

STAKEHOLDERS EVALUATION GROUP

MEETING

OF

DECEMBER 14, 2010

MIGHTY EIGHTH AIR FORCE MUSEUM

POOLER, GEORGIA

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## 1 OPENING REMARKS AND INTRODUCTIONS

2 MR. DYSART: Good morning. I'm Ben  
3 Dysart, and let's get the Savannah Harbor  
4 Stakeholder Evaluation Group meeting underway.

5 As usual, we'll start by making  
6 introductions around the table, and if you  
7 would give your name very clearly and your  
8 affiliation, whatever you choose to call your  
9 affiliation. We'll start with Bernard over  
10 there

11 MR. MOSEBY: Good morning. Bernard  
12 Moseby, Mobile District Corps. I'm with the  
13 Deep Draft Navigation Planning Center of  
14 Expertise.

15 MR. BAILEY: Bill Bailey, Corps of  
16 Engineers.

17 MR. FARMER: Bill Farmer, member of the  
18 public.

19 MR. OFF: Lou Off, Tybee Island.

20 MR. EMBERS: Joe Embers with the Coast  
21 Guard 7th District out of Miami, Aid to  
22 Navigation and Waterways Clearance.

23 MS. SADDLER: Emily Saddler, Coast Guard  
24 Marine Tech Unit here in Savannah.

25 MS. CARTY: Jen Carty, Coast Guard Marine

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2 Tech in Savannah.

3 MR. CALDWELL: Dale Caldwell, Georgia  
4 DNR, EPD.

5 MS. MOORE: Kelie Moore, Georgia  
6 Department of Natural Resources, Coastal  
7 Resources Division.

8 MS. JENNINGS: Judy Jennings, Georgia  
9 Sierra.

10 MR. BIRDWELL: Billie Birdwell, Corps  
11 of Engineers here in Savannah.

12 MR. MOSS: Dean Moss, South Carolina  
13 Savannah River Maritime Commission.

14 MR. HALL: Carl Hall, Georgia Wildlife  
15 Federation.

16 MS. GRIESS: Jane Griess, US Fish and  
17 Wildlife Service, Savannah Coastal Refuges.

18 MR. HAYES: Chuck Hayes, Wildlife  
19 Biologist, Savannah Coastal Refuges.

20 MS. MALLOY: Andrea Malloy, Coastal  
21 Conservation League, South Carolina.

22 MRS. BEASLEY: Cathy Beasley, Georgia  
23 Ports Authority.

24 MR. REES: Morgan Rees, consultant for  
25 GPA.

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2 MR. McCURRY: Jamie McCurry, Georgia  
3 Ports Authority.

4 MS. MOORER: Hope Moorer, Georgia Ports  
5 Authority.

6 MS. LANDERS: Mary Landers, The Savannah  
7 Morning News.

8 MR. KYLER: Dave Kyler, Center for a  
9 Sustainable Coast.

10 MR. BERSON: Will Berson, The Georgia  
11 Conservancy.

12 MR. DYSART: Ben Dysart, SEG Facilitator.

13 MR. O'KANE: Jason O'Kane, Corps of  
14 Engineers.

15 MR. SNEDEKER: John Snedeker, Synergistic  
16 Dynamics, a former member of the Economics  
17 Working Group.

18 MS. WENDT: Priscilla Wendt, South  
19 Carolina Department of Natural Resources.

20 MR. ROMINGER: McLeod Rominger, TICO  
21 Terminal Services.

22 MR. WRIGHT: Tom Wright, citizen. I live  
23 here.

24 MR. DYSART: Okay. Those who come in  
25 later, we'll get them to introduce themselves

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2 on the record at an appropriate break. You  
3 have in front of you the draft proposed agenda  
4 for the meeting today.

5 You've had an opportunity to look at it.  
6 I would ask if the body finds this acceptable,  
7 do you wish to make any changes in it? Seeing  
8 no request to do so, we will consider that it  
9 has been accepted for conduct of our meeting  
10 today.

11 We have -- you've had an opportunity to  
12 look at the previous meeting's transcript. Is  
13 there any correction or clarification that  
14 needs to be made on the record? Seeing no  
15 requests, we will consider that this body has  
16 accepted the transcript of the previous  
17 meeting.

18 Okay. The main reason we're here today  
19 is to hear a briefing on the project economics  
20 and we have the distinguished Bernard Moseby  
21 here to do that.

22 Bernard, I want to know, has the dismal  
23 science come up with any new ways to look at  
24 economics -- you're going to tell us about  
25 that, aren't you?

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2 MR. MOSEBY: Thank you, yes, sir.

3 MR. DYSART: We really look forward to  
4 your presentation. I understand you've got an  
5 half and a hour presentation, and then we'll  
6 be taking questions.

7 You're obviously prepared to provide all  
8 details that anybody might want in response to  
9 questions.

10 MR. MOSEBY: That's correct. What I'd  
11 like to do is go through my slide  
12 presentation. If you have questions during  
13 the presentation, feel free to interrupt and  
14 ask your question, because I've really boiled  
15 this down to a really thick syrup.

16 I was instructed man on the street,  
17 instead of using those \$50 terms that I  
18 borrowed from everybody else. So it's really  
19 a thumbnail sketch of what we've done.

20 Interrupt when you like. If we get too  
21 deep, if you wouldn't mind, I might ask you to  
22 postpone it until I finish, and then we can  
23 get further into the discussion.

24 Some of our guests need to get out  
25 earlier, so we'd like to try and get them out

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2 and they have the benefit of full  
3 presentation, and then we can go further into  
4 the discussion after the presentation.

5 I hope the presentation wouldn't take  
6 more than 25 or 30 minutes. Okay. My purpose  
7 is to do a recap of our meeting that we had in  
8 February of 2009, and pick up from there to  
9 explain how we updated the economic analysis  
10 for the expansion project, and then to explain  
11 our approach to this updated economic  
12 evaluation that we provide, and then to  
13 explain the benefit of the analysis.

14 We had initial resolution conference  
15 after the AFB. The AFB was held in August of  
16 2008.

17 MS. MOORER: AFB, Alternative Formulation  
18 Briefing.

19 MR. MOSEBY: Yes. I have to get off  
20 that, the Alternative Formulation Briefing.  
21 There were some concerns identified at that  
22 particular meeting we had here in Savannah  
23 with all our of headquarters folks, division  
24 folks, district folks both from Mobile and  
25 Savannah, and our review teams.

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2 The concerns that were identified was  
3 that the economic model that we had developed  
4 for that analysis was more than six years old,  
5 and it didn't have enough flexibility in it.  
6 We could not change important variables to  
7 measure their impact on changes in those  
8 variables and their impact on the planned  
9 formulation.

10 It is very important we're able to do  
11 that, especially when we're dealing with  
12 uncertainty. When we're dealing with  
13 uncertainty, you know, you don't have any  
14 probabilities to deal with.

15 And if you don't have probabilities,  
16 you're not dealing with decision-making under  
17 the rest, you're dealing with decision-making  
18 under uncertainty. So the two that you have  
19 there -- sensitivity analysis.

20 And we couldn't do the sensitivity  
21 analysis to tell us what's the impact of a  
22 percentage change in any particular, important  
23 variable. So we were handicapped. We were  
24 told that our assumptions, the simplified  
25 assumptions we used for container ship

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2 operation was not sufficient.

3 The Corps' has had lots of experience  
4 dealing with tankers and bulkers, their  
5 analysis and operation, we had a long history  
6 dealing with. Container vessel operations,  
7 even though they have been around a long time,  
8 we didn't have a well enough understanding of  
9 how they operated, and incorporating those  
10 characteristics into our previous model.

11 The Panama Canal expansion that's planned  
12 for 2014, 2015 was not taken into account in  
13 our previous model. Here recently the  
14 container industry has been going through  
15 quite a revolution -- evolution, and that  
16 evolution was not captured in that prior  
17 analysis.

18 One of the things in particular is the  
19 handling of empty containers and empty slots  
20 on these fully cellular container vessels.  
21 You know, they have slots that contain these  
22 -- that hold these containers. And no deposit  
23 no return, when you bring them full,  
24 eventually you're going to need empty or  
25 you're going to be building new containers at

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2 the source or somewhere to ship the goods back  
3 over.

4 You've got to eventually pay the piper  
5 and get the empties back. In order to load  
6 and unload you need empty slots, in order to  
7 move containers around.

8 We have a tide analysis that we had  
9 performed for the earlier analysis, and it was  
10 judged that we could do a better job. We had  
11 a model now that we can incorporate tide and  
12 also a passing lane analysis. So that was  
13 found to be a weak point.

14 The model was a 2006 model. Our  
15 commodity forecast was 2003. And you know  
16 what has happened at Savannah between 2003 and  
17 2008; new distribution centers, improvements  
18 at the port, and growth in our container  
19 business that has just rocketed us up in the  
20 standings of the busiest container ports in  
21 the nation.

22 So we had to update the commodity  
23 forecast. What have we done then, since that  
24 issue resolution conference that we held in  
25 Mobile, our alternative formation briefing in

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2 Savannah, we have updated the economic  
3 analysis starting with a new commodity  
4 forecast and a new fleet -- vessel fleet  
5 forecast.

6 Additionally, we developed a container  
7 ship model specifically for the Port of  
8 Savannah and a transportation cost-savings  
9 model. This model is a spreadsheet model.

10 Ideally, we would like to have what we  
11 call Monte Carlo simulation model, where we  
12 can repeat the study period over and over and  
13 over again using random processes, and  
14 probability distribution functions in order to  
15 get us multiple answers, so we can get a main  
16 standard deviation.

17 If we get a standard deviation, we've got  
18 an idea about risk, and we can build  
19 confidence levels around our answers, and we  
20 can better give decision-makers information  
21 that will help them when they're trying to  
22 allocate scarce resource dollars.

23 But we didn't have enough time for that,  
24 but we did start the process to building that  
25 simulation model. So we decided the quickest

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2 way to get there and be as applicable to  
3 Savannah in the way the container ships are  
4 operated.

5 A spreadsheet model was the answer as an  
6 interim measure, but we've also started on a  
7 path, like I say, to produce that Monte Carlo  
8 simulation model. We have Monte Carlo  
9 simulation models for our hurricane and storm  
10 damage studies. We have them for our  
11 hydrocarbon repair studies.

12 We have one for our inland navigation  
13 models. So we have a lot of experience with  
14 those types of models and they have really  
15 been good for us. So we just need a deep  
16 draft simulation model. The container ship  
17 model is the transportation cost savings  
18 model -- yes.

19 MR. DYSART: Question, Will.

20 MR. BERSON: Monte Carlo simulation?

21 MR. MOSEBY: Yes, sir. Monte Carlo  
22 technique is a statistical technique where you  
23 build a probability distribution function,  
24 like if you were going to shoot craps. You  
25 have one die. There are seven possible

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2 answers. So each number one to seven has an  
3 equal probability of showing up, if the die is  
4 fake.

5 So you can conduct an experiment. Each  
6 number has a one in seven -- six probability  
7 in showing up. And you shake the thing and  
8 you repeat this experiment over and over again  
9 to see if the die is fake.

10 The Monte Carlo technique, because of the  
11 gambling houses in Monte Carlo, terminated.  
12 That's the simulation. All of our  
13 distributions are not uniform, you know. We  
14 have other distributions that follow say the  
15 norm, the approx or exponential.

16 Whatever variables we are dealing with,  
17 we find a probability density distribution and  
18 we randomly pick from that distribution. So  
19 every time your main variables are shifting a  
20 little bit, based on that probability  
21 distribution. And that's what gives us many  
22 answers, and then we divide to get an average,  
23 and then we build our deviations and  
24 confidence intervals around it.

25 MR. SAPP: Quick question. Will you have

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2 that Monte Carlo approach finished by the time  
3 this EIS has been finalized?

4 MR. MOSEBY: No. I've had a training  
5 session down in Mobile on that model where we  
6 introduced the deep draft navigation twos.  
7 These twos, one is the tide table. Another  
8 one is the data loading two.

9 All the data that we collected, all of  
10 our harbors around the nation is kept in  
11 various databases, public databases and  
12 private databases. These twos help us to pull  
13 that data down for a particular harbor we're  
14 studying.

15 There were four twos they previewed for  
16 this deep draft model in Mobile. So we've got  
17 the twos that will help us build these input  
18 values, but there's still some development  
19 that's going to take us about, optimistically  
20 -- I'm an optimist. I'm always wrong. I'd  
21 say six or seven more months to get the rest  
22 of the model ready for beta testing.

23 Right now we're alpha and beta testing,  
24 you know, kind of in between, but I don't  
25 think so. I really don't think so.

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2 MR. SAPP: Okay. Thanks.

3 MR. DYSART: David Kyler has a question.

4 MR. KYLER: Let me clarify, maybe I'm  
5 missing the point here, or maybe you made this  
6 clear to everyone else but me. You said  
7 earlier part of the problem before was there  
8 was no probabilities available.

9 Now you're saying you're building a model  
10 based on analysis of recent activity and  
11 the probabilities associated with those is the  
12 forecast; is that what you're saying?

13 MR. MOSEBY: The prime model that we had  
14 was a static model, and we were not able to do  
15 sensitivity analysis on the important  
16 variables. I mean we couldn't change -- it  
17 was just a restrictive model. You could get  
18 one answer out of the model and you couldn't  
19 vary the input.

20 MR. KYLER: But didn't you say one of the  
21 problems at the time of the alternative  
22 formulation briefing --

23 MR. MOSEBY: Oh, at the briefing, yes.

24 MR. KYLER: -- there were no  
25 probabilities available for container shipping

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2 industry behavior.

3 MR. MOSEBY: Yes --

4 MR. KYLER: Now you're trying to build  
5 that, based upon an analysis of the recent  
6 activity of the container shipping industry,  
7 is that right?

8 MR. MOSEBY: I've got you so confused,  
9 I'm sorry. The model that we built for this  
10 analysis to address the comments we received  
11 at the AFB, this model, we're able to do  
12 sensitivity analysis. We still have -- we  
13 don't have standard deviations out of this  
14 model that we built for this go-round.

15 The deep draft simulation, Monte Carlo  
16 simulation model, that's the one that we're  
17 paralleling. We're building that one now so  
18 we can get multiple answers and standard  
19 deviation.

20 MR. KYLER: In the future?

21 MR. MOSEBY: That's right.

22 MR. KYLER: That's not yet available?

23 MR. MOSEBY: That's right.

24 MR. KYLER: So given that you have no  
25 existing probabilistic-based modeling, the

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2 forecasting you're doing is based only on  
3 trends or --

4 MR. MOSEBY: Basically needs, yes, and  
5 trends, but we have conducted many sensitivity  
6 analyses varying our important variables.  
7 Like on the commodities forecast, we have done  
8 sensitivities plus minus 1%, plus minus 2%,  
9 plus minus 3%, to see if it had changed our  
10 simulation. We can do that now.

11 MR. KYLER: Okay.

12 MR. DYSART: Will.

13 MR. BERSON: So you developed a specific  
14 tool for this particular project, but you're  
15 building a tool that will apply to all other  
16 projects across the nation?

17 MR. MOSEBY: That's right. That's  
18 correct. Thank you. All right. Now the  
19 other model that we used was our HarborSym  
20 model and it's a deep draft widening model.  
21 So we've taken the basic HarborSym Monte  
22 Carlo simulation widening model, and that was  
23 the platform that we started with to add to  
24 HarborSym the deepening model.

25 That's the deepening component and that's

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2 the one still under development, but the  
3 widening, the channel widening model has been  
4 around for a while, and we use it for  
5 evaluating channel widening projects.

6 And we were able to use it for our  
7 meeting lane analysis. In the expansion  
8 project two post-Panamax generation two  
9 vessels cannot meet each other in the channel.

10 So we evaluated meeting lanes where one  
11 of the vessels can park itself off-side the  
12 main channel, the other post-Panamax two can  
13 pass the opposite transgressing vessel and  
14 then complete its journey. So only two  
15 post-Panamax generation two vessels have the  
16 meeting difficulty of constraint; a  
17 post-Panamax generation one post-Panamax  
18 generation two can pass -- can meet each other  
19 in the channel.

20 MS. MOORER: Just a clarification. It's  
21 more an issue of timing, not parking the  
22 vessel in the meeting lane, and then meeting  
23 another vessel. It's more an issue of the  
24 pilots timing it.

25 It's like they time vessels within

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2 straightaways within the channel for meeting,  
3 so it's not parking the vessel. It's like a  
4 timing issue -- clarification.

5 MR. MOSEBY: Thank you.

6 MR. DYSART: Jane ,you have a question.

7 MS. GRIESS: I wanted a clarification.

8 Did I understand you to say the harbor  
9 simulation model is still under development?

10 MR. MOSEBY: The widening HarborSym  
11 model is not. We are adding another feature,  
12 deepening, where you can evaluate widening and  
13 deepening.

14 MS. GRIESS: So for the documents we're  
15 reviewing now, it's only the meeting portion  
16 that's included?

17 MR. MOSEBY: Time delay, I mean tide  
18 delay is evaluated in HarborSym.

19 MS. GRIESS: But not the deepening  
20 portion?

21 MR. MOSEBY: Not the deepening portion,  
22 the deepening portion is in the transportation  
23 cost-saving model.

24 MS. GRIESS: Okay. So just for our  
25 clarification is there additional

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2 documentation of those particular models  
3 available, because it was not included in the  
4 documents.

5 MR. MOSEBY: Okay. The transportation  
6 cost-savings documentation should be on the --

7 MR. HAYES: The documentation for the  
8 HarborSym model is not available because the  
9 link on the website is broken.

10 MS. MOORER: That would be our website  
11 probably. I don't know whether it's posted on  
12 their website or not. If you will just let us  
13 know when you see a link broken, we will try  
14 to get that repaired.

15 MR. MOSEBY: So you can access GPA's  
16 site?

17 MR. HAYES: These were questions from our  
18 economics people in DC. They could not access  
19 the site link.

20 MS. MOORER: Bernard, the HarborSym  
21 model does include the different ducks, in  
22 that you have to have the different ducks for  
23 the tidal movements of the vessels in  
24 assigning when they're moving.

25 It's like a simulation, like city sim.

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2 It's kind of like that, except it's with the  
3 harbor, how many vessels and when they're  
4 moving, at what points in the tide, things  
5 like that. There is a ducks component  
6 involved.

7 It does not measure the benefit of the  
8 ducks. It's a simulation to see how the  
9 harbor handles the vessel movement according  
10 to the tide. Is that right, Bernard?

11 MR. DYSART: Go ahead and follow up, then  
12 we'll get Bill.

13 MR. MOSEBY: Okay. I need to get you a  
14 copy of the transportation cost-savings model  
15 and that documentation, so you can get it on  
16 your site. Yes, sir.

17 MR. HAYES: Maybe you can address this  
18 later. I was just wondering with all these  
19 models flying around which models build upon  
20 each other, and how's that risk uncertainty  
21 compounded?

22 MR. MOSEBY: The transportation  
23 cost-savings are completely contained in the  
24 container ship model. The tide delay, the  
25 meeting lane analysis and constraints, like

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2 the two post-Panamax generation twos passing  
3 each other, and LNG, liquid natural gas  
4 vessels which have a card and have a  
5 window they can operate in; those benefits are  
6 derived from HarborSym Monte Carlo simulation.

7 So that's tide delay, the impact of  
8 channel constraints like the LNG vessels and  
9 the meeting lane constraints between two  
10 post-Panamax generation two vessels. So we  
11 get benefits from the harbor sim model  
12 attributed to deepening. As we go deeper, the  
13 delay should reduce and different meeting  
14 areas should reduce delays in the harbor.

15 MS. GRIESS: Clear as mud.

16 MR. HAYES: I guess the question is maybe  
17 I'll talk to you about it later.

18 MR. BAILEY: Chuck, there are two  
19 separate analyses in the economics. One is  
20 the transportation savings, and that's looking  
21 at changes in sizes of the vessels. That's  
22 one analysis. A separate analysis uses the  
23 HarborSym and that looks at tide delays.

24 MR. HAYES: Okay. Within the HarborSym,  
25 you're using variables and predictions from

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2 other models, such as Monte Carlo simulations  
3 to feed into that model. Is that --

4 MR. MOSEBY: No. The HarborSym model is  
5 a Monte Carlo. What we do, we load up all the  
6 vessels. We launch from sea boat into the  
7 harbor to their different docks and their  
8 process, if they can.

9 And we have a tide gate that determines  
10 when they can enter, when they can leave, if  
11 they have got an LNG problem, have they got  
12 another constriction in the harbor. We do  
13 that in our period of analysis once and then  
14 we do it again.

