. Chairman, members of the Board, ladies and gentlemen, thank you very much for this opportunity to present to you on some of the things that we're doing here. I'm Brian Tetreault from the Coastal and Hydraulics Lab at the Engineer Research and Development Center.

What I'm going to talk about is kind of a high level concept of e-Navigation. The idea of river information services, which is the inland waterways implementation of e-Navigation and then some of the specific tools that we're doing.

In listening to the presentations of today and in the interest of the Board, I was a little concerned at first that I was taking a flier here. What I'm going to be presenting to you here isn't of interest. I think Rich [Lockwood] already mentioned some of the stuff that's come up. I think there's some linkage to the stuff that Mr. Walker presented. And also potentially to some of the other things that you're interested in with regards to the allocation of resources and funding. So I think you will see a connection here and I hope that there is.

Next slide. Starting high level, e-Navigation. This is the definition up on the screen is one that was developed by the international community to say what e-Navigation is. I'm not going to read it to you, but I highlighted some of the most important things there because it deals with information. Getting information from a source to those who need it in a consistent, efficient, appropriate way. So that's a key concept of e-Navigation that I would like you to remember because I'm going to keep ping-pong on that as we go through.

Next slide, please. Okay. Here's what e-Navigation is. Wiring diagram, everybody got that? This is from a document that the international community has produced that is showing the e-Navigation architecture. I throw this up here to say that okay, a bunch of words on the previous screen were a concept. There are actual efforts being taken to build an infrastructure and a framework for e-Navigation.

Now, the next slide is what it really means. So if you could do that, please. For whatever reason, it means a lot more than that. There should be up on the screen, it should be a picture circle on one side, it's a ship. We have the shipboard side. Those of you that have the printout have this in front of you on the page.

On the other side there's the shore side. And in between in the two circles there, there's two sides of the coin. You got the shipboard side and the shore side. That's how the users use their information. Navigators use their equipment on board the ship; those ashore have information and need information from the vessels.

What's in middle there is that third side of the coin as a colleague of mine in the international community has termed it. That's the communications between the two sides of coin, but also some of these more less tangible things. Harmonization of standards, of terminologies, of things like that.

This is what you have in front of you and hopefully what others will be able to see what are better described is a simplified version. Really the key concepts of e-Navigation.

Moving on, please. Some of the key pieces of e-Navigation I've already hit on. Standard technology terminology, data exchange standards, communications equipment, things like that. As well as data structures, so that we're all speaking the same language. These are some of the things that we'll be focusing on as we move forward with implementation.

Now, what I just presented was drawn from international sources. There's international efforts to implement e-Navigation. In the United States, the Committee on the Marine Transportation System, an interagency organizing body, has developed a U.S. e-Navigation implementation strategy. They called it strategic implementation plan. Because the idea is to take this concept that's still under development and look at existing capabilities and start implementing some of the true e-Navigation capabilities so we can start seeing the benefits of them, as well as help drive international efforts so that we have a say in what may become international standards and things like that.

I talked about existing capabilities that we want to build on. Its cloud here is kind of a sampling of some of these existing capabilities. If you could, some of them are coastal, some of them are inland. But they all kind of work together. There's a lot of overlap and things like that. They are all owned by different entities, whether public or private.

One that I want to focus on in particular is the idea of river information services, which as I say is the implementation of -- we see is the implementation of e-Navigation on the inland waterways.

The main functions of River Information Services or RIS is to provide these general areas of service. So information on the waterways, fairway information, vessel traffic information or monitoring movement, traffic management, such as lock ordering or efficiently getting vessels through locks or congested waterways.

Calamity abatement, international term that means emergency response operations. Supporting that. Not responding to emergencies is necessarily what RIS does, but it provides information and capabilities to support that.

And then transport logistic support. So support for the movement cargo. So this is where the interface would be, the commercial side is very important in river information services.

Kind of a cartoon diagram of the concept as we see it here, and I take the kind of the example of one type of service that RIS will provide or needs support is reporting of information by industry. So various entities within the government need information or have information that's of value to industry. And right now, frequently that information is reported on a one-to-one basis. So if

the Coast Guard requires a report, it's reported to the Coast Guard. The Corps requires maybe the same or similar information, that's reported to the Corps.

