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# A REVIEW OF THE UNITED STATES ARMY CORPS OF ENGINEERS CHIEF'S REPORTS

**(113–22)**

## HEARING

BEFORE THE

SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

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May 31, 2013

**SUMMARY OF SUBJECT MATTER**

**TO:** Members, Subcommittee on Water Resources and Environment
**FROM:** Staff, Subcommittee on Water Resources and Environment
**RE:** Subcommittee Hearing on "A Review of the United States Army Corps of Engineers Chief's Reports"

## PURPOSE

The Subcommittee on Water Resources and Environment will meet on Wednesday, June 5, 2013, at 10:00 a.m. in 2167 Rayburn House Office Building, to receive testimony from the Army Corps of Engineers (Corps) on pending Chief's Reports. This hearing is intended to provide Members with an opportunity to review the 25 Chief's Reports submitted to Congress since the last Water Resources Development Act (WRDA) was enacted in 2007, and the process the Corps of Engineers undertakes when developing its projects and activities that benefit the Nation.

## BACKGROUND

*General*

The U. S. Army Corps of Engineers is the federal government's largest water resources development and management agency. The Corps began its water resources program in 1824 when Congress for the first time appropriated money for improving river navigation. Since the 1920's, the Corps has been reducing flood damage along rivers, lakes, and the coast. Along with these missions, the Corps generates hydropower, supplies water to cities and industry, regulates development in navigable waters, restores aquatic ecosystems, assists in national emergencies, and manages a recreation program. Today, the Corps manages nearly 1,500 water resources projects.

The Corps of Engineers constructs projects for the purposes of navigation, flood control, beach erosion control and shoreline protection, hydroelectric power, recreation, water supply, environmental protection, restoration and enhancement, and fish and wildlife mitigation. The Corps of Engineers planning process considers economic development and environmental needs as it addresses water resources problems. The planning process addresses the Nation's water

resources needs in a systems context and explores a full range of alternatives in developing solutions.

*Studies*

The first step in a Corps water resources development project is a study of the project. If the Corps has done a study in the area before, the new study can be authorized by a resolution of either the House Committee on Transportation and Infrastructure or the Senate Committee on Environment and Public Works. If the area has not been studied previously by the Corps, then an Act of Congress is necessary to authorize the study. Generally, studies are authorized by Committee resolution. The Committee authority to carry out these resolutions is vested in section 4 of the Rivers and Harbors Act of 1913.

The Corps performs a reconnaissance study at federal expense, subject to appropriations, typically taking about one year to complete and costing between $100,000 and $300,000. This is a preliminary analysis of the costs, benefits, and environmental impacts of the project and contains an estimate of the costs of preparing a feasibility study. According to the Congressional Research Service, around one-third of reconnaissance studies eventually lead to feasibility studies; only 16 of every 100 reconnaissance studies lead to constructed projects.

If the reconnaissance study indicates that there may be a viable federal project and that a more detailed study should be undertaken, the Corps enters into a cost-sharing agreement with the non-federal project sponsor that was identified during the reconnaissance study process. The cost of the feasibility study is shared 50 percent by the federal government, subject to appropriations, and 50 percent by the non-federal interest.

During the feasibility study phase, the Corps of Engineers District Office, (the Corps is comprised of 38 District offices within 8 Divisions), prepares detailed analyses on the economic costs and benefits of carrying out the project and any associated environmental, social, and cultural impacts. In some cases, dozens of project alternatives are identified and reviewed. The study typically describes with reasonable certainty the economic, social, and environmental benefits and detriments of the each of the alternatives and the engineering features, public acceptability, and the purposes, scope, and scale of each of the alternatives. The feasibility study also includes any associated environmental impact statement and a mitigation plan for environmental damages that cannot be reasonably avoided.

The feasibility study also contains the views of other federal agencies and non-federal agencies on the project alternatives, a description of non-structural alternatives to the recommended plans, and a description of the federal and non-federal participation in the project.

Following completion of the feasibility study phase, the study is transmitted to Division for review and, if approved, then sent to the headquarters level of the U.S. Army Corps of Engineers for final policy and technical review. After a full study is completed, the results and recommendations of the study are submitted to Congress, usually in the form of a report of the Chief of Engineers, commonly referred to as a Chief's Report. If such results and recommendations are favorable, the next step would be authorization by Congress. Project

authorizations are contained in Water Resources Development Acts, the last of which was enacted in 2007.

*Requirements*

The U.S Army Corps of Engineers is subject to all federal statutes, including the National Environmental Policy Act (NEPA), the Clean Air Act, the Clean Water Act, the Endangered Species Act, the Fish and Wildlife Coordination Act, and previous Water Resources Development Acts, Flood Control Acts, and Rivers and Harbors Acts. These laws and associated regulations and guidance provide the legal basis for the Corps of Engineers planning process.

For instance, when carrying out a feasibility study, NEPA requires the Corps of Engineers include an identification of significant environmental resources likely to be impacted by the proposed project, an assessment of the impacts, a full disclosure of likely impacts, and a consideration of a full range of alternatives, including a No Action Alternative and Action by Others alternatives. Importantly, NEPA also requires a 30 day public review of any draft document and a 30 day public review of any final document produced by the Corps of Engineers.

Additionally, when carrying out a feasibility study, the Clean Water Act requires an evaluation of the potential impacts of a proposed project or action and requires a letter from a state agency ensuring the proposed project or action complies with state water quality standards.

The Army Corps of Engineers also has to adhere to the *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* (P&G) developed in 1983 by the United States Water Resources Council, an Executive Branch document that guides formulation and evaluation of study objectives. The P&G is intended to ensure proper and consistent planning by federal agencies engaged in the formulation and evaluation of federal water resources development projects and activities. The P&G also established federal objectives in pursuing water resources development projects, including defining contributions to national economic development consistent with protecting the environment.