15 So we've done it, there's a 50 year  
16 period of analysis, multiple times to get  
17 multiple estimates of delays, average delays.  
18 And with that average we can get -- we get  
19 standard deviations and a measure of risk  
20 involved with that particular answer.

21 MR. HAYES: Right. I understand that.  
22 I'll have to talk to you about it later. I'll  
23 have to think about it in my head. Maybe I  
24 can phrase it better.

25 MR. MOSEBY: The input to the HarborSym

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2 comes up on the next line, but it starts with  
3 the vessel. All the vessels we expect to see  
4 in a given year of a different type and their  
5 sail routes, that's input to the model. And  
6 we launch them according to the windows that  
7 the pilots tell us that they can get in and  
8 out, given under keel clearance, how deep  
9 they're laden, and if there are any  
10 restrictions in the harbor. HarborSym uses  
11 that to drive that simulation. It's a data  
12 driven model. Any other questions?

13 MR. DYSART: Bill and Judy.

14 MR. SAPP: Mine's more clarification.

15 MR. MOSEBY: Yes.

16 MR. SAPP: The way I understand the  
17 process, the Corps of Engineers does its  
18 analysis, gets to a point where you feel  
19 comfortable with it, and then puts that  
20 analysis out for public comment.

21 And during the public comment period,  
22 you're not doing anymore analysis. You're  
23 waiting for the public to comment. Then once  
24 you get our comments, then you might do some  
25 more analysis in response to our comments.

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2 MR. MOSEBY: Yes, that's true.

3 MR. SAPP: Is that's what happening now,  
4 because it sounds like there's some analysis  
5 ongoing right now? I was curious about that.

6 MR. MOSEBY: That is so correct. We have  
7 policy review comments from our headquarters  
8 that they have given us. We're working now to  
9 answer those policy comments. So we're not  
10 sitting still.

11 One of the things that headquarters has  
12 given us, remember I told the data was 2003.  
13 We didn't have 2008 in it. This time we took  
14 all the way up to 2008. Headquarters says  
15 well what about the depression that you're in  
16 now.

17 So we have got to go back and adjust our  
18 commodity forecast and vessel fleet forecast  
19 for what is happening in '09 and '10 and rerun  
20 both of these model, see if it impacts  
21 formulation. So we are pedal to the metal  
22 trying to do that sensitivity analysis to  
23 answer headquarters comments.

24 MR. SAPP: So is there going to be an  
25 opportunity for the public to comment on the

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2 new analysis that you're doing?

3 MR. MOSEBY: If there's no change in the  
4 formulation, then it's a benign situation. If  
5 there's a change, it will have to be dealt  
6 with properly according to our policy and  
7 guidelines.

8 MR. DYSART: Judy.

9 MS. JENNINGS: This is really confusing  
10 to me. I'll share with you just very briefly,  
11 it's reminded me the whole thing is like  
12 quicksand. That's what you're describing.  
13 You're just trying to get your foot. Every  
14 time you move something squiggles underneath  
15 you.

16 At the same time GPA now retired David  
17 Schaller told me the plane does have to land  
18 sometime. So between the two, see I don't  
19 have a Phd in this stuff, so all I can do is  
20 literally read the black and white, go over  
21 here and there's something else in black and  
22 white.

23 I try to put it together. I see here in  
24 Chapter 7, alternative plan evaluations,  
25 benefits and transportation cost-saving model

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2 benefits, meeting area and tidal delay  
3 benefits. Those are the things you've talked  
4 about that you have got, you know.

5 MR. MOSEBY: Yes.

6 MS. JENNINGS: So you know how to model.  
7 Still going around reading the book being  
8 literal Judy, I get over to Chapter 11 and  
9 that's plan selection. So you're telling me  
10 you have something else you need to insert  
11 between Chapter 7 and Chapter 11?

12 MR. MOSEBY: Okay. Once we get our  
13 benefits for each alternative -- alternative  
14 plan --

15 MS. JENNINGS: This is just hardcopies of  
16 everything you've put out so far.

17 MR. MOSEBY: After we have all the  
18 benefits for each alternative depth we've  
19 investigated --

20 MS. JENNINGS: I think you have -- I  
21 haven't read those carefully. I've thumbed  
22 through every page. In the beginning of the  
23 book you say we do this for every alternative  
24 depth. I just haven't shoved my way through  
25 those parts. Somewhere in the beginning of

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2 the book, you say you have done that. I just  
3 haven't gotten there yet. You're telling me  
4 as I keep going, I'm not going to find it?

5 MR. MOSEBY: No. We have completed our  
6 study and we have identified the national  
7 economic development plan, the NED plan.  
8 That's the job of NED in congress, we have  
9 identified that plan.

10 MS. JENNINGS: But the model where you  
11 put in all the ships and all the  
12 characteristics chewing through the model, you  
13 don't need that in the NED?

14 MR. MOSEBY: Yes. That generates the  
15 benefit that determines the NED plan, yes.

16 MS. JENNINGS: That's the part we don't  
17 have.

18 MR. MOSEBY: Oh no, it's there.

19 MS. JENNINGS: What is we don't have --  
20 go back and tell me what we don't have? I  
21 thought what we didn't have was the model  
22 where you put in all the new world fleet, and  
23 you take it with all the tides, and you just  
24 -- with all the things the pilots tell you,  
25 you put the boats in there and see what can

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2 happen.

3 MR. MOSEBY: We have completed all that

4 analyses.

5 MS. JENNINGS: What don't you have? Stop

6 right there and tell me what you don't have.

7 MR. MOSEBY: It's complete. It is done.

8 MS. JENNINGS: Is it in this book?

9 MR. MOSEBY: Yes, it is.

10 MS. JENNINGS: I'm totally confused on

11 what part that we're not finished with.

12 MR. MOSEBY: I think I confused you --

13 MS. JENNINGS: I would say yes.

14 MR. MOSEBY: -- when I said we don't have

15 the Monte Carlo simulation model to estimate

16 container vessel benefits using the Monte

17 Carlo simulation model. So we had to use this

18 spreadsheet model that we had built.

19 MS. JENNINGS: Okay.

20 MR. MOSEBY: That's what we don't have.

21 We don't have a Monte Carlo simulation model

22 for the deepening project for the harbor

23 deepening project. I mean that's just a fact.

24 We didn't have one, but our benefit analysis

25 is complete and it's finished.

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2 MS. MOORER: Finished --

3 MR. DYSART: Bernard.

4 MS. MOORER: -- based on using just a  
5 different model, using a different model,  
6 using a spreadsheet model?

7 MR. MOSEBY: That's correct. That's  
8 correct.

9 MS. MOORER: The other thing, you're  
10 going to go through this, the inputs for like  
11 harbor zone that includes all the other  
12 vessels too, like all the other docks and  
13 travel time to each of the docks and  
14 everything.

15 All harbor traffic is included within the  
16 simulation, future fleets of those different  
17 docks, because there are 16, 15, 16. It  
18 varies during every year with the census  
19 coming in and going out, but there's other  
20 traffic other than containerized traffic on  
21 the harbor that that model does take into  
22 account too.

23 MS. JENNINGS: The thing is is the Monte  
24 Carlo simulation model for harbor deepening,  
25 we'll never see that in any significant way,

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2 unless it's in some significant way different  
3 from the spreadsheet model?

4 MR. MOSEBY: No, the -- the spreadsheet  
5 model that we've used for the container ship  
6 evaluations deepening benefits, that's the  
7 best model that the Corps has. It was  
8 developed specifically for Savannah. We used  
9 it, and that's what the total economic  
10 analysis is measuring, the transportation  
11 cost-savings benefits to each alternative  
12 depth investigated. It's -- it is what it is.

13 MR. BAILEY: Judy, my understanding is  
14 that the Monte Carlo simulation is a way to  
15 take that spreadsheet model and change the  
16 inputs and have it run through and see if the  
17 answer changes. So it's still keeping the  
18 same transportation cost-savings model. It's  
19 just doing a lot of variations on it.

20 MR. MOSEBY: That's right, so we can get  
21 multiple answers. We can get multiple  
22 answers. We can do sensitivity analysis now,  
23 plus or minus 1%, 2%, 3%, what if the  
24 containers are heavier by one ton, what if  
25 they're lighter by one ton, what is the number

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2 of empties, the percent of empties is varied,  
3 what if the percent of empty slots varied.

4 Also we can do a sensitivity analysis,  
5 put in an adjustment, run the model again and  
6 look at that. With the Monte Carlo  
7 simulation, you can get 1,000 answers, average  
8 them and calculate the standard deviation.

9 We know the standard error about that  
10 answer. That give us you a metric about  
11 what's the variation, what's the spread in  
12 that answer around the average answer.  
13 You know, if we take the spreadsheet model now  
14 and if we sit there and change it and punch it  
15 1,000 times and change all these variables in  
16 there have an impact.

17 It would simulate a Monte Carlo  
18 technique, but it's just not a good -- you  
19 know, a waste of time trying to do it now.

20 MR. DYSART: Bernard would it -- do you  
21 think if the discussion would be better if you  
22 plowed on through and people could kind of see  
23 the bigger picture?

24 MR. MOSEBY: Right --

25 MR. DYSART: Let's do that. Hold your

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2 questions. Okay.

3 MR. MOSEBY: All right. But it will  
4 become clearer, because you can see the inputs  
5 and the different variables that are involved  
6 in this reset. It has given you the commodity  
7 forecast, and we went out to a company that we  
8 use quite often, MSI, Marine Strategies,  
9 Incorporated to give us a new commodity  
10 forecast.

11 This is a forecast, imports and exports  
12 specifically for Savannah, based on the  
13 trading partner country of origin and  
14 destination. So they would give us the  
15 expected commodities coming in from the  
16 Mediterranean, Africa, Europe, imports and  
17 exports into Savannah.

18 We take the commodity forecast that we  
19 get from MSI and assign it to the trade  
20 routes. And that gives us the tons of trade  
21 on each of our 11 trade groups. There are 40,  
22 50 different routes that come into Savannah,  
23 and we combined those 40 or 50 routes into a  
24 basic 11 route groups.

25 Then we had to get a new fleet forecast,

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2 and that came -- that fleet forecast was used  
3 in a transportation cost-savings model, and it  
4 -- it tells us what the fleet looks like out  
5 in the future for the future years, and it's  
6 used in the transportation cost-savings model.

7 Out of the transportation cost-savings  
8 model, we get the different fleet breakdowns,  
9 and that's one of the inputs into the  
10 HarborSym model that we use to simulate harbor  
11 -- vessels moving in the harbor in and out in  
12 the HarborSym simulation model.

13 We'll show you that pretty soon, but the  
14 heart of the container ship model is based on  
15 our load factor analysis.

16 Ships have a measure of carrying capacity  
17 that's expressed in deadweight tons. That  
18 vessel's sinkage is determined by components  
19 like the cargo that you're carrying, cargo  
20 carriage like the container box itself,  
21 bunkering that a ship might carry, ballast and  
22 an allocation for crew requirements and  
23 stores.

24 For container vessels and -- I mean yes,  
25 tanker vessels and bulk vessels, a rule of

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2 thumb is about 92% of the deadweight tonnage  
3 capacity is allocated to these different  
4 requirements, you know, 92% of the sinkage per  
5 inch is dedicated to carrying stores, bunkers,  
6 fuels.

7 But with container ships it's a little  
8 different on every transit. If you have  
9 tankers and bulkers you usually go by volume,  
10 you know, knowing how much emersion you might  
11 have per inch. For liquid things, you know,  
12 it might vary between the alcohol and syrups.

13 Maybe alcohol is a little thinner. A  
14 gallon of alcohol isn't as heavy as a gallon  
15 of syrup. You know how many barrels or  
16 gallons you can carry.

17 All of that can be measured and it's  
18 pretty precise. Ro-ros, roll-on roll-off  
19 vessels, you have lane meets that determine,  
20 you know, your sinkage factors. Now on these  
21 fully cellular container vessels that run  
22 around, and they have a pre-determined time  
23 that they would like to be in certain places,  
24 they're taking off containers, putting on  
25 containers, containers have different weights.

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2           You have empty slots, you have empty  
3 containers. It gets very problematic. And  
4 you have to deal with that. The best way you  
5 can do it is with this load factor analysis  
6 for each ship type, let's say Panamax vessel  
7 now that can use the Panama Canal, a  
8 post-Panamax vessel that will be using the new  
9 expanded canal locks, and then within the  
10 Panamax, post-Panamax, generation one,  
11 post-Panamax generation two, you have  
12 different class sizes with them.

13           So we built this table for each ship type  
14 and the different classes of vessels within  
15 those types. We look at our historical fleet  
16 that has already visited Savannah, in order to  
17 get our staff on what's the average weight of  
18 a container moving on the Far East Panama  
19 Canal, Savannah, back through the canal to the  
20 Far East.

21           What's the average container weight,  
22 import, export, bunkering, percent of empty  
23 containers, percent of loaded containers,  
24 percent of empty slots, ta-dah, ta-dah,  
25 ta-dah.

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2 MR. DYSART: Hope has a comment.

3 MS. MOORER: Real quick, and it was  
4 interesting how on those different trade  
5 routes if it went to say the Mediterranean  
6 or Southern Asia or Northeast Asia, wherever  
7 the trade route was, the averages inbound and  
8 outbound were different depending which trade  
9 route it was on too.

10 So the average weights of the containers  
11 were specific to a trade route and the inbound  
12 weight and outbound weight were specific to  
13 the trade route, based on historical  
14 information, because your commodities from  
15 each place are going to vary.

16 MR. MOSEBY: Thank you. Thank you, Hope,  
17 very good. All right. Here are some of the  
18 variables; occupied slots, vacant slots,  
19 loaded containers, average weights, cargo  
20 weights, average weight of empty containers  
21 and empty slots. These are all variables that  
22 vary, but with a static model averages are  
23 what you can use.

24 Then you have sensitivity analysis where  
25 you hold everything constant, change an

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2 important variable -- the vacant slots or the  
3 empty containers.

4 Some routes the empty container ratio is  
5 as low as 2%. On other routes it's in the  
6 high 20s, a lot of variation in those  
7 variables. So what if, you know, it's 3%  
8 more, 2% less. Sensitivity analysis is the  
9 only --

10 MR. DYSART: Clarification.

11 MR. O'KANE: Bernard, I think this is a  
12 good point to illustrate we use that term, so  
13 many people latched on to it, that Monte Carlo  
14 simulation, that's just a description of a  
15 type of model. It allows these sensitivities  
16 or these variables to be changed perhaps more  
17 easily.

18 We've done the same thing with what we  
19 have, we've done it basically by hand and we  
20 called it sensitivity analysis. We change one  
21 of these by such and such a percent, see what  
22 the answer is.

23 We use that to decide how sensitive the  
24 model is to that factor. That helps us to  
25 evaluate the quality and improve the quality

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2 of the model. These are the type of variables  
3 Bernard was describing when he said  
4 sensitivity analysis. It is an adjustment of  
5 these. You see how sensitive the model is to  
6 these.

7 MR. MOSEBY: Exactly. Now what if you're  
8 doing Monte Carlo simulation on a  
9 transportation cost-savings. It's a data  
10 driven model. So here's the data that I would  
11 provide.

12 Empty slots, I would tell the model the  
13 average percentage of empty containers --  
14 excuse me -- is 5%, but it could be as much as  
15 10% or low as 1%.

16 All right. If I have a uniform  
17 distribution, you know, kind of bell shaped.  
18 In the middle I'd have my average value and  
19 then the other values would spread out towards  
20 the tail. Each time I do a simulation, the  
21 model would blindly pick one of those  
22 variables and use in that run.

23 The next time it would blindly select  
24 that distribution with another value. It does  
25 it multiple times. And that's the advantage

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2 of a Monte Carlo simulation over a static  
3 model.

4 All right. So in looking at these  
5 historical averages, each trade route, those  
6 variables are determined for each trade route  
7 for each vessel class, for each size vessel  
8 within those classes.

9 So we're talking about a pretty large  
10 database that we draw from in our load factor  
11 analysis. And what it tells us is how much  
12 per metric ton it costs us to transport a ton  
13 of cargo or a TEU every thousands miles. For  
14 instance, the Far East to Savannah is a little  
15 over 11,000 miles. We look up in the table if  
16 it's \$500 a TEU per 1,000 miles, we multiply  
17 by 11 1/2, and that's the total transportation  
18 cost for that vessel size and vessel class.

19 Now what you can move from a Panamax  
20 vessel to post-Panamax vessel, you're carrying  
21 more containers, but you have a little bit  
22 higher cost of operation maybe. You can  
23 determine, you know, your cost -- shipping  
24 costs, transportation cost for a more  
25 efficient vessel that can carry more and sail

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2 in a deeper channel.

3 So the load factor analysis is really an  
4 important piece of our -- of our  
5 transportation cost-savings computation.

6 MS. MOORER: Bernard, Bill has a  
7 question.

8 MR. SAPP: Quick question. In the  
9 analysis you did, did you take into account  
10 the post-Panamax type two or super Panamax  
11 vessels that typically have a 50 foot draft?

12 MR. MOSEBY: Yes, we did.

13 MR. SAPP: So they would come in to  
14 Savannah light-loaded?

15 MR. MOSEBY: It depends on the  
16 alternative. Existing conditions at 42 feet,  
17 we have a certain fleet mix that would most  
18 likely use Savannah Harbor. As you deepen to  
19 44, 45, 46, 47 that fleet changes, and we're  
20 getting into that now.

21 MR. SAPP: Okay. Great.

22 MR. MOSEBY: So We've got the load factor  
23 analysis and the big look-up table that gives  
24 us the cost per ton, per TEU per 1,000 miles  
25 of traveling.

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2 MS. MOORER: Bernard, one quick thing on  
3 those vessels too, all of the class vessels  
4 that have a max draft of 50 feet, it's the way  
5 they have done it because of the bunkering and  
6 empty slots and different things; they're  
7 never at 50 feet.

8 It's at a lesser depth sailing. All of  
9 these vessels have an assigned potential depth  
10 to it because of bunkering, container weight,  
11 things like that. I don't think it ever is at  
12 the max draft, any of those vessels.

13 MR. SAPP: Is there an air draft problem  
14 with those bigger ships?

15 MS. MOORER: There is not. They did an  
16 extensive analysis. I believe Bernard can  
17 talk about what all they looked at. It was  
18 nationwide looking the world fleet to see if  
19 it would have an air draft problem here.

20 MR. DYSART: Will and Drew, quick  
21 clarifications.

22 MR. BERSON: What's the classification of  
23 the vessel that you used as the design vessel  
24 for the project?

25 MR. MOSEBY: Susan Maersk.

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2 MR. BERSON: What would you call that  
3 one?

4 MS. MOORER: Gen one.

5 MR. MOSEBY: Matter of fact, that's the  
6 average vessel that's expected to use the  
7 channel in the future. You can have larger  
8 vessels, as we saw when the Figaro came in,  
9 but we have to define a design vessel. It was  
10 Susan Maersk.

11 MR. MOSS: What does PPX mean?

12 MR. MOSEBY: post-Panamax, and we have  
13 generation one, generation two.

14 MR. MOSS: Thank you.

15 MS. MOORER: Gen one is about 55 to 7,000  
16 and gen two 7,000 to 8,500.

17 MR. MOSEBY: Okay.

18 MS. MOORER: Is that about right?

19 MR. MOSEBY: post-Panamax generation one  
20 6,200 TEU. At 85% capacity that's about 5,300  
21 TEUs. The generation two, 8,700 TEUs and at  
22 85% capacity about 7,400 TEUs. Those are 20  
23 foot equivalent.

24 MR. O'KANE: Real quick, one more point.  
25 Bill, there's a good write-up in the

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2 engineering appendix, four pages. It starts  
3 on page 64 of the engineering appendix on air  
4 draft. It's a concise little write-up.

5 MR. SAPP: Oh good. Okay. Thanks.

6 MR. MOSEBY: A very importantly variable  
7 in the transportation cost-savings analysis;  
8 that is when post-Panamax generation ones  
9 replace Panamaxes, when generation two  
10 replaces generation one.

11 Our decision point was look at the load  
12 factor database and compare the cost per ton  
13 per 1,000 miles for each trade route. Each  
14 trade route has a different -- a different  
15 matrix. We will deploy generation one to  
16 replace Panamaxes that can use the canal now,  
17 when the cost per ton is less than using a  
18 Panamax vessel. Likewise, we would deploy  
19 generation twos to replace generation ones  
20 when the transportation cost per ton or TEU is  
21 less.

22 In other words, a more efficient vessel  
23 drives the deployment decision. Now on these  
24 trade routes, in order to make the schedules  
25 that you have, you have multiple ships. On

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2 average, it takes about eight ships in order  
3 to complete the circuit and make a weekly call  
4 at a particular port.