What we want to do is make it so that there's single point, hopefully, or at least single standard reporting of information. And then it's made available as appropriate to those who need it.

Back out, correlated with other information, for example. So that it can be, it's more efficient, more consistent, more timely getting to some of the stuff that Rich Lockwood was talking about. And also, hopefully, less of a burden on industry in the instance of reporting information.

Next slide, please. Some of the key technologies that either exist now or are being developed to implement river information services support those key principles that I mentioned before, types of services. So inland electronic navigation charts, inland automatic identification systems to support vessel tracking, as well as that third side of the coin, the information exchange between ship and shore.

Electronic reporting between industry, between agencies. That previous slide that I mentioned gave an example of that. Notices to skippers which in the U.S., we have specific terms for the notices to mariners that the Coast Guard issues or notice of navigation that the Corps issues. Harmonizing those and providing them in formats that can be used more easily by those who need them.

And then the idea of a RIS index is an effort to gather the geospatial information that's necessary for navigation, such as the location of locks and terminals. And coding this in a consistent manner so that when you're saying a specific point, whether it's on your chart, on your bill of lading for a lock or whatever, it's the same thing, regardless of the service or who's using it. That's some of the key things and these are being developed.

Next slide. What we're starting to do is look at our existing capabilities. I've listed some of them there. Then what we want to do in the short term is start providing some of these services, if they are not being provided already in a consistent manner. One of the things that we're looking at are some of the information that would be valuable for the levels of service that were mentioned. The lock performance information. We're working on ways to deliver that in a common, consistent, centralized format validated by other real-time information so that you don't have to wait two years to get information on the number of lockages through a lock, you can have that near real-time. That's our goal for that sort of thing. So I'm hoping that that would help facilitate some of the decision making that was in the previous presentation.

Then another thing that we're doing is establishing our river information services center. Now, a lot of the capabilities we're talking about will exist, quote, unquote, in the cloud to use a term popular today. But you'll still need a central place to manage, to coordinate and do things like that. So we are looking at establishing a river information services center that we anticipate being a public/private partnership, establishing that.

Right now we're looking at establishing a RIS center here in Pittsburgh in partnership with the Pittsburgh commission. And we're still working on a lot of those details. That's the sort of thing that we want to do to start getting some of these efforts moving.

Next slide. Now, a specific capability that we have developed and deployed and are continuing to do so is the Lock Operations Management Application. This is a tool to improve the situation awareness of initially lock operators, but also other folks who need that type of information. Whether they be vessel operators navigating on the waterways, Corps management to make some of the strategic decisions that we mentioned or folks from industry, the public or other government agencies that have an interest or need to make decisions about operations on the waterways.

The key technology that we're using for this is the automatic identification system, as I think you're all familiar with the tracking technology used aboard vessels mandated for carriage to board most commercial vessels either now or in the near future. So we're going to build our technology on that.

Next slide, please. Conceptually here, and I don't want to spend too much time on the gory details, but the idea is that the information that's aboard the vessels on the left-hand side here, we would be able to communicate digitally with them through the AIS capability either that we own, the Corps is displaying at the locks, or by leveraging what the Coast Guard already has. We're working very closely with the Coast Guard to integrate our systems and share capabilities.

In the middle there, surrounded by the dotted line is kind of the boundaries of what LOMA is and what we're building. The information infrastructure storage capabilities, data validation, integration with other systems, as well as a display and interface for our lock operators down there at the bottom.

On the right is where the interface that I think will really build some of our RIS capabilities is exchange of information with external entities. So getting cargo information from industry that can be correlated with the AIS data, so you have real-time location of cargo movement, things like that that are of interest, for example, to the Coast Guard, for dangerous cargo movements and things like that.

That's the sort of thing that we're planning on building. A lot of this is we have placeholders, not in place yet, but this is where we're going.

Next slide, please. Just real quick, we have AIS equipment that we're deploying at lock locations. It may be kind of hard to see but the red diamonds are locations where there are locks. Yellow is areas where we've got equipment ordered and actually has been delivered and green is where they've already been deployed and are operational.