5 So when do you change out those eight  
6 vessels, you know, do you change out all  
7 eight. When you put the larger vessel on, say  
8 replace eight Panamaxs with eight generation  
9 ones, and you're carrying more cargo, you've  
10 got fewer visits carrying more cargo, fewer  
11 vessel calls carrying more cargo efficiently,  
12 you know, there are quite a few variables that  
13 are involved in that.

14 Using a static spreadsheet, in order to  
15 vary that decision, you can only do  
16 sensitivities, what if. You know, does that  
17 change the formulation, does that shift the  
18 NED answer from 44 feet to 45 feet, or is the  
19 answer still 44 feet.

20 So this is a very important variable and  
21 we've done sensitivities about this deployment  
22 decision to see how sensitive that variable  
23 is.

24 MR. DYSART: David has a quick  
25 clarification.

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2 MR. KYLER: This maybe marginal factor,  
3 but it seems to me part of the decision in  
4 retiring ships would be degree to which the  
5 old ship has been amortized.

6 MR. MOSEBY: That's right.

7 MR. KYLER: So the cost to the company is  
8 not just shipping costs, but capital costs in  
9 amortizing the investment.

10 MR. MOSEBY: We -- vessel retirements and  
11 replacements are a part of the deployment  
12 decision.

13 MR. KYLER: But so when you say the  
14 decision point is when it's cheaper to ship,  
15 part of what goes into that determination of  
16 cost is --

17 MR. MOSEBY: The vessel operating costs,  
18 yes.

19 MS. MOORER: Can I take a stab?

20 MR. KYLER: Sure.

21 MS. MOORER: A lot of times vessel lines  
22 aren't just getting rid of that vessel.  
23 They're moving it a to different route. So  
24 it's not necessarily the amortization.

25 MR. KYLER: Redeploying it.

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2 MS. MOORER: Right. They're redeploying  
3 to route that might be South America or  
4 something. There is a lot more that goes into  
5 -- a lot more goes into the decisions of how  
6 many do they switch, and at what speed do they  
7 switch out the vessels on the service too.

8 I mean it might be fuel costs. It might  
9 be that route has better trade at that time  
10 and it changes all the time. You know, it's  
11 not that they set it and it's set like that  
12 for five years.

13 The vessels on the service, they will  
14 change them in and out. It is kind of -- if  
15 you're looking at this, it is kind of an  
16 average because you move in vessels in and out  
17 of the service all the time.

18 MR. KYLER: A lot of moving parts.

19 MS. MOORER: It is a lot of moving parts.

20 MR. DYSART: Bernard, would we like to  
21 take a quick five minute break. Let's take a  
22 five minute break. I'm going to let Will  
23 be the timekeeper.

24 (Short Break)

25 MR. DYSART: Bernard is back. I think

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2 sometimes when things are very, very  
3 interesting. It's nice to take a little  
4 break.

5 I know one time I was on the witness  
6 stand in federal court for three hours  
7 straight. I was the principle expert witness  
8 for the United States of America, and so the  
9 forces were all arrayed read against my, and I  
10 was having so much fun I didn't want court to  
11 get through that day.

12 But anyway, let's continue. My objective  
13 has been to try to get clarifications that  
14 would help, but would allow Bernard to push on  
15 through, so everybody here could kind of see  
16 the full pictures. Then the questions could  
17 be -- could be more productive. So go ahead  
18 and finish up. Bernard.

19 MR. MOSEBY: Thank you, Ben. Oh boy. I  
20 didn't expect it to be that small. This is  
21 the forecast vessel call by vessel class,  
22 channel depth and year.

23 In the spreadsheet model, we have our  
24 alternatives existing conditions, 42 foot  
25 depth, what if 44 depth, 46 -- 45, 46, 47, 48

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2 depths. For our base year, 2008, how many  
3 Panamax, self-Panamax, post-Panamaxes,  
4 existing Panama Canal, post-Panamax generation  
5 one, post-Panamax generation two vessels you  
6 expect to call in 2008, 2010, 2015, 2025,  
7 2030.

8 2032 is when we reach maximum build-out,  
9 maximum capacity at the port of about  
10 6,000,000 TEUs. We hold it constant at that  
11 TEU level over the 50 year period of  
12 evaluation, from the base year out 50 years.

13 This is one of the tables in the economic  
14 appendix. And you can see how -- you know,  
15 the deployment decision, the load factor  
16 analysis, average numbers of loaded  
17 containers; all of this plays into these  
18 vessels calls that are generated.

19 This is input into HarborSym, along with  
20 our general cargo vessels. You know, there  
21 are other vessels you see in the channel and  
22 the LNG vessels. All of these vessels, how  
23 many calls they make are loaded into HarborSym  
24 and it sits there and has the tide clock, has  
25 the vessel drafts, has the priority decisions.

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2 You know when to launch and when not to  
3 launch, and add up the delay time and how  
4 much delays we are encountering, for a  
5 particular alternative, and it compares that  
6 to existing conditions, the 42 foot channel  
7 and tallies up the benefits.

8 The tide delays, some of the variables  
9 that drive the HarborSym model, under keel  
10 clearance, tide tables, the LNG ship  
11 restrictions and other vessel operating  
12 restrictions, such as two post-Panamax  
13 generation twos in meeting situations.

14 The meeting lane evaluations, we looked  
15 at two alternative; one in the Oglethorpe area  
16 and one in the Long Island area, and then both  
17 meeting areas in combination.

18 This is for the two post-Panamax gen twos  
19 meeting each other. The results of the  
20 HarborSym tide delay, the LNG meeting area  
21 analysis at Monte Carlo simulation pointed to  
22 greater benefits for the combination of both  
23 the Oglethorpe and the Long Island meeting  
24 area.

25 These benefits are added to the

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2 transportation cost-savings benefits to give  
3 us our total benefits. Now benefits and  
4 costs, our job as the economists is to  
5 identify what we call the national economic  
6 development plan, the NED plan. That plan is  
7 the plan that generates the greater net  
8 benefits; that is benefits in excess of cost  
9 of that plan. It's the plan that's the most  
10 efficient plan for government dollars  
11 invested.

12 Now once my job of identifying that plan  
13 that's most efficient for the government, that  
14 plays into cost-share, how much the government  
15 would participate in constructing that  
16 project. The sponsor can request something  
17 smaller than the NED plan or something greater  
18 than the NED plan.

19 If it's the greater than the NED plan,  
20 the sponsor will have to carry a 100% of the  
21 incremental costs. If it's less than the NED  
22 plan, the government will still cost-share in  
23 that particular plan if it's economically  
24 efficient, the benefit to cost ratio is  
25 greater than one. The NED plan, as the

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2 analysis stands now is the 47 foot  
3 alternative.

4 MR. DYSART: Questions. Drew, Will and  
5 David Kyler.

6 MR. MOSS: The question'S on your  
7 assumptions on the port build-out in 2032.

8 MR. MOSEBY: Yes.

9 MR. MOSS: Those are based on 2008 data,  
10 the commodity forecast is based on 2008?

11 MR. MOSEBY: No. That's the actual  
12 operation capacity of the port.

13 MR. MOSS: I understand what your  
14 estimate of the port is, but when you're going  
15 to get there is based upon the assumptions you  
16 used starting in 2008, and you said you're  
17 going to update those commodity forecasts  
18 based upon the economics as a result of the  
19 downturn. You anticipate that that would  
20 affect that projection?

21 MR. MOSEBY: Yes, it's probable. It's  
22 probable. At one time, the total build-out  
23 was 2030. Due to changes that we made, it  
24 took it to 2032. So it's probable it could  
25 move, sure can.

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2 MR. BAILEY: Bernard, I think one of the  
3 -- headquarters, the other part of the Corps,  
4 asked for some work. You did go back and  
5 discuss it with them, and they thought that  
6 looking at these, answering these other  
7 questions, would not change the decisions,  
8 would not change how the alternative depths  
9 compare to each other, so you don't expect  
10 that.

11 MR. MOSEBY: I don't. In the sensitivity  
12 analysis, we made the bands large enough on  
13 the commodities forecast and the vessel  
14 forecast, we think we've encapsulated in what  
15 might happen in '09 and '10 if it were added  
16 in, and it did not change the formulation.

17 So we haven't went out and gotten the  
18 actual numbers and run the numbers yet, but we  
19 expect the answer not to change the  
20 formulation. We'll see.

21 MR. MOSS: Thank you.

22 MR. MOSEBY: Good question.

23 MR. DYSART: Will pointed out to me that  
24 Dean's card does look like it says Drew, but  
25 the name is Dean. I apologize

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2 MR. MOSS: Not a problem.

3 MR. DYSART: I accept responsibility.

4 Will.

5 MR. BERSON: You mentioned based on the  
6 analysis, the decision by Corps was 47 feet.  
7 I've been unclear -- this may not be a  
8 question directed to you exactly; what is the  
9 process for the Corps deciding that GPA's  
10 request for 48 feet as a locally preferred  
11 option is approvable?

12 Nobody ever said if that request has been  
13 made, but it's not clear what the process is  
14 for the Corps deciding yes, we will go with  
15 your request, no we won't, or what the basis  
16 of that decision is.

17 MR. MOSEBY: The agencies have to weigh  
18 in from it.

19 MS. MOORER: But then, Will, from what I  
20 understand, Will, Bill correct me, they have  
21 to ask for a waiver from the Assistant  
22 Secretary of the Army for Civil Works.

23 It has to be approved by the Assistant  
24 Secretary of the Army for Civil Works.  
25 They're going through a comment period and

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2 getting comments and deciding whether or not  
3 to request that waiver.

4 MR. BERSON: So we'll go through the  
5 public process -- I guess what I'm saying, do  
6 I comment on a 47 foot channel or 48 foot  
7 channel, as my public comments that are due  
8 on January 10th.

9 MS. MOORER: I think you comment on a 47  
10 foot NED with a 48 foot requested locally  
11 preferred plan.

12 MR. BERSON: Okay.

13 MS. MOORER: Not both, but the situation  
14 the scenario, essentially what do you feel  
15 about that.

16 MR. BERSON: So after -- I'm sorry, after  
17 the public comment period is when the Corps  
18 would ask for a waiver from ASA or the project  
19 -- the local sponsor --

20 MS. MOORER: The Corps would make a  
21 determination, don't you, Bill?

22 MR. BAILEY: Yes.

23 MR. BERSON: Okay. So that would  
24 probably happen after this round of public  
25 comment, based on the public comments received

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2 from the other agencies involved, as well as  
3 the public?

4 MS. MOORER: And the public and the  
5 independent external peer review.

6 MR. McCURRY: It's all factored into the  
7 consideration.

8 MR. MOSEBY: Good question, very good  
9 question.

10 MR. DYSART: David.

11 MR. KYLER: As I understand it from what  
12 you presented this morning, the sensitivity  
13 analysis you described applies to the benefits  
14 of commodity shipping?

15 MR. MOSEBY: Transportation cost  
16 benefits, yes.

17 MR. KYLER: What about a sensitivity  
18 analysis related to the cost side of the  
19 economic analysis.

20 MR. MOSEBY: Our --

21 MR. BAILEY: We have done a cost risk  
22 analysis. That's done.

23 MR. KYLER: I didn't know whether it was  
24 Bill's or Bernard's realm of knowledge or  
25 opinion, but --

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2 MR. MOSEBY: We have centers of  
3 expertise, and all of our cost engineering has  
4 to go through our center. They have a program  
5 that they call crystal ball. That helps them  
6 determine those contingencies.

7 MR. KYLER: So my question is back to the  
8 adaptive management realm we have covered to  
9 some extent previously, how is sensitivity  
10 tied to adaptive management?

11 It seems to me when you do a sensitivity  
12 analysis, you know, assuming it's legitimate  
13 and based upon realistic relationships of  
14 factors within the realm of possibility, you  
15 would want to tie decision-making within  
16 adaptive management to the conditions that,  
17 under sensitivity analysis, suggest you're  
18 getting into some dicey areas of operation or  
19 of project impact.

20 In other words, the sensitivity analysis  
21 says you're good up to this point. Beyond  
22 that you're not. In adaptive management you  
23 want to know where that point is and when  
24 you're approaching it to take preemptive  
25 adaptive correction to prevent those adverse

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2 conditions from being realized, correct?

3 MR. MOSEBY: Aren't you having reporting  
4 as you go back through times? You're sampling  
5 variables and seeing how they respond?

6 MR. BAILEY: The cost risk analysis that  
7 the Corps conducted was on the cost, so the  
8 cost to move -- the cost to build something or  
9 the cost to dig something. They didn't go  
10 back, specifically, to look at to do a cost  
11 risk on environmental impacts.

12 MR. KYLER: Why not?

13 MS. MOORER: Can I?

14 MR. MOSEBY: It's --

15 MS. MOORER: Can I add something in  
16 there. It's kind of adaptive management costs  
17 are built into the total cost of the project  
18 right now, an estimate of different things  
19 that might be required essentially.

20 And so whether or not that has to be  
21 done is built into the cost of the project  
22 ahead of time. When you are looking at the  
23 NED plan, it includes kind of that risk of  
24 something may have to be adjusted, because  
25 that cost is already included, like an

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2 estimate has been done on what if you have to  
3 adjust the diversion structure at McCoy's Cut,  
4 what if you have to buy more acreage, what if  
5 you have to do something else, you know, if  
6 you need three more units of dissolved oxygen  
7 or something.

8 Those costs are built in right now,  
9 whether or not they're needed, okay, and so  
10 that is factored into the project cost, which  
11 is then factored into the NED plan. It adds  
12 kind of a root component within that.

13 MR. KYLER: Yeah, I can see where that  
14 is relevant to the question, but it doesn't  
15 completely respond to the question.

16 MS. MOORER: Are you talking risk of when  
17 you make a decision with respect to adaptive  
18 management?

19 MR. KYLER: No.

20 MS. MOORER: No, okay.

21 MR. KYLER: What if the project itself or  
22 the mitigation, in attempting to control the  
23 impacts of the project go beyond expected  
24 adverse -- acceptable adverse consequences,  
25 which gets into the sensitivity analysis.

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2 MR. O'KANE: Okay. I think --

3 MR. KYLER: So you want to have controls  
4 on those parameters established ahead of time  
5 so you can do proper adaptive management, it  
6 seems to me.

7 MR. O'KANE: I think -- I think the  
8 question you're asking, if I understand it  
9 right, how do we predict something that's  
10 unpredictable.

11 What we've done is put a contingency on  
12 all the costs to cover that risk, and that's  
13 the best we can do.

14 MR. KYLER: Bill just said you didn't put  
15 a sensitivity analysis on environmental  
16 impacts.

17 MR. MOSEBY: Okay. I think you've got  
18 two components that you're talking about.  
19 You're talking about in particular maybe the  
20 monitoring, the adaptive management monitoring  
21 through time on the environmental side, and  
22 then the expected cost of what might be done,  
23 in response to this adoptive management as  
24 we're going along.

25 And that part goes in process. The

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2 adaptive management is part of the  
3 environmental expectations and investigations  
4 that they do that determines the costs. Now I  
5 sat on one of the panels that fills out the  
6 matrix that we send for the costs.

7 Our feelings about each one of those  
8 variables, let's take a variable. It will say  
9 what kind of confidence do you have in this  
10 particular cost for that element. So the team  
11 member says I'm highly confident. I'm  
12 confident. I'm not so confident.

13 That plays into the contingency  
14 percentage. It's one of the things that is  
15 input into the computation of the contingency  
16 factor percentage that's given to us. From  
17 that perspective, I know that's one of the  
18 variables that goes in there. There's a lot  
19 of uncertainty associated with it.

20 MR. BAILEY: David, you summarized  
21 something I said. What your summary was  
22 wasn't -- I'm not sure it's what I said, at  
23 least it wasn't what I meant. We have done  
24 many sensitivity analyses on environmental  
25 impacts.

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2 MR. O'KANE: Resource impacts.

3 MR. BAILEY: What I was talking about  
4 was, I was trying to respond to what I thought  
5 your question was dealing with costs, but  
6 that's different.

7 MR. KYLER: Well impacts are on the cost  
8 side of the equation, right?

9 MR. O'KANE: The impacts -- impacts yield  
10 an analysis that determines the mitigation,  
11 and depending upon what that mitigation  
12 measure is, it may yield a cost. It's kind of  
13 secondhand they are related to costs.

14 MR. KYLER: So all costs are mitigated,  
15 and the only way of measuring costs is by  
16 mitigation costs?

17 MR. O'KANE: I don't understand.

18 MR. KYLER: All environmental impacts are  
19 mitigated and -- under your model of the  
20 projected impacts of the project. And  
21 therefore the only way to measure the economic  
22 impact of those environmental effects are  
23 through mitigation; is that what you're  
24 saying?

25 MR. MOSEBY: That's correct.

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2 MR. KYLER: Okay. So then my question  
3 still stands. If the mitigation is  
4 ineffective or unpredictably causes adverse  
5 effects, in one way or another, shouldn't  
6 there be controls on adaptive management based  
7 on the sensitivity analysis?

8 MR. O'KANE: Define controls, what do you  
9 mean by controls?

10 MR. KYLER: Well corrective actions or  
11 possibly even stopping the project -- depends  
12 upon the severity of the impact.

13 MR. BAILEY: There is congressional limit  
14 that the Corps can't spend more than 20% above  
15 an authorized project cost. So that is a  
16 limit.

17 The monitoring plan that we've proposed,  
18 we propose to monitor during construction, and  
19 watch how things are happening during  
20 construction. If something comes up,  
21 something shows up that we're not expecting,  
22 we can deal with it during construction and  
23 not wait till after construction. We're also  
24 looking after construction for a period of  
25 time.

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2 MR. DYSART: Let me break in here. Fish  
3 and Wildlife Service people need to leave in a  
4 few minutes. I want to make sure they have an  
5 opportunity to get their questions on the  
6 record, and get whatever kind of response they  
7 can get. Then we'll go back to everyone else.

8 Fish and Wildlife obviously is a critical  
9 agency in this. I want to make sure they have  
10 an opportunity.

11 MS. GRIESS: Bernard, I just had one  
12 question. The models were all run on base  
13 year 2008, correct?

14 MR. MOSEBY: Yes, but the base year 2008  
15 included effects from 2005, 2006, 2007 on the  
16 weighted end.

17 MS. GRIESS: But you mentioned earlier  
18 you were asked to go back and look at 2009 and  
19 2010.

20 MR. MOSEBY: Well to add those in to our  
21 base year jump-off.

22 MS. GRIESS: Is there a potential that  
23 NED plan could change, based on running those,  
24 including that data?

25 MR. MOSEBY: Okay. Based on our

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2 sensitivity analysis on the commodity  
3 forecast, we went plus or minus 1, 2, 3%. We  
4 figured 3% is huge -- a huge impact, and  
5 should cover the '09 and '10 downturn in the  
6 economy. We're hopeful that it doesn't  
7 change.

8 I'm pretty confident that the 3 -- 2%, 3%  
9 plus or minus more than can accommodate for  
10 the '09, '10 turn down. We're not going to be  
11 here forever. It's going to, sometime in the  
12 future, whatever the forecasting service tells  
13 us, we're going to climb out of this thing.

14 So it's going to have an impact in the  
15 short-term. In the long-term, it's going to  
16 have an impact. We feel that the sensitivity  
17 analysis should capture that and should not  
18 have any effect --

19 MS. GRIESS: And those analyses will be  
20 done by?

21 MR. MOSEBY: Before we go to what we call  
22 our civil works review board, we will have to  
23 have those comments addressed.

24 MR. SAPP: And when is that?

25 MR. BAILEY: Basically before the final.

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2 MR. MOSEBY: March 24th.

3 MS. MOORER: I'd say more the April  
4 timeframe.

5 MR. MOSEBY: They just gave us our date  
6 yesterday.

7 MS. GRIESS: So we'll know if there is  
8 any change in the basic NED plan?

9 MR. MOSEBY: That's correct.

10 MR. HAYES: That's based on your  
11 assumptions -- that's based on your  
12 wide-ranging --

13 MR. MOSEBY: So far plus or minus 3%  
14 change in the commodity forecast does not  
15 change the formulation.

16 MR. HAYES: Will you use real world data  
17 to check that?

18 MR. MOSEBY: We're going back to our  
19 forecasting service to give us the new  
20 commodity forecast. We're going to use the  
21 actual data for 2009, 2010.

22 MR. HAYES: To check to see if what you  
23 guys assumed --

24 MR. MOSEBY: That's right. We're going  
25 to do the whole analysis all over again, and

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2 the HarborSym model -- complete analysis.

3 MR. HAYES: I wanted to -- I'm not an  
4 economist. I know supply and demand. That's  
5 as far as it goes. We do have economists in  
6 DC. I just wanted to go on the record reading  
7 these. I can give these if you want.

8 Here's some questions. The first  
9 question is, could you please provide  
10 additional justification for the assumptions  
11 that the shift in fleet, due to the Panama  
12 Canal expansion, will begin in 2015? Could  
13 you provide additional information on the  
14 assumed ship, such as the assumed pattern and  
15 timing of shift -- assumed shift?

16 MR. MOSEBY: We're in constant  
17 communication with people down in Panama.  
18 They are having pretty good sight that tracks  
19 their construction schedule and where they are  
20 in that construction schedule.

21 Hopefully, they would like to hit 2014,  
22 because that's the 100th anniversary. I can  
23 imagine 2014 for the 100th anniversary it  
24 might not be complete, but they will have the  
25 party to mark it. They're -- they're pretty

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2 close to schedule as they see it.

3 So the construction schedule on the  
4 canal, you can follow it. And then the second  
5 half of that question?

6 MR. HAYES: Could you provide additional  
7 information on the assumed shift, such as an  
8 assumed pattern and timing of the shift?

9 MR. MOSEBY: Right, and it's really  
10 based on one, the deployment decision and that  
11 transportation cost-savings model by vessel,  
12 by class; how much it costs, what's the  
13 efficiency of moving a loaded container in a  
14 certain size vessel and class vessel.

15 That gives us the efficiency of using the  
16 vessel. The model itself makes the decision  
17 on deployment, based on the economy's a scale  
18 of shipping a container, the transition from  
19 the existing canal, post-Panamax vessels,  
20 the Panamax vessel in the old canal area  
21 moving to the large post-Panamax generation  
22 one, and then when you go to a two, the  
23 economics of shipping a ton or TEU over that  
24 trade route. That's what drives the  
25 decisions.

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2 And we've vetted this in the industry and  
3 everybody we can find, you know. This is the  
4 Corps' best answer. We've gotten our best  
5 experts from our research division, The  
6 Institute of Water Resources, the Deep Draft  
7 Center, my outfit.

8 We've gone to industry. We've gotten  
9 independent experts to give us our forecast.  
10 We've tried to get the best data and the best  
11 methodology. We are putting this forth as,  
12 you know, our best shot. Our policy people  
13 have told us this is the best that they have  
14 seen for the state of the container operation  
15 to date. Hopefully we'll have a Corps-wide  
16 model soon. This has been a big, big step  
17 for us.

18 MR. HAYES: Okay. What was the rationale  
19 for the assumption of an expected drop in SPX  
20 capacity 33% between now and 2015?

21 MR. MOSEBY: Okay. Was that one of our  
22 sensitivities?

23 MR. HAYES: Instead getting into that, I  
24 just want to go on file, but I can give this  
25 to you.

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2 MR. MOSEBY: Let me get my cards.

3 MS. JENNINGS: What's the capacity?

4 MR. HAYES: 33% in expected drop in SPX  
5 capacity.

6 MR. McCURRY: Transitioning of vessels  
7 out of service.

8 MR. O'KANE: Probably the retirement, I  
9 think, of vessels.

10 MR. HAYES: I'll give it to Sarah.

11 MR. HAYES: Request for addition model  
12 documentation, which you guys answered the  
13 first one about the broken link.

14 Is additional documentation available for  
15 the transportation cost-savings model, beyond  
16 the model flow chart included in Attachment  
17 2 Appendix A?

18 MR. MOSEBY: Yes. We have a document  
19 like this.

20 MR. HAYES: That's it there.

21 MR. MOSEBY: Very good. Excellent.

22 MR. DYSART: Are there any other  
23 questions Fish and Wildlife Service folks have  
24 wanting to follow-up, clarification,  
25 practical questions, anything else?

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2 Okay. Kim, Bill Sapp, Hope, Judy, Will  
3 Tom and Bill Farmer.

4 MS. STATLER: Kim Statler, Lowcountry  
5 Alliance. Just two quick questions, in the  
6 transportation model was there consideration  
7 of possible fees charged by the Panama Canal  
8 for traffic going through that canal?

9 MR. MOSEBY: No. That is an important  
10 variable. As the rates go up, they might  
11 force traffic to the Suez route. You know, we  
12 have no idea what they're going to charge.

13 MS. STATLER: The second question is --  
14 okay. That's unknown. Cargo folks a couple  
15 of years ago debated a lot about how much  
16 would go post-Panamax ships, how much would  
17 stay ship-to-ship, because there's still  
18 potential of small ships to small ships  
19 through the canal. Is that part of the  
20 formula kind of mix you inserted, when you  
21 were projecting the model of post-Panamax  
22 ships that would come in and out of the port?

23 MR. MOSEBY: Yes. On the vessel fleet  
24 forecast, that's looking for particularly  
25 Savannah, what traffic is most likely -- I

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2 mean what vessels are most likely to call  
3 given each alternative depth.

4 MS. STATLER: I guess what I'm asking,  
5 was there consideration that the market --  
6 there would be a percentage that would shift  
7 to post-Panamax, and there would be a  
8 percentage that would maintain smaller vessel  
9 flexibility?

10 MR. MOSEBY: Okay. You know, our  
11 decision grew for deployment for the ones and  
12 twos. Also, there's a world fleet that's  
13 available out there.

14 The forecast that we get on the world  
15 fleet of what's likely to come to Savannah, we  
16 pick on that decision matrix what's the most  
17 efficient vessel to move that cargo.

18 Companies make decisions based on many  
19 more variables than we can look at. We go  
20 under the common man economics rational  
21 decision-making. We believe that in the long  
22 run, decision-makers will tend towards the  
23 most efficient vessel to ship that tonnage.

24 And that's the best we can do. It's an  
25 economically rational way of looking at it,

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2 because we can't capture all the reasons why  
3 this line would do this or that line would  
4 make a different decision. We base ours  
5 on an economic rational.

6 MS. STATLER: Is it fair then to say the  
7 answer is the world fleet tries to project and  
8 accommodate that efficiency, and then that --

9 MR. MOSEBY: No. The world fleet is a  
10 function of retirements and what's on the  
11 order books, you know, cancellations --

12 MS. STATLER: Yes. I guess what I'm  
13 trying to get at, we have not arbitrarily  
14 picked numbers, but it's based on private  
15 sector decisions in the fleet?

16 If I were to argue the opposite, I would  
17 argue maybe the percentage of ship-to-ship  
18 will be more so than what you think is going  
19 to go post-Panamax. I'm trying to hear your  
20 rebuttal back to me -- no, what we've done is  
21 we've looked at X.

22 MR. MOSEBY: I think the question you're  
23 asking me is micro --

24 MS. STATLER: Maybe.

25 MR. MOSEBY: -- you're seeking a micro

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2 answer. I'm saying that specifically no. The  
3 answer that we're getting back on the  
4 commodity forecast, vessel fleet forecast and  
5 what's likely to come to Savannah; indirectly  
6 it's in there, but specifically no. We just  
7 can't get to that resolution.

8 MS. STATLER: Okay.

9 MR. DYSART: Thank you, Kim for  
10 introducing yourself. Did anyone else come  
11 in after the initial introductions?

12 MS. WALKER: Laura Walker, City of  
13 Savannah.

14 MR. DYSART: Anyone else? Next Bill  
15 Sapp, please.

16 MR. SAPP: Bill Sapp, Southern  
17 Environmental Law Center.

18 MR. DYSART: No, you had a question.

19 MR. SAPP: Oh, sorry. Yeah. Actually  
20 this goes to one of the fundamental  
21 assumptions that's in the economics analysis,  
22 and I understand you have to make certain  
23 assumptions as an economist, but the  
24 assumption, as I read it in the documents, is  
25 that the growth of the port, with or without

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2 the project, is going to be the same going off  
3 into the future.

4 MR. MOSEBY: That's right.

5 MR. SAPP: And yet I read in the  
6 newspaper that it seems like the reality is  
7 -- at least the hope is the Savannah Harbor  
8 will grow at a faster rate than -- than what  
9 you have in the documents. And I just wanted  
10 to confirm that's an economic assumption that  
11 you have chosen to make for this analysis.

12 You're not trying to really predict what  
13 the actual growth of the harbor will be over  
14 time.

15 MR. MOSEBY: You're correct that we use  
16 the same tonnage in both the without project  
17 condition going to 42 feet, and for each one  
18 of the alternatives. We didn't try to favor  
19 we would induce additional tonnage due to a  
20 deepening.

21 MR. SAPP: Right. The multiport analysis  
22 that you include even shows that the growth  
23 won't -- I mean what you're trying to show  
24 there, I guess, is there won't be more cargo  
25 coming to Savannah from other ports because of

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2 the deepening.

3 MR. MOSEBY: No. I wouldn't say that  
4 we've shown that. We have just excluded the  
5 -- in the equation any traffic that would be  
6 induced into Savannah or leave Savannah and go  
7 to another port, we would not include in the  
8 equation.

9 MR. SAPP: Okay. I'm trying to  
10 understand how that works then. The way I  
11 read the multiport analysis.

12 MR. MOSEBY: Oh, on the Jasper port?

13 MR. SAPP: Not on Jasper. Actually it's  
14 all the ports. In the multiport analysis, you  
15 looked at all the different ports on the  
16 Eastern Seaboard.

17 You calculated the additional savings  
18 that would accrue to each TEU that goes  
19 through Savannah. And you were able to show  
20 that that additional savings would not be  
21 enough to redirect -- at least this is what  
22 you're saying -- would not be enough to  
23 redirect a container from this port to  
24 Charleston or Jacksonville.

25 MR. MOSEBY: Right, right.

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2 MR. SAPP: So that's -- my understanding  
3 of the multiport analysis is correct. That's  
4 what that shows.

5 MR. MOSEBY: Right. I misunderstood your  
6 question.

7 MR. SAPP: But getting back to the  
8 fundamental analysis that the amount of growth  
9 is not going to change with or without the  
10 harbor deepening, that frees you up to say,  
11 and I know this question is getting long, but  
12 that frees you up to say that there are no  
13 landside environmental impacts, because the  
14 port's going to grow the same with or without  
15 the deepening.

16 MR. MOSEBY: I don't think so.

17 MR. SAPP: Yeah. I mean, landside -- I  
18 mean by distribution centers. The same amount  
19 of distribution centers are going to built  
20 with or without the harbor deepening.

21 MR. MOSEBY: Okay. If you tick them off  
22 by one by one like that maybe. For each  
23 alternative, you are going to have some  
24 variation in, let's say emissions from the  
25 vessels, if you have fewer vessels coming into

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2 the port. So there are some impacts that vary  
3 across alternatives.

4 MR. SAPP: Across alternatives, but as  
5 far as with the harbor deepening versus  
6 without the harbor deepening, I mean I'm just  
7 trying to figure out the analysis here.

8 I mean with harbor deepening you're going  
9 to be moving the same amount of cargo as  
10 without.

11 MR. MOSEBY: Right.

12 MR. SAPP: You've got fewer vessels,  
13 fewer air emissions, better efficiencies, but  
14 essentially you're holding to that fundamental  
15 analysis.

16 Now the one thing I didn't understand  
17 though using that analysis is the jobs,  
18 because there's almost 6,000 jobs that are  
19 created by the harbor deepening. I'm just --  
20 Bill, you might be able to answer this.

21 Are those jobs tied the construction?  
22 Are those all construction jobs, or are those  
23 additional jobs because of the deepening that  
24 are going to be long-term?

25 MR. MOSEBY: Let me try that initially

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2 and then I'll let Bill weigh in. The regional  
3 economic development benefits that we  
4 calculated, we show a number of jobs  
5 equivalent to the benefits that are being  
6 generated.

7 We're not saying that actually that many  
8 jobs would be created, but based on the  
9 average wage across industries here, that  
10 would be cut by the expansion, that number of  
11 benefits equilibrates or equals a number of  
12 equivalent jobs.

13 We're not saying in particular there are  
14 going to be so many jobs in this industry, so  
15 many in that. We're just making an equivalent  
16 between the benefits and what that converts to  
17 in jobs. We're not saying that we're creating  
18 5,000, 6,000 jobs.

19 MR. SAPP: Okay. The difference I was  
20 trying to make was that you're using this  
21 assumption that there's going to be the same  
22 cargo going through the port with or without  
23 the project, and therefore there's not going  
24 to be anymore distribution centers built  
25 landside with or without the project, but yet

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2 there is a difference in jobs of 6,000.

3 MR. MOSEBY: No, no, no, no. As your  
4 tonnage grows throughout the time, it's the  
5 same number of distribution centers without as  
6 to with are the same. The project generates  
7 benefits.

8 Let's say \$200,000,000 in benefits. What  
9 is that equivalent to if you change it from  
10 dollars to jobs. That's all we do is make a  
11 conversion from the economic benefits of  
12 construction and the transportation  
13 cost-savings throughout the period of  
14 analysis.

15 The less tide delay sitting there  
16 operating, you know, burning fuel, all of  
17 those savings, if they were expressed in an  
18 equivalent number of jobs, that's the number.  
19 That number of jobs and those regional  
20 economics development benefits do not go in  
21 the NED justification.

22 NED savings are those the whole nation  
23 participates in; transportation cost-savings.  
24 If there are additional jobs generated here in  
25 the region, in the county, in the neighboring

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2 counties; those are what we call regional  
3 economic development benefits. They do not  
4 -- they are not considered benefits of the  
5 nation and used in the justification.

6 MR. SAPP: Okay.

7 MR. MOSEBY: So that's just showing the  
8 regional benefits. The total benefits due to  
9 construction and over time, just equivalence  
10 into a number of jobs.

11 MR. SAPP: It's not right -- I think I  
12 understand what you are saying. That's taking  
13 the 200,000,00 in profits, extra profits that  
14 are going to be generated by the --

15 MR. MOSEBY: No.

16 MR. SAPP: Okay. Then stop there because  
17 I thought I had it.

18 MR. MOSEBY: Profit is small.

19 MR. SAPP: I'll talk to you afterwards.

20 MR. MOSEBY: This is revenue, dollars --

21 MR. SAPP: I definitely don't have it  
22 then, but I'll talk to you later.

23 MR. DYSART: Next is Hope, Judy and Will.

24 MS. MOORER: The question came Fish and  
25 Wildlife. They're gone now. I was going to

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2 be making a clarification about cargo levels  
3 that we have returned to the pre-recession  
4 cargo levels already.

5 The other part about the vessel  
6 projections, we're beyond the projections of  
7 size of vessels already too. So we have  
8 larger vessels here sooner than what we had  
9 anticipated. That has a lot of function to do  
10 not with the timing of the Panama Canal, but  
11 the Suez Canal, and a shift to services using  
12 the Suez Canal because of number one, the  
13 cost-savings of using those larger vessels.  
14 So you see an East Coast shift already  
15 into the larger vessels.

16 The other thing is, Bernard, on the  
17 variations of the fleet that Kim was alluding  
18 to as well, as I think Jane, that you're doing  
19 sensitivity analyses of the fleet forecast as  
20 well, from what I can remember and I haven't  
21 reread it again, but it just seems like there  
22 are sensitivity analyses there too so whatever  
23 projections are off.

24 The smaller vessels, there is a  
25 percentage, if you look at that chart Bernard

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2 had up there, it still allows for smaller  
3 vessels to be calling on the East Coast as  
4 part of the mix. So there are smaller  
5 vessels. There's the sub-Panamax,  
6 post-Panamax, post-Panamax gen one and gen  
7 two.

8 MR. O'KANE: The sensitivity analysis on  
9 the vessels had to do so with when they  
10 deploy.

11 MS. MOORER: Right, so how soon do you  
12 see that mix of --

13 MR. O'KANE: Right, economics tips the  
14 scale for you to go from a post-Panamax to a  
15 Panamax to a post-Panamax gen one versus a gen  
16 two. So those are in there, they're in the  
17 reports.

18 MR. DYSART: Judy.

19 MS. JENNINGS: Thanks. Gosh that was so  
20 long ago I doubt I remember. I had a couple  
21 of questions, but let me state this has been a  
22 question, Bill, we've argued with that  
23 assumption from day one, day one.

24 Morgan and I have had lots of  
25 conversations about that. It's never changed

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2 and I don't get it yet, but that's what it is.  
3 Actually, the way I've always gotten it is not  
4 so much -- it's the distribution won't change,  
5 the distribution, and that's the way I've made  
6 peace with it.

7 I'm just curious. If you took -- one  
8 thing about the Panama Canal, I think we sort  
9 of slipped a little bit when we make the  
10 assumption the Panama Canal is being changed  
11 to enable this worldwide redeployment of  
12 ships.

13 It really -- that's not the real -- I  
14 mean Panama is the clog of the world, and  
15 that's really the reason Panama is trying to  
16 do that, in addition to additional revenue for  
17 Panama.

18 So I don't think the Panamanian people  
19 voted for that to say oh well, we're going to  
20 redistribute the world fleet. I think our  
21 assumption that it will redistribute the world  
22 fleet is just sort of like that assumption  
23 that we live with and kind of pretend it  
24 doesn't smell.

25 I'm just saying that's a big assumption

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2 and I question it to some extent. I've never  
3 seen anybody try to prove it one way or  
4 another. There is one possible way you could  
5 look at.

6 Could you take the analyses that you've  
7 done and assume that the world fleet is going  
8 to change, because of Panama, and do an  
9 analysis on Baltimore or Wilmington, the two  
10 50 foot channels on the East Coast -- we  
11 already have 50 feet there.

12 I'm just curious. If you did an analysis  
13 of the new Panama, and if you redistributed  
14 the fleet coming through the Panama and  
15 applied it to Baltimore and Wilmington, would  
16 either of them change?

17 MR. MOSEBY: Would those projects change  
18 or would they impact on Savannah?

19 MS. JENNINGS: I don't know if they have  
20 projects. They're 50 feet -- Baltimore and  
21 Norfolk, I'm sorry.

22 MR. MOSEBY: Let me dig back in history  
23 just a little bit and maybe you already know  
24 this, but before the strike on the West Coast,  
25 Oakland, the shippers were heavily dependent

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2 on the land bridge.

3 When the strike happened and there was  
4 gridlock there, they were attracted to the  
5 Panama Canal because it was an alternative to  
6 the land route. Industry likes to have  
7 choices, you know. They hate being locked to  
8 railroads.

9 So they shifted to the Panama Canal at  
10 the time and competed against the railroads.  
11 So the industry, the shipping industry saw  
12 this a useful thing for them, and that  
13 particular decision using an all-water route  
14 to get to the East Coast --

15 MS. JENNINGS: We're kind of a recipient  
16 of that.

17 MR. MOSEBY: Yes, it was. There they  
18 have a very large interest in using Panama  
19 Canal because of the efficiency. There's a  
20 new set of locks that's going to more  
21 efficient than the old set of locks.

22 If it was more efficient for them to use  
23 the land bridge, they would more, but they  
24 also like having that alternative. Even it  
25 were more efficient to use the land bridge,

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2 they would still economically be thinking,  
3 they still would send some by the water route,  
4 even if it was less efficient just to keep it  
5 viable so they have, you know, the alternative  
6 of using one or other in case of a strike or  
7 a calamity at one of the ports.

8 So that's driving -- that's a driving  
9 thing for the shipping industry to use a water  
10 route. The Panama Canal Commission knows the  
11 industry is going to participate in savings  
12 using the new locks.

13 They have got to pay for the locks and  
14 whatever they're going to charge, you know,  
15 they're probably going to go as far as the  
16 industry would bear and not shift tonnage to  
17 somewhere else. Does that background kind of  
18 help you a little bit?

19 MS. JENNINGS: Yeah, and you're right. I  
20 was aware of that. Still I'm wondering if you  
21 took the model you have for Savannah and  
22 applied it to the already 50 feet ports on the  
23 East Coast, in the Southeast, Baltimore and  
24 Norfolk, would -- would anything about those  
25 ports, calls or commodities change?

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2 MR. MOSEBY: The existing conditions they  
3 have now -- this model would be applicable,  
4 but you would have to get data that's generic  
5 to that particular port.

6 MR. DYSART: Hope has a clarification.

7 MS. MOORER: Let me interject into that.  
8 It has to do a lot with the type of market you  
9 have, the population where your market is  
10 based in terms of travel time too. So it  
11 would be specific to Baltimore, specific to  
12 Norfolk then.

13 You'd have to look at what their trade  
14 is. Like our trade here has been recently  
15 primarily export markets. Export are heavier.  
16 It shifts back and forth. Normally it's about  
17 a 50/50 here.