Not shown on here is the Pacific Northwest where most of the Columbia River has yellow at each of their locks. So we are deploying equipment there.

Next slide, please. Current capabilities and developing capabilities are a situational display. Up in the upper right-hand corner is what it currently looks like. A web based display. An interface for the lock operators. It provides obviously vessel locations, but also additional information on vessels. It also has some data management functions. We can do a play back of, if there's an incident or want to see what happened in an area for a period of time. That can be done.

Users can set up zones that can provide an alert when a vessel enters the zone or collect statistics. This also leads to one of our functions a little further down there, integration with other systems, where we can, based on those alerts, for example, we can send information to the lock performance monitoring system so they could start automating collection of lock passage, rather than relying on the lock operator to manually note times of passage and information like that. So integration with other systems is a key part of this.

Also working on data dissemination. Using the transmit function of the AIS capability to send out in a common format information from the locks to vessels that can be displayed on their navigation screens. At some locations we have current sensors that are collecting information on the current velocities. We will transmit that out so it can be displayed onboard vessels. We're also developing the capability to transmit information on lock operations, average wait time, vessels awaiting lockage. And those sorts of things that now aren't available immediately on the bridge of the vessels. So we're looking forward to doing that.

That's a quick summary of the e-Navigation concept. How we're looking to implement it within the U.S. through the interagency Committee on Marine Transportation System. Some of the specific technologies that we're working on that I demonstrated or told you about through the LOMA capability there.

Then I would like make a little plug here. There's a lot of work going on with e-Navigation. The Committee on Marine Transportation System has an active action team that is working to develop an implementation plan. An inventory of existing capabilities and looking to get these things going.

And at two conferences coming up, here in Pittsburgh at the end of August and then the Seattle in the end of November, we plan on doing a lot of outreach to the industry, to other stakeholders, to share the work that we're doing on e-Navigation as well as collect input. So I call your attention to those and would love to have participation in those as well.

Thank you very much.

MR. POINTON: Any questions for Brian? Thanks, Brian.

We have a couple of gentlemen who wish to make a public comment. I'm going to call on Jim McCarville of the Port of Pittsburgh Commission first.

MR. JAMES McCARVILLE: I will be brief, but I did want to thank you all for selecting Pittsburgh and giving us an opportunity to tell our story.

I hope on your flight back or in your office you have a chance to read over this edition of the *Pittsburgh Engineer*. It talks about a lot of the issues that you have been discussing here. It also talks about the billions of dollars that private industry has made in investments in recent years and continues to make, based on the assumption that we have a viable waterway transportation system.

I think that one of the things that we've all agreed upon is that we do not have a sustainable model for going forward in the future and that the consequences of continuing to do nothing will be severe. And I think these are all serious things that you understand and take very strongly.

It had been mentioned earlier that there had been a lockage fee proposed. I want to just speak for the people that work at these industries that have made the investments along the river, that a lockage fee would be particularly onerous on Southwestern Pennsylvania and would like hopefully we can direct this to the Administration, but we would like to see a new round of discussions on solving this unsustainable system, other than the lockage fee. And we hope that that would be taken under consideration.

Other than that, thank you very much.

MR. POINTON: Mike Toohey from Waterways Council is next.

MR. MICHAEL TOOHEY: Thank you very much for the opportunity to say a few brief remarks. I want to thank the Administration and you, General, for reconstituting the Board. It's been a critical enterprise of the Waterways Council membership to have this as a functioning, engaged body and we really appreciate the opportunity that the Users Board creates.

Now, with respect to WCI, I would like to inform the Board since it's been 18 months since you last met, that there are a few initiatives that we are working on that hopefully will inform your judgment and recommendations to the Corps of Engineers.

First and foremost, the Board was the creator along with the Corps of the Capital Development Plan. And we have now succeeded in getting that introduced into Congress as a legislative initiative. It's sponsored by Congressman Whitfield of Kentucky and co-sponsored by 14 members of Congress, bipartisan. And seven of those members serve on the transportation committee. The goal is to impact that committee's deliberation on a WRDA 12 bill.