18 MS. JENNINGS: Right.

19 MS. MOORER: Those others might not be.  
20 I don't know exactly what theirs is, probably  
21 about 30% exports. You have to look at  
22 specific trade they have too. It's not just  
23 the vessels. It's everything on the whole  
24 business, the commodity forecast specific for  
25 that port that would affect it.

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2 MS. JENNINGS: Right, I agree. However,  
3 having said that with those ports being higher  
4 in imports, I would expect they would be a  
5 greater recipient of higher efficiency cargo  
6 vessel movements.

7 MS. MOORER: Lighter vessels too though.

8 MS. JENNINGS: Yeah, anyway I originally  
9 put my tent up, I was just a little surprised  
10 that you in your slide put the LNG right along  
11 tidal delays.

12 MR. MOSEBY: Uh-huh.

13 MS. JENNINGS: Maybe I just haven't found  
14 it yet where you have the cost benefits  
15 attributed to LNG, and if you did a  
16 sensitivity analysis on whether, you know, is  
17 the cost-savings sensitive at all to even its  
18 existence.

19 MR. MOSEBY: Okay. LNG vessels do not  
20 need additional depth.

21 MS. JENNINGS: Right.

22 MR. MOSEBY: Okay. Their impact on the  
23 channel is they need to reach their docks  
24 exactly at slack tide, in order to terminate  
25 the vessel and get in without being crossed.

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2 So the LNG, when he shows up, he looks at the  
3 tide gate and sees if it can deploy. It can  
4 dispatch that vessel, get to the dock at slack  
5 tide. Also, there's a safety zone around that  
6 vessel.

7 MS. JENNINGS: Right.

8 MR. MOSEBY: That LNG vessel impacts the  
9 wait time for all other vessels. So benefits  
10 accrue to delay time, if you can get the Q  
11 that's waiting for the tide smaller. As you  
12 deepen the harbor, the Q at the buoy gets  
13 shorter, and there's less impact of LNG on  
14 those vessels if we can get them out of the Q.

15 So LNG in itself doesn't generate any  
16 time delay benefits, but by moving other ships  
17 in and out faster, the impact from LNG adds to  
18 the benefits because of the impact on delays.

19 MS. JENNINGS: So there cost-savings  
20 simply because they're less trouble than they  
21 would be?

22 MR. MOSEBY: Exactly.

23 MS. JENNINGS: That's what I thought. So  
24 what I'm asking is, did you do a sensitivity  
25 analysis with no LNG traffic at all?

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2 MR. MOSEBY: No, no, we didn't.

3 MS. JENNINGS: I mean considering the  
4 price of gas, don't you think that would be  
5 wise?

6 MR. MOSEBY: LNG shipments across the  
7 nation, and the Energy Department projections  
8 are shown to be growing, and they are yielding  
9 larger and larger LNG vessels. And all the  
10 forecasts show that it's only going to  
11 increase.

12 MS. JENNINGS: The difference between  
13 natural gas and LNG is very different. An  
14 article in the Wall Street Journal about two  
15 months ago that called the expansion  
16 foolhardy, I mean not a bastion of  
17 environmental thinking. Tough, you've got to  
18 admit --

19 MR. DYSART: Hope has a clarification.

20 MS. MOORER: Just a clarification, the  
21 LNG benefits compared to the overall benefits  
22 are a very small portion of the overall scheme  
23 of things.

24 If you can't find the section in there,  
25 I'm sure you can call the Corps and they can

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2 point it out to you.

3 MR. O'KANE: Is that GRR you've got  
4 there? I think it's about page 178. There is  
5 a table that shows you --

6 MR. SAPP: Paragraph three.

7 MR. MOSEBY: In other words, if you  
8 subtract all the benefits associated with the  
9 LNG vessels, it's not going to be significant,  
10 and definitely not impact --

11 MS. JENNINGS: But the sensitivity  
12 analysis would show, like Hope says, it's an  
13 insignificant factor.

14 MS. MOORER: Not insignificant.

15 MR. MOSEBY: You don't have to run  
16 sensitivity. You take the benefits out  
17 completely and recalculate the cost-savings  
18 and BC ratios. You couldn't see a tenth of a  
19 decimal change in benefits on just LNG.

20 MR. DYSART: Okay. Will has a question.

21 MR. BERSON: Please don't misconstrue  
22 this as a comment against adaptive management.  
23 I'm wondering if the figure that the Corps  
24 uses is basically 10% of construction costs or  
25 \$50,000,000. If you assume that you actually

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2 spent 50,000,000 because project impacts were  
3 different, or mitigation didn't work, or  
4 whatever; does that serve to distort tacking  
5 on an extra \$50,000,000 on the end of the  
6 project, does that serve to distort your cost  
7 benefit NED analysis, that you make about the  
8 project initially? Do you understand what I'm  
9 saying?

10 MR. MOSEBY: Okay. Your reasoning for  
11 the 50,000,000, is that beyond certainty?

12 MR. BERSON: Just what the Corps proposed  
13 as 10% of construction costs.

14 MR. O'KANE: Our policy is to include  
15 the costs related to the project including  
16 mitigation. Contingency is 25% for most --  
17 for 99% of the features on the project. Does  
18 that distort; it's not for us to say. That's  
19 our policy.

20 MR. BAILEY: One answer is if that's  
21 applied equally to every alternative, then it  
22 doesn't distort the net benefit determination.

23 MR. BERSON: Okay.

24 MR. BAILEY: It just would slide  
25 everything up or down.

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2 MR. O'KANE: We answered two different  
3 questions.

4 MR. BAILEY: Uh-huh.

5 MR. DYSART: Tom.

6 MR. WRIGHT: This week's Business Week  
7 Magazine had an article on foreign trade and  
8 the Panama Canal, and reported that 80% of the  
9 new construction of container ships under  
10 contract are over 8,000 TEU today. That's my  
11 short answer to the first question that Fish  
12 and Wildlife had.

13 MR. DYSART: Okay. Next is Bill Farmer.

14 MR. FARMER: My question has to do with  
15 the --

16 MR. DYSART: Obviously, he has a late tee  
17 time today.

18 MR. OFF: Too cold.

19 MR. FARMER: Yes. It has to do with the  
20 variability in the benefit cost ratio. I  
21 would assume that say for the 47 foot depth,  
22 the benefit cost ratio is a certain number,  
23 which takes a most likely benefit value and a  
24 most likely cost and divides them.

25 Now you did a lot of sensitivity

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2 analysis, call it Monte Carlo or whatever,  
3 where you varied a lot of the important  
4 variables. I would assume that that had an  
5 impact on the calculated benefit cost ratio,  
6 based upon what combination of variables you  
7 used.

8 So again if -- if some of these assumed  
9 variable values were less than the target or  
10 the most likely and they were bad, what would  
11 the benefit cost ratio turn out to be, or if  
12 they were good what would it be. So you would  
13 have a range of benefit cost ratios rather  
14 than whatever it is, 4.7. It might go from  
15 two up to eight or something like that.

16 So coming back to the question, what's  
17 the variability in the benefit cost ratio,  
18 based upon all the sensitivity analysis you  
19 did, the most likely variations of the Q  
20 variables?

21 MR. MOSEBY: Undetermined.

22 MR. BAILEY: That's all in the report.

23 MR. MOSEBY: Yes, but specifically on the  
24 transportation cost-savings benefit, each  
25 sensitivity analysis you're getting one -- one

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2 re-estimate of the benefit cost ratio. But  
3 you have to -- we don't know if we have done  
4 the important sensitivity analysis enough to  
5 give us data that we could tell you about the  
6 variation and the benefit cost ratios.

7 In other words, the answer might be more  
8 beneath the mean or eschewed more above the  
9 mean. I just can't answer that, but on each  
10 sensitivity analysis and that benefit change,  
11 you can see its impact on the benefit cost  
12 ratio.

13 That's in the report, but to do exactly  
14 what you want to and say, you know, the NED  
15 benefit cost ratio and put this range around  
16 it, or address the uncertainty in it; I don't  
17 have -- I don't have the information to do  
18 that statistically speaking.

19 MR. O'KANE: Bill, I think it's a good  
20 question because that's why run the  
21 sensitivity analysis. That's gets to why  
22 we've done it.

23 What we've done is what's the range of or  
24 how realistic is it, how wrong could we be on  
25 either of side of this assumption. We've run

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2 those scenarios and saw how it affected the  
3 benefits and the cost.

4 What gives us the confidence the way  
5 we've done it is it doesn't rock -- it doesn't  
6 rock the answer much, but those are laid out  
7 in the sensitivity analysis. Does that help?

8 MR. FARMER: Yeah. It helps, but if you  
9 do all these variations it should come down to  
10 bottom line in each set of analyses, you know,  
11 and the bottom line is the benefit cost ratio.

12 I guess as long as it's more than one,  
13 you're good, you know. It would be  
14 interesting to know if some of the variables,  
15 like the average weight of a container and  
16 the number of containers that are empty, all  
17 that kind of stuff, if all those came out to  
18 be bad, you know, in the baseline they're too  
19 high. So if they were less, you would have  
20 less benefits, correct?

21 MR. MOSEBY: That's right.

22 MR. FARMER: So the benefit cost ratio  
23 might vary somewhat. I just don't know how  
24 much. That was the basis for the question.

25 MR. MOSEBY: Well the basis for my answer

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2 is statistically speaking, if I try to do that  
3 and statisticians looked at it and said no,  
4 because you don't know if your sensitivities  
5 are biased beneath your average or above your  
6 average. And because I don't know that  
7 statistically speaking, I just can't do it  
8 with what we have now.

9 Suppose there's an important sensitivity  
10 analysis I did not perform, and it would have  
11 an impact on the BC ratio. My sensitivity  
12 analysis I did was just my feel, my gut feel  
13 for what the important variables were, and how  
14 much to vary, because I don't have  
15 probabilities.

16 I can't stand up with some certainty, you  
17 know, I'm just, you know, my gut feel. I  
18 couldn't stand up to a statistical evaluation  
19 of giving you the risk associated with it.

20 MR. BAILEY: One of the analyses you ran  
21 was with no growth, wasn't it?

22 MR. MOSEBY: Yes, it was. Yes, it was.

23 MR. BAILEY: I think the project was  
24 still justified.

25 MR. MOSEBY: Still justified if we just

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2 held -- held our tonnage at current levels.

3 MR. DYSART: Dean, David and Judy.

4 MR. MOSS: Bernard, just a question. I  
5 want to go back to the multiport analysis just  
6 for a minute. The assumption that we're  
7 making as I understand it, is effectively we  
8 have no more containers than we would have if  
9 the project were not constructed. There's a  
10 growth in containers whether you do the  
11 project or don't do the project.

12 MR. MOSEBY: Right.

13 MR. MOSS: So effectively, what we're  
14 saying is that, and the EIS states a clear  
15 assumption in the beginning, no movement of  
16 containers from one port to another as a  
17 result of this project.

18 In other words, if Charleston is going to  
19 lose any containers to Savannah as a result of  
20 this project, I don't understand how that  
21 assumption makes sense, given your modeling,  
22 and the assumption that ship owners are going  
23 to make the most rational decision possible in  
24 their shipping between now and 2032.

25 In other words, what we're seeing is that

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2 Savannah will be able to take the post-Panamax  
3 two ships, under the current conditions in the  
4 harbor. Is that a correct statement, that you  
5 will be able, under the current navigation  
6 conditions in the harbor be able to  
7 accommodate sufficient post-Panamax two ships  
8 to allow that projected container growth to  
9 occur?

10 Is that a fair statement? The shippers  
11 are not going to say well, I don't want to  
12 send that post-Panamax two ship into Savannah  
13 because there's risk of running aground, or  
14 other types of problems, because if that's  
15 not true, then effectively if Savannah doesn't  
16 do the project, it gives the competitive  
17 advantage to some other port that does or  
18 another port that, as Hope said, in the  
19 market area that has the ability to service  
20 that demand, that regional demand for exports  
21 and imports.

22 MR. DYSART: Hope, clarification.

23 MR. MOSEBY: I can't answer that in the  
24 model. I make that conservative assumption  
25 that the tonnages are the same in the with or

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2 without project condition, without addressing  
3 tonnage going to another port or reducing  
4 tonnage back to Savannah.

5 We just don't want -- it's not -- it's  
6 not a thing we want to model.

7 MR. MOSS: But if it's a national  
8 economic model --

9 MR. MOSEBY: In the evaluation, we're  
10 looking at Savannah port based on the  
11 projected growth for Savannah. And the most  
12 conservative thing to do is to use the same  
13 tonnage and growth rates in the without  
14 project condition as with with project  
15 condition.

16 It would be -- I could not defend an  
17 analysis that would say I'm reducing traffic  
18 from Charleston to Savannah, or if I don't go  
19 so deep traffic is going to leave Savannah to  
20 go to Charleston.

21 I just can't defend that. And I have to  
22 have a defense of the project, and I can't do  
23 it.

24 MR. MOSS: I'm not asking you to defend  
25 it. I'm trying to understand the nature of

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2 your analysis, because there are a lot of  
3 other variables on the table --

4 MR. MOSEBY: Yes, there is.

5 MR. MOSS: -- that in many ways revolve  
6 around that call very clearly in the national  
7 economic model.

8 MR. MOSEBY: I didn't do a big picture  
9 analysis with all these ports and all the  
10 interactions between them. I don't think the  
11 Corps would -- you've got to have a model that  
12 would do - that would do that. I don't

13 MR. MOSS: I understand.

14 MR. SAPP: Bernard, could you repeat what  
15 you just said?

16 MR. BAILEY: I think you did look at the  
17 depths in all the ports on the East Coast and  
18 you did look at other ports.

19 MR. MOSEBY: Yes, we did, but what  
20 they're asking is did I characterize if  
21 Savannah is going to induce traffic or lose  
22 traffic to other ports, based on deepening or  
23 not deepening, I think. But the most  
24 conservative, defensible position was to  
25 assume that the same traffic would be used in

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2 the without project condition, 42 feet, and at  
3 each alternative depth.

4 MR. BAILEY: Bernard, would it be a  
5 national benefit if cargo -- if you were to  
6 analyze the cargo just moved from one port to  
7 another; is there a national benefit?

8 MR. MOSEBY: All right. There are many  
9 reasons why they would move cargo from one  
10 port to another. A lot of it, you would think  
11 it was because of economic efficiency, but  
12 there are other reasons, not economically  
13 efficient, why they would move cargo to a  
14 different port.

15 And I just don't know those kinds of  
16 decisions, and each company makes their  
17 decisions based on --

18 MR. BAILEY: That wasn't question I  
19 asked.

20 MR. MOSEBY: Okay. Would it be a NED  
21 benefit?

22 MR. BAILEY: Yes.

23 MR. MOSEBY: If it was an economically  
24 efficient decision; in other words, if it  
25 lowered the transportation cost from the

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2 origin to the final destination, yes, it would  
3 be an economic benefit.

4 MR. BAILEY: Would you have to subtract  
5 off some costs to the other port?

6 MR. MOSEBY: To whom the benefits may  
7 accrue, you know.

8 MR. BAILEY: Okay.

9 MR. MOSEBY: Suppose he makes the  
10 decision, based on moving that container from  
11 the port to its final destination. That's not  
12 in the model. I wouldn't pick it up.

13 MR. BAILEY: Okay.

14 MR. MOSEBY: It would be a benefit to  
15 somebody, but without looking at where that  
16 container starts and where that container  
17 finishes, and then the associated charge; I  
18 mean they're going to charge me for  
19 repositioning that empty too. How much is the  
20 industry charging for that -- I don't know.  
21 It's very complicated.

22 MR. DYSART: David Kyler, Judy, Will,  
23 Bill Sapp and Morgan.

24 MR. KYLER: At the risk of sounding glib  
25 but kind of interesting to me, I think I

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2 either discovered why you're described as an  
3 optimistic economist, in spite of all facts to  
4 the contrary in the world, but I'm not sure  
5 whether the chicken and egg thing's relative  
6 to the question Bill brought up.

7 MR. DYSART: Bill who?

8 MR. KYLER: Sapp. There are multiple  
9 Bills.

10 MR. DYSART: Yes.

11 MR. KYLER: It's one thing to say we  
12 agree that there's a TEU efficiency benefit  
13 and that is the only benefit of this project.  
14 It's something else to say that this has a job  
15 equivalent benefit, when there are no  
16 causalities associated with that creation of  
17 jobs, because that has -- you say job  
18 equivalent benefit. It has a coercive effect  
19 on public opinion about the project, right,  
20 because it takes from one type of benefit into  
21 a whole other socially relevant, I would say  
22 in this economy very compelling form of  
23 benefit that's totally unfounded. You see  
24 what I'm saying?

25 MR. MOSEBY: Let's go to the first part.

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2 I'm not creating jobs.

3 MR. KYLER: Right.

4 MR. MOSEBY: I'm giving you -- I'm  
5 converting dollars to Rubles.

6 MR. KYLER: Why would you convert at all  
7 though, because it has in my opinion a  
8 perverse and prejudicial effect on public  
9 opinion about the project.

10 MR. MOSEBY: I have to report regional  
11 economic benefits, just report by my guidance,  
12 and that's a part of our policy and guides.

13 MR. KYLER: May I say that that policy  
14 is totally off base. It has such a distorted  
15 effect on --

16 MS. MOORER: It's not included in the NED  
17 calculation though.

18 MR. KYLER: As Bill was saying, it  
19 reflects public opinion about the project in  
20 the press. I think that's probably one reason  
21 why.

22 MR. MOSEBY: I have to show regional  
23 economic benefits and I have to show other  
24 social effects. I just have to do it. That's  
25 my job.

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2 MR. KYLER: Yeah, but social effects to  
3 me to be legitimate have to be -- have to  
4 trace a causality related to the project. You  
5 can't just say because you have X thousand or  
6 million or billion in efficiency improvement,  
7 that is equivalent to jobs when there is no  
8 linkage and causality in the real world  
9 causing those jobs to be created.

10 MR. MOSEBY: It's just the equivalent.

11 MR. KYLER: Yeah, I know. I understand  
12 what you're saying. I think the policy is  
13 totally bogus.

14 MR. O'KANE: What helped me to understand  
15 this a little bit was to think of who our  
16 decision-makers, the Corps of Engineers  
17 decision-makers are. It's congress and they  
18 want a bottom line number.

19 MR. KYLER: Yeah, but all the more  
20 reason, an even more dangerous place to use  
21 the word jobs. In this economy especially  
22 it's ridiculous.

23 MR. SAPP: If I can jump in for one  
24 second.

25 MR. DYSART: Clarification welcome.

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2 MR. SAPP: This gets back to where the  
3 benefits of this project are going. Are they  
4 going to China, are they going to Europe or  
5 are they going to the United States.

6 There's going to be, based on this  
7 calculation if it goes to the 48 foot depth,  
8 there is going to be \$207,000,000 savings in  
9 efficiencies. Well is that going to be  
10 converted into jobs -- probably not. That may  
11 well go in the pockets of the Chinese. So  
12 anyway --

13 MR. KYLER: Or 2% of the American  
14 population as opposed to 80% of the  
15 population, even if it is domestic benefit,  
16 it's not necessarily a public benefit.

17 MR. MOSEBY: Transportation costs --  
18 economically NED benefits, economically  
19 speaking our guidance is to whom the benefits  
20 may accrue. They didn't say to Americans, Far  
21 Easterners, as long as they're transferred to  
22 goods that are bought and sold, eventually the  
23 American market, those savings will be passed  
24 along as national benefits.

25 MR. KYLER: A trickle down effect, to put

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2 it somewhat prejudicial. That's my soapbox  
3 part of my question. I have a couple other  
4 ones.

5 MR. MOSEBY: I understand.

6 MR. KYLER: There are two questions. One  
7 is you may recall when you were here last  
8 time, was it two years ago?

9 MR. MOSEBY: A year and 10 months ago.  
10 February 9th, I believe it was.

11 MR. KYLER: You will recall, I think you  
12 described it as an effort on the part of the  
13 Corps to clean up their act, that was your  
14 phrase after some scandals in the Upper  
15 Mississippi, something like that.

16 MR. MOSEBY: We've gotten scrutiny in our  
17 review process where we have go -- we have to  
18 conduct independent external peer review of  
19 our documents now, and because of the Upper  
20 Miss, Congress has told us look, you've got to  
21 go outside and have independent peer review  
22 agencies and people look at your work.

23 MR. KYLER: I'm all in favor of that, but  
24 I'm going to ask again the same question I  
25 asked then, which is acknowledging the value

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2 of that improvement, has there been any  
3 further steps -- have there been any further  
4 steps beyond that to do any post-project  
5 analysis that verifies, validates or not, the  
6 decision-making and assessment that's went  
7 into that project being done in the first  
8 place?

9 MR. MOSEBY: Yes. For instance, the  
10 Institute for Water Resources, our research  
11 arm in navigation for the Corps of Engineers  
12 went back and looked at previous projects we  
13 had built, and did postmortem on them to see  
14 if the Corps' forecasting, methodology and  
15 determination of benefits back then would --  
16 how they would look using a re-analysis today.  
17 We do go back.

18 MR. KYLER: Is it an ongoing --

19 MR. MOSEBY: No, no.

20 MR. KYLER: So it's a periodic thing that  
21 you may do?

22 MR. MOSEBY: That's right, because it  
23 takes resources to do that.

24 MR. KYLER: A similar question to me or  
25 related question is, have there been any

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2 adjustments to the HQ procedures on  
3 construction projects relative to adaptive  
4 management?

5 I understand from Bill there is, I guess,  
6 a word of based initiative to use adaptive  
7 management, but there is no guidance from on  
8 high, from HQ, for what that means and how to  
9 carry it out, is that correct?

10 MS. MOORER: I think that's in the draft.  
11 I think the guidance they're working on is at  
12 headquarters. It takes them always from,  
13 headquarters, from what I've just seen, when  
14 there is a directive several to get guidance  
15 out on how to implement that.

16 MR. KYLER: So maybe Hope is the person I  
17 should be asking this; what effect would those  
18 yet to be released guidelines have on this  
19 project?

20 MS. MOORER: It has had an effect.  
21 Recently released guidance has had an effect  
22 on this project, where the Corps district has  
23 had to go back and redo things according to  
24 what the new guidance puts out. I mean there  
25 have been several aspects of the project where

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2 that has happened. Sea level rise is one of  
3 them.

4 If they come out with new implementation  
5 prior to us finishing our approval process or  
6 coming to close, they could say, you know, you  
7 need to do this in compliance with what we've  
8 put out there.

9 There's always opportunity to request a  
10 waiver from headquarters, since you are so far  
11 in the process or have agencies all agreed to.  
12 In this case, all the agencies potentially  
13 agree to a process of what we're using, but  
14 the Corps headquarters can always say no. We  
15 want you to do it this way. So yes, there is  
16 that potential.

17 MR. KYLER: So given all that you have  
18 just said, what opportunity and when will the  
19 public have opportunity to comment on the EIS,  
20 relative to those guidelines.

21 MS. MOORER: They usually -- the guidance  
22 usually comes out of headquarters. There's  
23 not much public opportunity that I have seen.  
24 When the Corps gets a directive from congress  
25 to do something, it seems like internally, it

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2 seems like they figure out how to do it -- it  
3 seems like to me they figure out how to do it  
4 and put it out there. That's how you do it  
5 for --

6 MR. KYLER: That's interesting, but not  
7 what I was asking, Hope. What I was asking is  
8 if we wanted to comment on the adaptive  
9 management aspects of this project relative to  
10 the EIS --

11 MS. MOORER: Now.

12 MR. KYLER: Now or in the final draft.

13 MS. MOORER: Right, those are your two  
14 opportunities.

15 MR. KYLER: We need to have the  
16 guidelines or part of what we're commenting  
17 on would be the adherence to the guidelines,  
18 and for that matter the relevance to the  
19 guidelines, based on our perception of what  
20 adaptive management is.

21 MS. MOORER: And they may not finish  
22 those guidelines until after the project is  
23 approved is what I'm saying now. If it  
24 happens, you would have your comment period  
25 now, you would have your comment period for

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2 the final.

3 If there are any changes in that  
4 according to guidance, you would have those  
5 opportunities, but it maybe a couple of years  
6 before they come out with guidance.

7 MR. KYLER: Ideally --

8 MS. MOORER: This is all the time. There  
9 are new policies and guidelines and guidance  
10 coming out all the time.

11 MR. KYLER: But ideally any comments we  
12 have about adaptive management would not only  
13 improve this project, but could actually  
14 improve the guidelines --

15 MS. MOORER: Yes.

16 MR. KYLER: -- coming out of HQ?

17 MS. MOORER: Yes. If you, you know, the  
18 support that you would give to this process,  
19 it's part of the public comment period on our  
20 project and potentially, you know, if there's  
21 a reviewer who is involved in writing the  
22 guidance that sees your comments, yes, it's a  
23 possibility that your comments could maybe  
24 influence the project.

25 MR. KYLER: And surely an optimistic

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2 economist would see -- but one other question.

3 MR. DYSART: Okay.

4 MR. KYLER: I assume the projected  
5 commodity forecast it includes analysis of  
6 trade agreements that may affect labor costs,  
7 tariffs and that kind of stuff, which would  
8 determine the sources and destinations of  
9 commodities to be shipped, right?

10 MR. MOSEBY: You would assume that the  
11 contractor who gives us those commodity  
12 forecasts base their forecast on the important  
13 variable.

14 MR. KYLER: Okay.

15 MR. MOSEBY: We don't explicitly tell  
16 them. There's a minutia of things you can  
17 tell them to investigate, but you just can't  
18 do it. So, you know, you have -- they give us  
19 their assumptions for their forecast. We just  
20 put those out.

21 MR. DYSART: Judy, Will, Bill Sapp.  
22 Morgan and Kim.

23 MS. JENNINGS: Yeah, I really have tried  
24 to follow the tables and I will more.

25 MR. DYSART: Which table is that you're

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2 referring to?

3 MS. JENNINGS: There are a lot of tables  
4 in this book. They are not all 100%  
5 consistent. I don't think that's a big deal,  
6 but it's partly you cite sources and the  
7 sources are not always 100% the same. But  
8 here's just an example that strikes my  
9 attention on the world fleet forecast.

10 The second chain PP2s, the year 2025  
11 we're going to have 573. If you go over and  
12 look at anticipated Savannah calls, you're  
13 looking in the year 2032 at a 45 depth, we're  
14 going to have 1,022 of them. So --

15 MR. MOSEBY: That's vessel calls?

16 MS. JENNINGS: Somehow we have gained  
17 about 500 ships.

18 MR. MOSEBY: This is the fleet, the fleet  
19 adjusted that makes the most multiple calls.

20 MS. JENNINGS: Okay. And we're assuming  
21 on a rotation?

22 MR. MOSEBY: Yes.

23 MR. DYSART: Be sure everyone talks nice  
24 and distinctly.

25 MS. JENNINGS: Is there anywhere in here

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2 where you say what sort of line of service you  
3 expected that to be? That would help me  
4 understand it more, whether it's weekly, what  
5 would you expect that to be, Hope?

6 MS. MOORER: Any service?

7 MS. JENNINGS: If you took a second  
8 generation.

9 MS. MOORER: It's a weekly. Very few of  
10 our services are not weekly.

11 MS. JENNINGS: Is that what I would  
12 assume when I read this.

13 MS. MOORER: Yes.

14 MR. McCURRY: Five or six post-Panamax  
15 services that we have today, 6 and 8,000 TEU  
16 vessels are all weekly.

17 MS. JENNINGS: That's what I thought.  
18 That's the assumption as you go through the  
19 numbers. There are some others. They're not  
20 big changes. It could be just in the source  
21 you cite. It could be something I don't  
22 understand yet.

23 MR. MOSEBY: In the comment period is a  
24 good time to bring those out, because you will  
25 get a response to it.

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2 MS. JENNINGS: I don't think anything is  
3 so big. Again, it's one of those that  
4 probably won't make a difference. Since we're  
5 talking, I will ask one question. Something  
6 came up in the last week.

7 There was an e-mail that went around.  
8 Hope helped me. It turned out to be false.  
9 It did bring up a question I thought was  
10 interesting and I had never thought of.

11 The e-mail was false. It said Emma  
12 Maersk that's under lease by Wal-Mart was  
13 doing fully loaded trans-Pacific with empty  
14 back-hauls.

15 Hope helped me see that it was Europe and  
16 Asia trade ever since it was deployed, but it  
17 did occur to me, what if a retailer with so  
18 much influence as Wal-Mart sets out on a  
19 notion like that.

20 I did Google around quite a bit. It  
21 wasn't -- whoever sent out that e-mail had a  
22 lot to draw from. There were a lot of  
23 references to that actually happening. So at  
24 the end of the day I wouldn't have bet a  
25 nickel on where the Emma Maersk actually was.

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2 MR. DYSART: You have a clarification,  
3 Hope?

4 MS. MOORER: Yes. I don't think there  
5 are any retailers that have contracted  
6 exclusively on a vessel like that. I don't  
7 think that is factored in as an option right  
8 now, because you don't see that exclusively on  
9 a vessel. I don't know where their references  
10 were on that, but it has been in the Europe  
11 Asia trade.

12 MS. JENNINGS: That was easy to find.  
13 Also, there were some conflicting, but I do  
14 know there's been retailers as large as  
15 Wal-Mart. There has been a lot of vertical  
16 integration in the shipping industry.

17 So there's more power in any one name  
18 than there was even 10 years ago when I looked  
19 at this. So I think maybe when this book was  
20 put together, you know, the powers that be  
21 evenly distribute in the shipping industry in  
22 general including manufacturers, retailers,  
23 shippers, like that. My suggestion is maybe  
24 it won't, but I don't know how you -- I don't  
25 know how you figure that.

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2 MR. MOSEBY: What we did look at was past  
3 practices, what have they done in the past and  
4 assume that the operating procedures that they  
5 have applied in the past are our best  
6 indication of what the future's going to look  
7 like. Our safest bet is to project what we  
8 know to the future.

9 MR. DYSART: Okay. Will.

10 MR. BERSON: I actually don't have a  
11 question.

12 MR. DYSART: Okay. Bill Sapp, Morgan and  
13 Kim.

14 MR. SAPP: Bernard, when I opened up the  
15 multiport analysis, I was expecting something  
16 a little different than what I saw. This goes  
17 to the discussion Bill and you and others had  
18 just a little while ago.

19 When I'm thinking about this is a federal  
20 project and I'm a US taxpayer, you know, how  
21 best to spend the dollar. And I thought I was  
22 going to see an analysis of a much bunch of  
23 ports on Eastern Seaboard, and how much it  
24 cost to deepen each of them, what the  
25 environmental impacts associated with each,

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2 and then sort of an overall analysis. I just  
3 want to confirm that is not in the documents  
4 somewhere.

5 MR. MOSEBY: No, I did not -- we did  
6 not --

7 MR. SAPP: Well that's fine. I just -- I  
8 know there would have been a huge amount of  
9 variables associated with that. But the other  
10 question I have, I don't know if you have an  
11 answer to this or not is, is it save to assume  
12 that all the ports are going to be deepened  
13 over time to meet the capacity of containers  
14 coming in, or are we going to end up some  
15 bigger ports and some smaller ports?

16 MR. MOSEBY: Yes, yes and yes. There are  
17 going to be economic, rational decisions made.  
18 You know we have scarce resources in the  
19 government.

20 I do the economic analysis and tell the  
21 government what's the most economic plan for  
22 the government. And the decisions to fund or  
23 not to fund lie with congress. Congress is  
24 elected by the people. Congress speaks for  
25 the people. I can't do anything until there

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2 is authorization and appropriation. Congress  
3 is the person to answer that. I don't know  
4 who will get funding and who won't.

5 MR. SAPP: But in the multiport analysis,  
6 the assumption you made there was that all of  
7 them would get deepened unrestrained -- I  
8 forget the term, unconstrained port capacity  
9 that --

10 MR. MOSEBY: The assumption for all deep  
11 harbors of the East Coast -- I can't answer, I  
12 don't know.

13 MR. SAPP: That's fair enough.

14 MR. MOSEBY: I'll have to write it down  
15 and see if I can get an answer.

16 MR. REES: All the ports get deepened, I  
17 don't remember that being in there.

18 MR. SAPP: I think one of the assumptions  
19 -- well, explain what unconstrained port  
20 capacity means?

21 MR. MOSEBY: Unconstrained is -- is what  
22 would be attracted there, what's likely to  
23 come there, would come there given the  
24 constraints to that or attracting that were  
25 not there.

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2 MR. SAPP: So in that analysis you -- I  
3 mean the bridge up in New Jersey you took into  
4 account that was air draft constraint?

5 MR. MOSEBY: If it's relaxed, all  
6 constraints were relaxed, because we don't  
7 know.

8 MR. SAPP: Right.

9 MR. MOSEBY: I didn't do an individual  
10 look at each project.

11 MR. SAPP: I understand that. I'm trying  
12 to get to the fundamental assumption when you  
13 are talking about unconstrained port capacity.  
14 That was the assumption you made for all those  
15 ports. I'm trying to figure out what that  
16 term means.

17 MR. MOSEBY: If there were no  
18 restrictions, but whether in particular that  
19 included, you know, deepening to 50 feet or  
20 deepening to the same deepening Savannah had?

21 MR. SAPP: Yeah.

22 MR. MOSEBY: I don't know. I'd really  
23 have to go back to the contractor, because  
24 that was done by our contractor in the  
25 previous report.

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2 MR. SAPP: Oh okay.

3 MR. MOSEBY: I really can't answer.

4 MR. SAPP: Do you understand?

5 MS. MOORER: I do understand what you are  
6 saying. I have to go back and look at it. I  
7 don't remember how it explained it. I don't  
8 remember how -- what that refers to, whether  
9 it was unconstrained capacity on the landside  
10 or unconstrained depth or unconstrained any --  
11 I don't remember.

12 MR. SAPP: The way I read it, I don't  
13 know if it's right, the way I read it, the  
14 assumption was all the ports were going, you  
15 know, going to get all the funding they needed  
16 going forward. They were going to get rid of  
17 all the constraints as they went forward, and  
18 this is what the world would like in 2050.

19 MS. MOORER: Okay. I don't -- I'll look  
20 at that, yeah.

21 MR. SAPP: I mean that's the question.

22 MR. MOSEBY: And you can put that in a  
23 comment to make sure you get your definitive  
24 answer. If you like you can give me your  
25 business card and e-mail address. I'll get to

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2 you.

3 MR. SAPP: Sounds good.

4 MR. DYSART: Like myself, Morgan trekked  
5 through the winter snow and winter ice to get  
6 here, so we look forward to the wisdom he is  
7 getting ready to bring us.

8 MR. REES: You folks think it's cold  
9 here, you should have been up on Lake Erie  
10 yesterday. The first thing I want to mention  
11 is something that was raised a long time ago.

12 It has had a lot of discussion since  
13 then, but I waited my turn. That has to do  
14 with the question that Judy and Dean mentioned  
15 -- is he still here -- and maybe one or two  
16 others about why is the assumption there of  
17 the same amount of trade regardless of whether  
18 the channel is deepened or not.

19 The answer very complex. I've actually  
20 tried my hand in sitting my home office to  
21 write a description I think people could  
22 follow. I've been unsuccessful to date, but a  
23 couple of the fundamental major reasons had to  
24 do with if you look at the overall, regional  
25 trade, not just Savannah, if you look at the

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2 overall regional trade, and if you look at the  
3 capacities of the individual harbors in the  
4 region, it's hard to imagine that not every  
5 port is going to be operating at full capacity  
6 within the time frame of the analysis.

7 And if you believe that, it's an  
8 assumption, but it's hard to figure out some  
9 alternative assumption that makes any sense,  
10 but if you believe that, then every port is  
11 going to operate whatever its through-put  
12 capacity is. The through-put capacity is not  
13 tied to channel depth necessarily.

14 I mean there is a connection, but it's  
15 not a big connection. So the point is the  
16 international trade situation going the way it  
17 is, and with reasonably projections of what  
18 that international trade is going to be, every  
19 port is going to benefit.

20 MR. SAPP: That's what I was --

21 MR. REES: So in the analysis it doesn't  
22 make a difference in the selecting the NED  
23 plan. It's not -- the recommendation that the  
24 Corps would make, in terms of the way they do  
25 the analysis, the recommendation is not

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2 sensitive to whether one port out competes  
3 another port in the short-term, because in the  
4 long-term you're going to need everything you  
5 can get to handle the international trade.

6 That's probably the biggest single  
7 reason. There are others. The biggest other  
8 one is when you sit down and try to draw a  
9 study plan that does the kind of things that  
10 Bill was asking about a while ago, have you  
11 looked at each port and seen when they're  
12 going to get trade, how much and blah, blah;  
13 it's beyond the scope of analysis.

14 I mean you just can't get there from  
15 here. That's the second big reason. There  
16 are other complexities, but I think that  
17 covers what the complexities are.

18 One of the other elements of following  
19 that process that seemed compelling to me, if  
20 you do it the way Corps has done it, you yield  
21 a pretty conservative estimate. And if you  
22 are thinking about maximizing the utility of  
23 spending a dollar of tax money, you're getting  
24 a good, solid, dependable, conservative  
25 answer because of the way the formulation

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2 process works.

3 In other words, you're not going to be  
4 wasting the money. It may not -- because of  
5 the complexity of the system, it may not go  
6 precisely the way the Corps is predicting it  
7 will go in the report, but you can have a high  
8 level of assurance it's going to be well  
9 spent, whether you reach capacity in 2032, you  
10 reach capacity in 2038, whether the Panama  
11 Canal gets completed in 2014 2018.

12 You're still going to get a good return  
13 on your dollar. So given that you have a high  
14 level of confidence of getting a good return  
15 on the dollar, you've got to question pretty  
16 seriously how much detail and precision you  
17 ought to go to complete the report and make  
18 a recommendation.

19 What's your level of confidence, and it  
20 goes back to the analysis more than the  
21 individual -- the individual -- how soon are  
22 the generation two Panamax, post-Panamax  
23 vessels going to come into play, how many, you  
24 know, what's going to be the proportion  
25 between PPX one and two.

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2 All that is relevant for coming out with  
3 the numbers. In the grander scheme of things  
4 within the 50 year planning cycle, you're  
5 going to need to get every bit of port  
6 capacity you can to meet the international  
7 trade demands.

8 That's my personal view. I don't know  
9 that that's within the document, but maybe  
10 that helps people understand the complexity of  
11 things --

12 MR. SAPP: That was helpful.

13 MR. REES: -- in trying to produce a  
14 report and write it in a way that people can  
15 understand where their money is going and why.

16 One other thing I'd like to mention while  
17 I have the floor here. Dave Kyler has brought  
18 up several what I think are good points and  
19 good questions about some of the ways the  
20 Corps does business that may not make sense on  
21 the surface.

22 I would just state I can give you the  
23 references. Maybe you have already read the  
24 fundamental principles and guideline document  
25 that was generated in 1983, I think --

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2 whenever it was, but it's a document that's  
3 not a Corps of Engineers document.

4 It was prepared by a now defunct inner  
5 agency organization called the Water Resources  
6 Council. It was established under law, I'm a  
7 history guy here, I should know this, I think  
8 1976 -- might have been 1971, but anyway,  
9 there was this Water Resources Council that  
10 was headed by the Department of the Interior,  
11 the Secretary of the Interior.

12 They produced this fundamental document  
13 that all the Corps regulations are built on.  
14 It was signed into effect by an executive  
15 order of the president.

16 All that is to say on some of the things  
17 that the Corps does they have no discretion.  
18 It's not a Corps implementing rule that they  
19 go by, but it is imposed on them by law and  
20 executive order. I think it would be helpful  
21 to understand why the Corps does some of the  
22 things they do, if you read the actual  
23 fundamental principles and guidelines document  
24 that was promulgated. I can give you that  
25 reference.

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2 MR. KYLER: Even more helpful to know  
3 what to do about it.

4 MR. REES: What you do is when you see  
5 that, when you read that and see how the Corps  
6 implements things, then you make a judgment  
7 about whether they have any flexibility or  
8 not.

9 MR. KYLER: I'm thinking more about  
10 correcting the problem and its origins.

11 MR. REES: Well, that's a different --

12 MS. MOORER: There's a redo, a redraft  
13 of the P&G, the principles and guidelines.  
14 I'm not sure if the comment period is still  
15 underway right now or not, but it's through  
16 CEQ. I think it's on the CEQ side, the  
17 administration side.

18 So if you go to white house dot gov, I  
19 think you can link through CEQ to a redraft of  
20 the principles and guidelines, which is trying  
21 to alter the way that the Corps does business,  
22 their process.

23 So that is a way, potentially, if the  
24 comment period is still open that you might  
25 have to --

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2 MR. KYLER: Has that come up in here  
3 before?