We are still told by the leadership that they do plan, Speaker Boehner, to have a WRDA bill this year. And we are informed on the Senate side that they are marking up this bill this summer. And they are writing it currently. We have been in the negotiations with the staff.

We have two members of the Senate that have agreed to cosponsor this bill, Senator Landreau and Senator Alexander. We expect that bill to be introduced this month. We are also seeking other members of support for that.

So I do not want to mislead or let the impression be left to this Board that nothing is going to happen on the Capital Development Plan. Nothing could be further from the truth. We believe we have a real legitimate shot. So taking Jim Walker's advice about the potential for change. Please recall that the potential for change is alive and well in your deliberations in the form of Wave Four.

Secondly, we are very concerned as the membership of the WCI with Olmsted with the cost to complete the project increasing by over a billion dollars last year, half of which has to be paid by the membership of WCI. That was a real shocker. And as a result, we have gone to Congress and we have expressed our concern.

General Walsh actually got ahead of us, that's what leaders do, by requesting the analysis of the build "in the dry" alternative. That is what we asked Congress to do. The House committee has responded favorably to that. They have limited 50 percent of the appropriation for Olmsted in a condition on getting report on an alternative method of construction, i.e., building "in the dry" through a cofferdam.

The Senate took a completely different approach to our request, which was they have started to implement the cost sharing changes in the Capital Development Plan with respect to one project, Olmsted. They have put in a change in law to change cost sharing at Olmsted to 75 percent federal, 25 percent from the Trust Fund for one year.

Senator Alexander told me that he would prefer to do it as hundred percent federal as the Capital Development Plan contemplates, but that he couldn't do it in this budget year. But that will free up, if adopted, \$72 million for the Corps to decide where to take that money and put it for navigation purposes.

The appropriators also contemplate shifting the priority from ecosystem restoration projects to more flood control and navigation programs at the discretion and judgment and decision of the Corps. So those are works in progress but they are moving. I mean the Energy and Water bill is on the floor of the House of Representative as we meet here today.

And so I just want you to be aware that there is a potential for change out there as you make your deliberation.

Finally, we have the new issue on hours of service that's great concern to our membership. The way the Corps is rolling it out is pretty responsible. That is they have picked those locks for changes that would be hard to defend not doing that. So we recognize that if there is truly a cost savings to be achieved, we would support that effort. We don't want to just find out that there's a shift in cost. Let's just take Chickamauga, which is not one of the locks currently subject to this change. Chickamauga really only has two private sector beneficiaries. Marathon and Olin. Marathon provides the fuel for Knoxville through a terminal there and has to come through the lock at Chickamauga. And Olin relies on the lock to operate their manufacturing facility there.

What is not ever discussed is the national defense component. All of the nuclear weaponry rides through that lock. That's not well known and shouldn't probably be well advertised. But it's served Oak Ridge. So there's a national defense purposes.

Well, why don't these locks also have national defense purposes or other concerns? So we will learn as we go through this process about the impact. But what we're most concerned about I think changing the threshold next year. That this year we buy in because it's a reasonable proposal. Next year they just try to squeeze the industry to pay more by raising the threshold at OMB. So that concerns us mightly. That's a work in progress also. Something new, but we're very concerned about that. I just wanted to give you the report from the advocacy perspective of WCI, what we're up to as you make your judgments.

Thank you for the opportunity to say a few remarks.

MR. POINTON: The third speaker is Matt Woodruff of Kirby Corporation.

MR. MATTHEW WOODRUFF: Just a few comments on the presentation on e-Navigation that we just saw. Kirby Corporation is the nation's largest operator of tank barges and probably the nation's largest transporter of hazardous materials by water.

We supported AIS when it first was proposed. We support anything that improves navigational safety by increasing the situational awareness of our operators in the wheel house. It lets them make better decisions as they navigate. But we have a great concern with some of the proposals that we've seen regarding the use and dissemination of AIS data. Because if we put too much information together, we aggregate it, we make it available for data mining. Then the enemies of our nation can sit in a cave and do the intelligence work that they need to target the toxic inhalation hazard cargoes that we carry in our barges, and determine the patterns, find the locations and plan an attack against us.