4 MS. MOORER: What?

5 MR. KYLER: Has that come up in the SEG  
6 before?

7 MS MOORER: I don't think so.

8 MR. KYLER: I'm surprised it hasn't.

9 MS. MOORER: I don't know where -- I  
10 can't remember even when it was put out for  
11 comments.

12 MR. SAPP: It's been a while.

13 MS. MOORER: Has it -- I don't know.

14 MR. DYSART: Let me ask a question.  
15 Would folks like to have a five minute break?  
16 It is now 12:18. Bernard is probably numbed  
17 out. Would a five minute -- seems like he's  
18 mainly listening to comments around here and  
19 being made more optimistic as the moments go  
20 on.

21 Would you like a five minute break or do  
22 you want to go ahead and wear Bernard out? We  
23 have Kim, Will, David and Hope.

24 MS. MOORER: I'm done.

25 MR. DYSART: Hope is done for the moment.

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2 Kim.

3 MS. STATLER: I just wanted to make a  
4 parallel for myself, on the South Carolina  
5 side of the equation, that seems extremely  
6 similar.

7 We just went through the process the  
8 evaluation of F35s coming to the Marine Corps  
9 Air Station. It was an environmental impact  
10 analysis.

11 It was exclusive to DOD requirements, how  
12 they looked at that piece of infrastructure  
13 coming to that base. There was a lot of  
14 frustration because we couldn't get our arms  
15 around what the economic meant beyond that  
16 potentially.

17 You couldn't because DOD would say that's  
18 not our bailiwick. We only look at this  
19 specific set of criteria, in relationship to  
20 that aircraft coming to this existing  
21 infrastructure.

22 My head wrapped around this analysis are  
23 the same. You look at the port and this piece  
24 of infrastructure and the economic viability  
25 of that from an infrastructure perspective.

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2 You look at mitigation and all of that. All  
3 that is in this report.

4 We took the F35, we being the economic  
5 arm of our region and said there has to be a  
6 strategy beyond this that looks at market  
7 value of that decision and how it plays into  
8 other moving market decisions.

9 That same thing has to be done, it just  
10 can't be done in this document as relates to  
11 this port decision. So I agree with you,  
12 millions of dollars shows a cost-savings.

13 There's another generation of analysis  
14 that folks in the private sector and public  
15 sector will take that information and say how  
16 do we maximize that cost-savings we know the  
17 market has, and convince them to put it here.

18 We had the same exact frustration in  
19 dialogue on our side because everybody wants  
20 to talk about jobs right now, and they jack  
21 everything up based on jobs. And even elected  
22 officials are notorious for that.

23 Okay. The reality is there's jobs  
24 attached to both decision. How we maximize  
25 them is based on our regional partnerships and

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2 strategies and private sector relationships.

3 I totally understand -- I feel for you because  
4 we're asking the model to do everything, but  
5 government decisions on infrastructure are  
6 sort of made in somewhat of a vacuum.

7 That's what we found out in Beaufort with  
8 that aircraft. I feel for you. I also look  
9 forward to whatever the cost-savings is, I  
10 assure you the private sector is salivating at  
11 how they might take advantage of that and  
12 argue for this in relationship to that.

13 MR. DYSART: Okay. Thank you. David had  
14 his tent back up.

15 MR. KYLER: Yeah. I just had to clarify  
16 something in response to what Morgan said. I  
17 think whatever the merits of what you were  
18 responding to, that is the uniformity and the  
19 undisturbed nature of commodity forecasts  
20 relative to these projects, you said and I  
21 wrote this down verbatim.

22 MR. REES: We have a transcript.

23 MR. KYLER: Good, solid, conservative  
24 answer will result. High level of confidence  
25 money will be spent on a good return on

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2 investment. Essentially, yeah, if everything  
3 else is done right, but there are so many  
4 other moving parts to this, come on.

5 MR. REES: Okay.

6 MR. KYLER: You know, to make those  
7 claims based upon the single assumption that  
8 commodity volumes would be unaffected by the  
9 project is to me totally unfounded.

10 MR. DYSART: Sounds like a response would  
11 be appropriate.

12 MR. REES: I'm trying to make sure I  
13 understand the comment. Are you --

14 MR. KYLER: I'm saying sure, even if  
15 everything you said is correct about the  
16 unaffected commodity forecast with and without  
17 project, you can't go on to say projects will  
18 be invariably, based on conservative answers  
19 and a high level of confidence of return on  
20 investment because there are so many other  
21 factors involved in the analysis of this  
22 project.

23 MR. REES: Okay. That's a fair comment.  
24 The context of my comment was that in this  
25 particular case, given all the other things

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2 that we've talked about, given the holistic  
3 view of the project which includes the  
4 environmental impacts, the mitigation  
5 provided, the adaptive management; including  
6 all of that the question is what is the risk  
7 of you're being wrong.

8 MR. KYLER: About that one thing.

9 MR. REES: No, no, about the whole  
10 project put together. I was talking about  
11 what's the risk of coming up with a different  
12 answer on economics, if you made different  
13 assumptions. That doesn't go at all -- I mean  
14 I wasn't addressing all those other issues you  
15 pointed out.

16 MR. SAPP: Wrong means being below one on  
17 benefit costs?

18 MR. REES: In other words, if it turns  
19 out to be a poor investment economically, you  
20 want to avoid that. How do you get to the  
21 level of assurance you're going to have the  
22 money well spent.

23 Now all of the other elements of the  
24 project that you correctly point out have an  
25 impact on that decision. I was speaking

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2 narrowly on the subject of the economic  
3 analysis.

4 MR. KYLER: If you talk about economics  
5 and economics are a part of the cost benefit,  
6 I assume you meant economics cost benefit  
7 analysis, then a part of the cost computation  
8 is mitigation costs, and those related to  
9 environmental impacts.

10 I mean to me that undermines the whole  
11 globally -- global implications of what you  
12 are saying.

13 MR. REES: I don't know why it should  
14 because if you go back and take step-by-step  
15 in the environmental analysis and see what's  
16 in there, in terms of identifying impacts, in  
17 terms of identifying the costs, in terms of  
18 identifying the risks and uncertainty, in the  
19 same way you do that kind of analysis with  
20 economics, you come up with whether the  
21 decision is risky or not.

22 I, in my comments on the economics, was  
23 specific the transportation savings element of  
24 the analysis, if all the other stuff remains  
25 as it is currently stated in the report, then

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2 you can be -- you can have a high level of  
3 confidence that your transportation savings  
4 are going to be defensible.

5 MR. KYLER: Without the if part of that  
6 being in the claim, the claim means nothing.

7 MR. REES: But we were discussing the  
8 economics. We weren't discussing all this.  
9 If you want to put the discussion in a more  
10 holistic perspective, we'd be glad to do that,  
11 in terms of what the risk level is. There's a  
12 section in the report, risk and uncertainty.

13 MR. KYLER: Yeah, first one I went to  
14 as a matter of fact.

15 MR. REES: Those issues are addressed  
16 there. You may think they're appropriately  
17 addressed or not. I don't know what your  
18 thoughts are.

19 Certainly that's a critical element of  
20 the report. And to say that one aspect of  
21 a risk and uncertainty analysis doesn't --  
22 doesn't stand up because you haven't  
23 considered all the other aspects, yeah, I  
24 guess you could look at it that way.

25 Then what you have to do is look at all

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2 the other aspects and see where you come out  
3 on it.

4 MR. KYLER: I'm saying it doesn't stand  
5 up. I'm saying the statement made about it  
6 doesn't stand up.

7 MR. REES: I think our old friend, Ben  
8 Brewton, from many years ago talked about word  
9 police, but I don't know what happened to  
10 them. Anyway --

11 MR. KYLER: Words matter.

12 MR. REES: They do. I'm glad you gave me  
13 an opportunity to make a clarification. I was  
14 speaking narrowly on the transportation  
15 savings.

16 MR. KYLER: Which is only a part of the  
17 economics analysis.

18 MR. DYSART: Will and Judy.

19 MR. BERSON: You know what happened to  
20 Alice when she hung around the rabbit hole too  
21 long, I've definitely fallen down in it.

22 I want to make one point about the  
23 multiport analysis which I've seen here. You  
24 were talking about boat capacity. You were  
25 talking about the fact there is a projected

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2 max-out of capacity of the East Coast ports in  
3 the future, but that assumes that a shipper is  
4 going -- that Baltimore is the same to a  
5 shipper as Savannah is to a shipper, and  
6 that's plainly not the case.

7 MR. REES: No, I don't think -- I agree  
8 it is not the case.

9 MR. BERSON: What you said -- I'm sorry.  
10 I'm not meaning to beat you up with your  
11 words. The idea is we're going to need all  
12 the cumulative capacity, of all the East Coast  
13 ports, to meet future trade levels.

14 MR. REES: Yes.

15 MR. BERSON: In that sense what the  
16 multiport analysis is asking you is where can  
17 we put our money most effectively to meet that  
18 demand, and that speaks to yes, there should  
19 be some larger ports or ports not in the  
20 curve, because our estimated capacity is  
21 almost a government function, how much  
22 through-put can you put through from Maine to  
23 Florida.

24 Those decisions are being made not based  
25 -- I mean, on some level if a port is maxed

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2 out, you're going to have problems for a  
3 shipper. They can't get through fast.

4 Attending to that is populationship, what  
5 you guys measure all the time, how many days  
6 for a box to get somewhere. So I'm saying it  
7 seems to me the multiport is a shallow one.

8 The point of a multiport is to go where  
9 she be. Investing our money to oh, make  
10 larger ports -- for the ports it makes sense  
11 for increased building in the future.

12 That might be Savannah. That might be  
13 somewhere else, but overall congress doesn't  
14 want to, the Corps doesn't want to because  
15 congress doesn't want to get into it because  
16 everybody wants a big super port.

17 I guess you can't equate capacity with a  
18 wide investment. Those are not the same thing  
19 and just because you're heading toward max-out  
20 at a certain date doesn't mean you shouldn't  
21 look at benefits to centralizing.

22 If we are going to see the Southeast or  
23 the South region grow, you probably want to  
24 put the boxes closer to the ultimate  
25 destination, for environmental reasons as well

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2 as efficiency. I'm kind of confused in two  
3 thoughts, they're not one.

4 Capacity, the otherwise investment, those  
5 are not the same necessarily. If the  
6 Northeast is dying, we don't need to invest in  
7 more capacity in the Northeast, do we; we need  
8 to invest in the Southeast or vice versa?

9 MR. MOSEBY: This multiport analysis is  
10 designed to answer that.

11 MR. BERSON: Agreed. The Southern  
12 Environmental Law Center had to ask for the  
13 multiport analysis. My impression was that  
14 was the question they were asking. I'm not  
15 sure it's been answered.

16 MR. MOSEBY: Not to that level putting  
17 all the ports in there. We do our analysis  
18 based on limiting assumptions, you know, and  
19 the unconstrained assumption is -- is, you  
20 know, a conservative way to go do a quick  
21 analysis.

22 We just don't have the capability to  
23 build it, okay, and enough money to draft them  
24 all to answer those kind of questions.

25 MR. BERSON: I can appreciate that --

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2 MS. MOORER: Congress --

3 MR. BERSON: -- congress doesn't want to  
4 answer then the winner and loser to all this.  
5 I appreciate that the problem with that is  
6 while we're talking about national benefits,  
7 we're also talking about local consequences.

8 We're talking about consequences felt at  
9 the immediate level, and whether or not -- I  
10 mean I sort of make -- I've often made the  
11 point that our assumptions about where the  
12 benefits actually go is one that the Corps  
13 policy dictates, but you know where those  
14 benefits actually spread out across, from the  
15 manufacturer to the shipper to the consumer,  
16 is not at the end. I mean it could happen  
17 anywhere in the middle.

18 So you have national benefits that may or  
19 may not be overstated. It will overstate the  
20 relative advantage to the national economy.  
21 You have local impacts that are very  
22 definitely felt at the local level. One's  
23 relatively theoretical and the other's  
24 absolutely real.

25 That kind of -- I mean that's the kind of

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2 thing that a multiport analysis, from an  
3 environmentalist's point of view, ought to be  
4 looking at.

5 MS. MOORER: The Corps does the multiport  
6 analysis for projects. They're required to.  
7 Bill, correct me too, but in addition on the  
8 project there was a regional port analysis  
9 done on this project.

10 It's within the confines of the  
11 authorization of this project to make that  
12 specific. So I think you look at both of  
13 those and consider them in your comments.

14 MR. DYSART: Morgan Rees.

15 MR. REES: I want to respond. You had  
16 said, again you were talking about the Corps  
17 policy of where the benefits go and all.  
18 That's not Corps policy, that's in law. The  
19 Corps doesn't have discretion about that.

20 MR. BERSON: That's really what I meant.  
21 It's applied equally. I understand, but as  
22 a matter of --

23 MR. REES: That's something we can't fix.

24 MR. BERSON: I completely understand. I  
25 can't pass up the opportunity.

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2 MR. REES: The other thing we can't fix  
3 or the Corps can't fix is there is -- there  
4 was a Corps policy, which now found its way  
5 into law. I don't know whether the Corps  
6 supported the Water Resources Act of 2007.

7 The alternatives were investigated in a  
8 report that said you have to have the support  
9 of the non-federal sponsor. There's a lot of  
10 history behind that.

11 I don't want to spend a lot of time, but  
12 I was there when it happened in the early  
13 '80s, when the cost sharing as we now know it  
14 went into effect. There were a lot of  
15 political compromises made, but one of the  
16 fundamental ones was nobody gets any harbor  
17 deepening money without active participation  
18 of the non-federal sponsor.

19 That seriously affects the ability of the  
20 Corps to do the study, in the sense SELC was  
21 asking for, which I understood they were  
22 asking for.

23 MR. BERSON: Okay. I understand. I  
24 understand.

25 MR. REES: Okay.

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2 MR. DYSART: Judy, Bill Sapp.

3 MS. JENNINGS: I would defer to Bill. He  
4 seems to have the whole thing going on. I'm  
5 listening too. I have a small question.

6 MR. DYSART: Bill.

7 MR. SAPP: Real short. Where can I look  
8 in Corps guidance, or in the planning  
9 notebook, for a description of the multiport  
10 analysis? Is there such a description or not?

11 MR. MOSEBY: It will probably be in the  
12 appendix E2 1165-2-1. 1165 --

13 MR. REES: Are you asking where on this  
14 project or in general?

15 MR. MOSEBY: E2 1165 --

16 MR. REES: 1105.

17 MR. MOSEBY: 1105-2 --

18 MR. SAPP: Does it have a nickname?

19 MR. REES: The Planning Guide Assistance  
20 Notebook.

21 MR. MOSEBY: Principles and Guidelines  
22 it's sometimes called. Appendix E is the  
23 economic analysis.

24 MR. REES: You can get it on the Corps  
25 website. You can search --

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2 MR. SAPP: I've got it in my briefcase.

3 MR. REES: -- specifically where it is,  
4 just search.

5 MR. SAPP: Search, okay.

6 MR. MOSEBY: Deep draft gets you to the  
7 deep draft section.

8 MR. SAPP: Okay. Great.

9 MR. DYSART: Judy -- Judy.

10 MS. JENNINGS: Quick information  
11 question. I tried to watch, on the Water  
12 Resources Development Act, but sometimes you  
13 want to know who wins and loses. You stop  
14 watching.

15 Did they change the direction on the BC  
16 ratio; is it one-to-one or is it two-to-one?  
17 I know there was a lot of discussion of making  
18 the minimum threshold greater than one-to-one,  
19 but I forget how it ended up.

20 MR. MOSEBY: Okay. Currently?

21 MS. JENNINGS: Yeah, currently.

22 MR. MOSEBY: One-to-one gives economic  
23 justification. Each year congress asks us to  
24 update the benefit cost ratios using the  
25 current discount rate. It's been in the

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2 neighborhood of a percent of the cost of  
3 money, the economic opportunity cost of money.

4 And because we have scarce resources, in  
5 order to prioritize projects, they may specify  
6 this year based on funding, you know, one of  
7 the criteria that we're using in the screening  
8 process is the BC ratio of 3.5.

9 All that changes based on what the budget  
10 is and it's not in law. The economic  
11 justification is still one-to-one. There's no  
12 edict that the project is not justified, if it  
13 doesn't have the 3.5 BC ratio.

14 That's just used in the budgeting process  
15 to help allocate scarce funds for that  
16 particular use.

17 MS. MOORER: Like Bernard said, it's  
18 depending on how much is allocated for  
19 construction. The projects are ranked by that  
20 and OMB would say you get 80% of capability  
21 for that year. They go down the list until  
22 they're budgeted.

23 Their cut-off point is like 3.5 this  
24 year. It was 3.0 a couple of years ago. It  
25 varies depending on the budget as to where

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2 that cut-off point is to what gets funded.

3 MR. DYSART: Further questions? Bill.

4 MR. SAPP: I'm sorry. I never took my  
5 tent down.

6 MR. DYSART: Further questions? Thank  
7 you, Bernard.

8 MR. DYSART: We've got two more, three  
9 more. Will, do you have anything else to say  
10 on the draft final report?

11 MR. BERSON: Afraid I've been a little  
12 busy looking at something else. Bill Farmer  
13 made an excellent suggestion for SEG's final  
14 report.

15 That is, we ought to include a section  
16 from each committee discussing their role in  
17 the process. I certainly support that. If  
18 anyone has any objection -- without an  
19 objection I'm going to include that.

20 I will end up writing my report and I  
21 thought I'd be mincing that in. Any other  
22 suggestions for the report are entirely  
23 timely.

24 As I said, I think you can appreciate  
25 that there are other things that have been

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2 getting my reading attention and writing  
3 attention at the moment. It is something I  
4 think is really important.

5 This is something that the SEG process  
6 deserves a good summary of, not only because  
7 some of have spent an awful lot of time in  
8 this room on, but also because it speaks to  
9 the Corps process for other water projects  
10 around the country.

11 MR. DYSART: Thank you. Does any  
12 committee have a report? Lou.

13 MR. OFF: I promise to try and keep this  
14 short. I'm probably as hungry as the rest of  
15 you are. I'd like to bring some things back  
16 up. I'd like to refer to, in the draft EIS,  
17 325 and 326, if anybody has that.

18 I'm not an expert like the rest of you  
19 folks around here, but I have been coming to  
20 the meetings since 2002. I kind of know how  
21 we operated.

22 I'm not representing anybody. I'm trying  
23 to skip some of my notes. I get lost here.  
24 Please forgive me, I'm trying.

25 I'm representing only a subcommittee of

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2 the Tybee Island Beach Task Force. We have  
3 been called upon to make a recommendation to  
4 the city council to see where we're going with  
5 a problem that we feel is very grave.

6 This all started back in approximately  
7 2003 when the state came up with a bill called  
8 HB 727. That required some of the material,  
9 beach quality material that was coming out of  
10 the channel during maintenance, to be placed  
11 in a position where it is assisting the  
12 nearshore beach of Tybee.

13 ERDC at that time did a report and put  
14 out a study that talked about a location on  
15 approximately 2nd Street, if you are familiar  
16 with Tybee, of a place to dump approximately  
17 500,000 cubic yards of material, some of it  
18 being below the standards of beach quality.

19 Following that and for this committee of  
20 the SEG, there was a report put out by my good  
21 friend, Bill here, Bill Bailey, that talked  
22 about 10,000 or 10,000,000 cubic yards of  
23 material being placed in the Tybee area.

24 I'm not sure when we talk about area that  
25 area was meant to be encompassed at that time.

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2 Right after that report, Bill made a  
3 presentation to the Tybee Beach Task Force.

4 Most of the people out there were aware  
5 of what was going to be presented. And if you  
6 look at the figure on 326, generally speaking,  
7 that was presented. Is that about the same as  
8 what you presented before, Bill?

9 MR. BAILEY: Yes.

10 MR. OFF: Obviously at that time in 2007,  
11 there was very little information as to what  
12 was going where, how much, why and so forth.  
13 Shortly after the presentation to the SEG, the  
14 DNR, Coastal Resources Division, CRD, sent a  
15 letter to Bill Bailey dated May 31, 2007,  
16 which included six pages of comments and  
17 questions.

18 We had coordinated -- I speak of we, the  
19 City of Tybee, the Tybee Beach Task Force,  
20 also our consultant coordinated with the city,  
21 with DNR at that time basically stating we  
22 wanted to have those questions answered before  
23 we started doing our own research.

24 Those questions were never answered. At  
25 several meetings of the SEG I have brought up

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2 when those questions would be answered, also  
3 some other questions about what was going to  
4 happen to the beach at Tybee without getting  
5 any clarification.

6 We hold monthly meetings of the Beach  
7 Task Force. The Corps sends a representative.  
8 DNR sends a representative at times, and we  
9 have been almost on a monthly basis wondering  
10 what is going to happen to us.

11 The EIS, the draft EIS was the first time  
12 this question has really been answered. Okay.  
13 What is it telling us? It's going to be  
14 dumping 2.2 million cubic yards of known, poor  
15 quality material which is going to be placed  
16 on the Tybee beaches.

17 Okay. Let me qualify, it's not going to  
18 be placed on the beach. It's going to the low  
19 tide line. Obviously, if water is at low  
20 tide, you're going to be using the beach  
21 beyond the low tide.

22 This material is going to be piled three  
23 to four feet above the mean low water for a  
24 width of 500 feet -- pretty much across all of  
25 the recreational beaches of Tybee.

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2           The exception is the south end of the  
3           Island. This is about double the amount of  
4           material that we put on beach that's obviously  
5           good beach-quality sand, well-studied,  
6           well-thought out, well-checked.

7           There were borings. I think they did  
8           about 25 borings, in a four or five acre spot,  
9           to convince the Corps and all the other  
10          agencies that we were going to be using good  
11          material.

12          So what I'd like for you to picture in  
13          your mind is some nice, sunny day this summer  
14          you're going to take a walk down our beach.  
15          You're going to walk down the beach and run  
16          into the low tide line. There's a pile of  
17          soft black material with a number of clay  
18          balls on it, an area of three to four feet  
19          higher than what you're going to be standing  
20          on 500 feet out into the nearshore.

21          We have absolutely no idea of what the  
22          material is going to be coming to us as. In  
23          the study the ERDC made in 2003, most of the  
24          information was from strictly grab samples.  
25          The indication was it was anywhere from 8% to

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2 50% non-sand material.

3 The agreements that have been between DNR  
4 and the Corps for this type of work is  
5 approximately 90% or 10% fines if we're going  
6 to put it on the beach, 20% if we're going to  
7 put it in the nearshore.

8 The average ERDC came up with was 30%.  
9 We're showing 10 or 20% below requirements we  
10 have for beach and nearshore. This material,  
11 as I said, stops before it gets to the total  
12 south end of the Island, which I believe was  
13 done because we have a fishing pier out there.

14 This material goes to within the 500 feet  
15 advance into the nearshore, well beyond the  
16 fishing pier, and a little drift for the  
17 material on our beach is to the south.

18 It is entirely possible that our pier  
19 will have dry land under the end of it. The  
20 other thing which is being done is the area  
21 that ERDC designed with things in mind like  
22 what is going to come on to the beach, what is  
23 going to flow, what is it that could possibly  
24 go into the channel was designed at 500,000  
25 cubic yards.

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2           The description before the page I just  
3           gave you on 325 talks about the amount of fill  
4           for that area is now 8.9 million cubic yards.  
5           That's 15 times what the original study  
6           considered. It's going to bring the material  
7           two feet closer to the surface over most of  
8           the area, and there are no dimensions on that  
9           area as we can find in that EIS.

10           What is this going to do to the dynamics  
11           of Tybee's wave climate, what's it going to do  
12           as to the possibility of setting up riptides  
13           for swimmers with this amount of material?

14           Contaminates; our barrow area which we  
15           depend upon to renourish our beach which is a  
16           mile, a mile and a half south of this major  
17           dump, what's it going to do to our shrimping  
18           industry which uses this area? What's it  
19           going to do to the turtles that have to climb  
20           over this material? What other unforeseen  
21           environmental damages can this do?

22           We know of no studies of anything --  
23           studies of what's on the top of that fill  
24           site.

25           Number two is it's slated not for being

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2 an underwater site, but it's going to be eight  
3 feet above the mean low tide line. With our  
4 typical 6 foot to 10 foot change in tide, it's  
5 going to be that much of the time we're going  
6 to have an Island there.

7 If you look at the statement on Statement  
8 D on page 325, this would also provide bird  
9 and fish habitats. There's absolutely no  
10 science for that.

11 I'm not so sure fish and birds can stay  
12 on the same place, unless we've got some fish  
13 that can live on land. This area also -- it's  
14 almost a mile long off of Tybee. We're  
15 looking at the middle of Tybee Island is  
16 probably a half mile offshore.

17 Until this areas dispenses this, we're  
18 going to have water and land above the water  
19 for as much as eight feet for approximately a  
20 mile long and a quarter of a mile wide.

21 What is that going to do to navigation?  
22 What is this going to do to all the other  
23 sorts of recreation Tybee's looking at?

24 We're concerned obviously about the  
25 tourist trade which keeps Tybee in business.

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2 There is no statements in the EIS or anywhere  
3 else as to how long it's going to take for  
4 this material to disperse.

5 Obviously that is what the idea of this  
6 is, to have the material disperse. There's no  
7 idea of how many clay balls or what the  
8 percentage of the clay is in this material.

9 This is a grave concern. On Thursday we  
10 will be having a monthly meeting of the beach  
11 task force. We have to make a recommendation  
12 that will go to the city council, will go to  
13 our engineering and beach consultant, and we  
14 will have to make some decision as to what we  
15 want to do.

16 It seems very hypocritical to me, and  
17 I've been chairman of the beach task force,  
18 I'm not at this present time, I've given that  
19 up, but for seven years.

20 We took renourishment, and from inception  
21 to completion -- it was the fourth  
22 renourishment and every renourishment we do,  
23 the paperwork is greater than what we have in  
24 the EIS to justify to fisheries, to  
25 conservation, to all the varies agencies to do

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2 our work. It appears to me my question when  
3 I'm finished is to Bill Bailey, is there any  
4 science, is there any study, is there any  
5 engineering over and above that, what the ERDC  
6 did back in 2003 when they looked into this?

7 When it's talked about a maximum 500,000  
8 cubic yards to be put in the nearshore of  
9 Tybee, we're very concerned. I personally  
10 have called many people in the association  
11 that talks about preserving beaches for the  
12 whole nation. I've yet to find anybody who  
13 has thought about, seen or heard about any  
14 kind of non-beach compatible material being  
15 dumped adjacent to a beach.

16 This considers pretty much the whole East  
17 Coast of Florida, the Florida Gulf. I did not  
18 talk to anyone from California because their  
19 situation is different.

20 We're very concerned that the closest  
21 thing happening like this happened to our  
22 beach, and it happened in 1993. I believe six  
23 to eight days after it started, the project  
24 was stopped.

25 It was stopped by the fisheries. It was

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2 stopped by the DNR. It was stopped by the  
3 Army Corps of Engineers. I don't believe  
4 anything has changed in the level of material  
5 that's coming out of the same area.

6 Again, we're very concerned. What I want  
7 to throw out to SEG, to Bill particularly, is  
8 there any engineering, is there any study,  
9 beyond what is in the EIS done by ERDC in  
10 2003, that can give us any idea of what we can  
11 expect our beaches to look like?

12 MR. DYSART: Let me ask a question. To  
13 whom are these comments addressed? Are they  
14 addressed to the stakeholders?

15 MR. OFF: I think I stated for the SEG,  
16 as a matter of fact, and a request to the Army  
17 Corps of Engineers. If they have any  
18 information that would be helpful for Tybee  
19 Island to see that we're not going to be wiped  
20 out, because that's what it looks like.

21 MR. McCURRY: It's stated as fact and not  
22 opinion?

23 MR. OFF: Excuse me.

24 MR. McCURRY: It's stated as fact and not  
25 opinion?

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2 MR. OFF: What I said now is opinion.  
3 What I said before is facts from the EIS.

4 MR. DYSART: Okay. Is there a  
5 recommendation from the Beach Erosion  
6 Committee.

7 MR. FARMER: The committee has not met  
8 since 2007. We did a recommendation at that  
9 time, based upon the draft disposal plan that  
10 the Corps put out. The recommendation at that  
11 time was that the committee thought it was  
12 good and acceptable.

13 So that came to this SEG. Subsequent to  
14 that, the DNR people looked at that report, as  
15 far as what they thought was good for the City  
16 of Tybee, and they raised some issues. I  
17 believe those issues were communicated.

18 I believe what Lou is saying is that the  
19 issues that they raised haven't been fully  
20 addressed yet. I think that's the substance  
21 of what he is saying here.

22 MR. DYSART: Lou, what would you like for  
23 us to do; receive this information or just  
24 appreciate you sharing it with us?

25 MR. OFF: What our recommendation is

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2 going to be, as I said, I'm not a beach  
3 expert. I've just been learning as I've been  
4 down here. I have a picture in my mind of  
5 seeing a 500 foot pile of slop. I do have a  
6 picture of what happened a while back. May I  
7 pass this around?

8 MR. DYSART: Sure.

9 MR. OFF: This is a picture dated  
10 September 9th, 1993 showing -- I believe it  
11 was about the time the project was stopped --  
12 as to what the appearance of beach was at that  
13 point in time. I'll collect it from Tom later  
14 on.

15 I don't know who took the picture. I  
16 have no reference there, other than for my own  
17 enjoyment that's about all I can do. We're  
18 like everybody else.

19 We've been trying for three and a half  
20 years to get an idea of what was going to  
21 happen to Tybee. There's no objection -- we  
22 have lost 100,000,000 cubic yards out of the  
23 nearshore. According to our consultant the  
24 only problem of that is that it increase our  
25 wave in there. Particularly, if we ever had a

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2 storm, it would increase the damage to the  
3 beach, and also a possibility that it's  
4 speeding up some of erosion problems.

5 We too would like to have material in our  
6 nearshore, but we want to know if this  
7 material is going to be compatible for all  
8 environmental conditions.

9 The material that was represented in the  
10 1993 harbor deepening was inaccurately stated,  
11 to a point that the Army Corps of Engineers  
12 themselves stopped that work they were doing,  
13 on the beach and nearshore, and put the  
14 material out to the north end of Tybee further  
15 out to sea, because if we stopped the total  
16 project, it was a contractor with a contract.

17 If we stopped there, obviously there  
18 would have been certain damages done for the  
19 contractor, and he would have had a claim  
20 against the Corps, GPA whoever was paying for  
21 it. In light of that fact, the fact there is  
22 some bonds -- I was not here at that time --  
23 \$5,000,000 worth of bond money that the state  
24 used to help rebuild some of the beaches and  
25 build some of the jetties on the south end --

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2 I don't remember that. Hope, you're so young  
3 that I don't think --

4 MS. MOORER: I was here at that time.

5 MR. OFF: We're concerned that the  
6 similarities between what was done in '93 and  
7 what's proposed now are very close. We are  
8 concerned that we could lose a year or two  
9 years of recreational beaches.

10 So I guess where we're going is going  
11 with what our beach consultant said, let us  
12 know whether this is something that can be  
13 done safely.

14 Obviously, we will take the necessary  
15 steps as to the SEG, as to this total project  
16 to see where it goes from there.

17 MR. DYSART: I presume you will be  
18 submitting this testimony at a public meeting  
19 and sharing it with the Corps and so forth,  
20 right?

21 MR. OFF: That's correct.

22 MR. DYSART: Okay. I presume we accept  
23 this information from Lou as information and  
24 lots of luck.

25 MR. OFF: Thank you.

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2 MR. DYSART: My wife wants to come to  
3 Savannah with me sometime and she wants to go  
4 out to Tybee.

5 MR. OFF: Just come before the harbor  
6 deepening.

7 MR. DYSART: Thank you. Any other  
8 comments? Anything that needs to be said  
9 about -- okay. Bill Bailey.

10 MR. BAILEY: I think -- I think the Corps  
11 does not agree with everything Mr. Off said,  
12 and we'll be glad to sit down and talk with  
13 the task force.

14 MR. OFF: You might want to send a  
15 representative out on Thursday. We'll even  
16 provide them with lunch.

17 MR. SAPP: What a deal.

18 MS. MOORER: Can't take it.

19 MS. MALLOY: That's right, you get in a  
20 lot of trouble in South Carolina about that.

21 MR. DYSART: Hope, thoughts about the  
22 next meeting? Is that something you want to  
23 communicate when you know something or do you  
24 know anything?

25 MS. MOORER: Why don't we schedule it.

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2 I'd like to get something scheduled because  
3 then at least it's on a calendar. The comment  
4 period is still ongoing in January. Maybe we  
5 can have the 11th as an interim SEG meeting  
6 just to touch base, if there's anything to  
7 communicate and also if there's anything Will  
8 has regarding the final report that needs to  
9 be communicated.

10 We can pass that around at that time. I  
11 think it would be a good idea to go ahead and  
12 schedule a meeting, and probably the 11th,  
13 since the 4th is right after the first of the  
14 year. If that's agreeable, that's my  
15 suggestion.

16 MS. JENNINGS: Interim.

17 MS. MOORER: Interim, it would be at 1:30  
18 is what time we meet on the 11th. We'll send  
19 out an e-mail. Cathy will send out an e-mail  
20 about that.

21 MR. DYSART: Then we will wait for that  
22 meeting to see whether there's any  
23 possibility.

24 MS. MOORER: Right.

25 MR. DYSART: Anything else to bring

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2 before the group? Will.

3 MR. BERSON: I'm really kind of  
4 embarrassed. I've sat with a calendar and  
5 counted it out several different times. We  
6 are talking about January 10th as the comment  
7 deadline. Is that true, does that include the  
8 15 days?

9 MS. MOORER: I don't think they have made  
10 a decision on the extension yet.

11 MR. BERSON: Okay. As one who actually  
12 asked for that extension, I'd like to  
13 reiterate we would love the 15 day extension.

14 MS. MOORER: We would too.

15 MR. BERSON: If it stands at this, I'll  
16 probably need a little extra time.

17 MS. JENNINGS: That would be on top of  
18 -- January 10th, I didn't write it down. I  
19 strongly beg for 15 more days.

20 MR. HALL: Second that.

21 MS. MOORER: If you would take the time  
22 to write that down and send it into the Corps,  
23 whether it be an e-mail -- the e-mail is  
24 provided on the link. The more comments  
25 requesting that the better the chances are.

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2 MS. JENNINGS: I'll go home and do it  
3 right now.

4 MR. BERSON: Okay. January 20th as it  
5 stands --

6 MR. DYSART: Kelie.

7 MS. MOORE: The pink sheet said January  
8 10th for everybody, January 10th

9 MR. BIRDWELL: Yes, so -- yes.

10 MR. DYSART: Okay. Further comments?  
11 Bill Farmer.

12 MR. FARMER: Yes. Does the SEG need to  
13 have some official input within that deadline?

14 MS. MOORER: There's nothing that  
15 operating guidelines states for that. It  
16 calls for a final report from the SEG -- well,  
17 it doesn't call for a final report.

18 It says a consensus agreement, consensus  
19 mitigation plan actually is how it is stated  
20 on the operating guidelines. So there's no --  
21 no call for that within the operating  
22 guidelines.

23 I don't know how time intensive it would  
24 be to get everyone to agree on comments. So  
25 if the SEG wants to do that, we certainly can

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2 schedule a time for a meeting at GPA to  
3 discuss that, but I would hope that everyone  
4 is making their comments individually.

5 If you want to do a group comment, we  
6 could meet at like the interim to try to pull  
7 something together.

8 MR. FARMER: I'm thinking of the legality  
9 or the impact or whatever. In other words,  
10 the SEG is going to have a final report, but  
11 if it's after the comment period expires, is  
12 there anyone in authority to get it or any use  
13 of it?

14 MR. BERSON: I'm going to speak to this  
15 as chair of the Operating Guidelines  
16 Committee. Frankly, I'm going to have my  
17 hands full doing my own comments.

18 I'm not in a position to organize and  
19 shepherd through comments acceptable to the  
20 entire organization. Not only that, I would  
21 much rather see every single person submit  
22 comments rather than just SEG comments. In  
23 this instance, I think more is better.

24 I think the effort would be better spent  
25 on individualized comments. Finding the

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2 common denominator amongst all of us, whatever  
3 we say is going to come out in individual  
4 comments. I suspect I would rather see more  
5 comments rather than group comments being  
6 folded in. I think agencies count how many  
7 letters they get, who they are from --

8 MR. DYSART: Carl.

9 MR. HALL: Yes, one quick question in  
10 case I need to look at any particular tables  
11 that may not be clear on the disk. Other than  
12 Judy's house, my friends across the river,  
13 Fish and Wildlife, where are copies of the 40  
14 pound version?

15 Bill, you said there was somebody to send  
16 it out to. She was out last week. How's the  
17 best way to find out where the copies are at?

18 MR. O'KANE: If electronic helps you,  
19 it's on the website. I heard one of the links  
20 is broke, but it will be available soon. It's  
21 Savannah District Corps of Engineers.

22 MR. HALL: Where they are located?

23 MR. O'KANE: Yes, sir, the whole document  
24 is broken down into several different pieces.

25 MR. BIRDWELL: He wants to know where he

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2 find paper copies.

3 MR. HALL: I've got a computer disk I'm  
4 working on.

5 MS. JENNINGS: The e-mail address is on  
6 the cover.

7 MR. BAILEY: Carl, would you like a  
8 hardcopy?

9 MR. HALL: I can go to Judy's house or go  
10 across the river. I didn't know if there were  
11 any in the public like libraries.

12 MR. BAILEY: There are. I'm not sure  
13 which ones.

14 MR. HALL: You have the girl's number who  
15 sends those out?

16 MR. BAILEY: I can send you a hardcopy.

17 MR. DYSART: Just say yes Carl, just say  
18 yes.

19 MR. HALL: Yes. I hate to take up -- I  
20 don't know. If I need one myself, I can come  
21 pick it up if there's one available.

22 MR. BAILEY: We still have some. We  
23 still have a few. I wouldn't offer if we  
24 didn't have one.

25 MR. HALL: I may. Are they available in

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2 the planning section?

3 MR. BAILEY: Yeah. We'll be a little  
4 busy in the afternoon.

5 MR. HALL: I'm going to be in town  
6 tomorrow. I'm coming to the civic center, if  
7 that's what you're talking about

8 MR. DYSART: David and Jason.

9 MR. KYLER: I just have a comment on the  
10 question on the report from the SEG. I agree  
11 with everything Will said. Add to that the  
12 diversity of opinions around the table and it  
13 will make it very difficult to get a  
14 consensus, plus the diversity should be heard.

15 The one thing SEG did communicate to GPA,  
16 by way of GPA to the Corps, in that memo of  
17 May of '08 having to do with potentially  
18 adaptive management, I would urge all the SEG  
19 people to reread that when making comments.

20 To the extent they deem it relevant to  
21 reference that document, reference it in  
22 relation to adaptive management and comment  
23 appropriately as they see fit on the EIS.

24 MR. DYSART: Thank you. Jason.

25 MR. O'KANE: I'm going to mention the

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2 same thing as Bill did about the workshop.

3 I'll let you cover anything you want tomorrow,  
4 but tomorrow evening we'll be starting at 4:00  
5 o'clock, 4:00 to 8:00.

6 We tried to pick a time people wanted and  
7 to have it at the end of day. People would  
8 have time at the end of their day, 4:00 to  
9 8:00, Savannah Civic Center. Bill, Bernard  
10 and me, and it's basically broken down into  
11 threes. Everybody in this forum, the SEG, has  
12 seen more detail. We'll be presenting it in  
13 displays, what have you.

14 Everybody here seems to have a clear  
15 understanding of what we'll be providing. We  
16 are offering that to the public. It's the  
17 second floor of the civic center. We'll be  
18 there those four hours.

19 There's not a particular time it starts.  
20 The doors are open. It's a mingle in and  
21 mingle about format.

22 MR. BAILEY: We'll be there to answer  
23 questions.

24 MR. DYSART: Okay. Judy.

25 MS. JENNINGS: I'm looking forward to the

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2 4:00 o'clock tomorrow. About the consensus  
3 report from the SEG, can't we work on that  
4 after the comment deadline, because it's not  
5 so much a comment about -- I don't think  
6 there's any one specific thing this group  
7 would agree on. We can still write a general  
8 good process-type thing.

9 MR. BERSON: I think Bill was talking  
10 about the whether or not the SEG should  
11 comment on the EIS.

12 MS. JENNINGS: I thought that it was  
13 we'll work on a consensus document after the  
14 comment period is over.

15 MR. BERSON: Absolutely.

16 MR. DYSART: Anything else? I declare  
17 the meeting an adjourned. We appreciate all  
18 of you being here, and being very productive  
19 and interested in the learning process. Thank  
20 you, Bernard, especially for being here.

21

22 (Meeting concluded at 1:25 p.m.)

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C E R T I F I C A T E

G E O R G I A :  
C H A T H A M C O U N T Y :

I hereby certify that the foregoing transcript was taken down, as stated in the caption, and the questions and answers thereto were reduced to typewriting under my direction; that the foregoing pages 1 through 176 represent a true and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

This the 31ST day of December, 2010.

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Kathleen Dore, Certified Court  
Reporter, B-2041