So I think we need to be very careful. We've raised these concerns to the Coast Guard, but also, I would hope that the Corps of Engineers with your war-fighting heritage can recognize the risk of too much information would pose to the nation. And that we need to be very careful as to how much of that information gets disseminated once it's collected.

The other thing that I think we have to concern ourselves with is the NTSB [National Transportation Safety Board] is telling us on a regular basis that our operators need to avoid distraction. They need to be doing less texting, less data entry and more looking out the window of what's going on around them. And some of proposals that we have seen that would require real-time updates to AIS, which can sometimes be a very data entry intensive process, would go against what we're trying to accomplish here, which is greater safety by distracting our operators.

So we think that we need to be very careful. It's great to collect data, it's good to have this information available for analytical purposes, but let's not do so at the expense of safety or security.

Thank you.

MR. POINTON: Thank you, Matt.

We're to the point in the agenda where we're going to have the chairman, Mr. Daily and General Walsh provide some closing comments and a summary of what we've done here today.

CHAIRMAN DAILY: Thank you. It's been a very educational day. The take-aways I have here is we want to get our members involved with the projects. And I think that that can go a long way toward interpretation of some of the things we saw that -- I'll be reaching out to the Board to first ask you to volunteer for projects and then the ones that are left over I'll assign. So pick the ones you want and get back to me. We'll start working trying to get an Annual Report kicked off and discussions on that going.

And then my promise as Chairman is to maintain a dialogue with the Assistant Secretary, with General Walsh. And facilitate whatever I can do to come up with the answers we can all support. Eventually, we all have to be close to the same page. We may disagree how we get there,

but as I've heard over and over today that the system is too important to let fail. Let's work toward making it succeed.

Thank you.

MAJOR GENERAL WALSH: Thank you. And as the new Executive Director of the Inland Waterways Users Board, this is my first meeting and also the Chairman's. Many of you first time appointees to the Board. So congratulations. You made it almost to the end as soon as I'm done.

It was an effort from the Administration to get you guys appointed. But it shows how important this Board is, not only to the Administration but also to us, the Corps of Engineers, your discussions, deliberations and recommendations are very important to us as we make our decisions to move forward in different areas.

A reminder of the Civil Works transformation process. Four pillars that I talked about in my opening comments. You'll see a lot of discussions on trying to get feasibility studies done in three years and \$3 million, planning feasibility studies.

There's a number of feasibility studies that are out there, as I mentioned, 365. We're going to take probably a hundred of those out that probably are not going to get funded or lead to a successful conclusion any way.

The budget transformation piece, trying to move from a District, a project-by-project approach, and trying to look at things from a systems approach and a watershed approach. We've asked the Divisions to provide us some pilot watershed approaches on how we divvy up the money for this year. And there will be more discussions in the FY15 budget preparations as well. As we try and think of things in the systems approach.

The methods of delivery. There's three things that you need to become, and you guys know this better than I. To become a master at anything, you need the education, you need the training and you need the experience. As we're having less funds going into particular areas, that experience pieces are more challenging for people to get.

So what we're looking for is, do we create production centers or regional centers so that people who are assigned there can see multiple projects, as opposed to working one or two projects during that particular phase.

And then the last one is the infrastructure strategy. What we have now is not sustainable. We have a lot of old infrastructure that's on our books. We need to figure out how to either repurpose those or to de-authorize those. And that's a big part of our discussions in putting together a policy only WRDA, if that's how we plan to move forward with the Water Resource Development Act.

The last thing I would leave us with is discussions that we had many times is what we're doing is not sustainable, what type of system do we want?

Thank you.

MR. POINTON: I would like to thank everybody for coming today. The meeting is adjourned. Thank you.

(The meeting was adjourned at 1:17 p.m. and the record was closed.)

#### CERTIFICATION

I, Linda Walker, Court Reporter and Notary Public, hereby certify that the transcript of the proceedings and the evidence are contained fully and accurately in the notes taken by me at the within cause, and that this is a true and correct transcript of the same.

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Linda Walker  
Notary Public