The P&G requires the formulation of alternative plans to ensure all reasonable alternatives are evaluated, including plans that maximize net national economic development benefits and other plans that incorporate other federal, state, and local concerns. Mitigation of adverse impacts is to be included in each of the alternative plans reviewed in the study. The Corps of Engineers is also responsible for identifying areas of risk and uncertainty in the study, so decisions can be made with some degree of reliability on the estimated costs and benefits of each alternative plan.

Typically, the plan recommended by the Corps of Engineers is the plan with the greatest net economic benefit consistent with protection of the Nation's environment. However, the Secretary of the Army has the discretion to recommend another alternative if there are overriding reasons for recommending another plan, based on other federal, state, or local concerns.

*Agency Actions*

The Nation's aging infrastructure, increased demands of the Corps of Engineers, and limited funding require the agency to focus resources on the highest performing programs and projects within the main missions of the Corps of Engineers. In January 2011, the Corps of Engineers undertook an initiative to modernize its planning activities to better align its project development process with national priorities.

Commonly referred to as the "3X3X3" approach, this planning modernization limits studies to 3 years, $3 million, and ensures that all 3 levels of District, Division, and Headquarters personnel are vertically integrated throughout the process and reviews are held concurrently, rather than in a step-by-step method. The target length of the main report for feasibility studies should be 100 pages or less and not larger than one three-inch binder.

This planning modernization initiative is focused on risk-based scoping to more quickly define water resources needs and opportunities with a target goal of completing typical feasibility studies within 18 to 36 months. While not every study will meet this goal, the new process could shorten the amount of time and decrease the typical cost of carrying out studies. All Corps of Engineers studies are intended to be "3X3X3" compliant by fiscal year (FY) 2014.

When the "3X3X3" initiative was begun in January 2011, the Corps had more than 650 active studies. Since beginning the implementation of this new planning modernization initiative, the Corps has reduced this to fewer than 200 studies by either completing ongoing studies or terminating those studies that have received little funding or provide questionable benefits to the Nation. The belief is that by focusing resources on fewer studies, the better studies will be completed sooner.

*Funding*

The President's budget requests $90 million for the Investigations account for FY 2014. This is $28 million less than the FY 2013 appropriations of $118 million. These funds are used for the study of potential projects related to river and harbor navigation, flood damage reduction, shore protection, environmental restoration, and related purposes. They also cover the restudy of authorized projects, miscellaneous investigations, and plans and specifications of projects prior to construction. Under this proposed budget, while ten new studies are funded, the focus is on completing existing studies. Of the more than 100 studies authorized in WRDA 2007, only 21 have been initiated.

Since the last Water Resources Development Act was enacted in 2007, 25 Chief's Reports have been delivered to Congress.

X

**WITNESS**

Major General Michael J. Walsh
Deputy Commanding General, Civil and Emergency Operations
United States Army Corps of Engineers

Accompanied by:
Theodore A. "Tab" Brown,
Chief, Planning and Policy
United States Army Corps of Engineers

# A REVIEW OF THE UNITED STATES ARMY CORPS OF ENGINEERS CHIEF'S REPORTS

**WEDNESDAY, JUNE 5, 2013**

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
*Washington, DC.*

The subcommittee met, pursuant to call, at 10:05 a.m., in Room 2167, Rayburn House Office Building, Hon. Bob Gibbs (Chairman of the subcommittee) presiding.

Mr. GIBBS. Good morning. The Committee on Transportation and Infrastructure, Water Resources and Environment Subcommittee, will convene.

At this time I would like to welcome General Walsh with our testimony here. And our committee hearing today is to review the United States Army Corps of Engineers Chief's Reports.

And at this time I want to ask unanimous consent that Members not on the committee be permitted to sit with the committee at today's hearing. Hearing no objection, so ordered.

At this time I want to yield time to our chairman of the full T and I committee, Chairman Shuster, for any opening remarks you may have.

Mr. SHUSTER. Thank you, Mr. Chairman. I appreciate you letting me go first. I have probably about a 14-hour day in the Armed Services Committee today. I hope it is only 14 hours, but we will see.

And I would also like to welcome Representative Cramer from North Dakota, who has a keen interest in what the Corps does, here today to sit at the dais and listen in.

Again, I want to say thank you to General Walsh. Thank you first for your service, and I know you are going off to greener pastures later in the year, so we really appreciate your service, and thanks for being here today. As well as Mr. Brown, thank you for being here. I look forward to hearing from you.

Today's hearing will play a valuable role in the committee's development of the Water Resources Development Act, also known as WRDA. Based on extensive studies, Chief's Reports make final recommendations to authorize specific construction activities. And that, I understand, is a Chief's Report. That is the first I have seen of them. I have heard how large they are and how extensive they are, but seeing is believing.

This hearing will bring greater transparency to the process and will provide the committee the opportunity to closely examine cur-

rent pending Chief's Reports. It is critical for Congress to reengage in the development of the Nation's water. Congress must have a role in determining the agency priorities and ensuring we fulfill our constitutional responsibilities.

Over the last few months, we have held a number of public educational forums, roundtables and hearings on the Corps of Engineers program. And I thank Chairman Gibbs for all his hard work in putting those together and participating.

The themes that have emerged from these public forums include the importance of project prioritization, public-private partnerships, empowering non-Federal project sponsors, and especially study acceleration. While it once took the Corps 3 to 5 years to complete a study, it has now become the norm for the Corps to take 10, 12 or even 15 years to produce a study. And it is no wonder it takes so much time since the Corps by law and regulation has to review in detail many different alternatives.

Just because a study is costly, complex and long does not necessarily mean it is a better project. This is not necessarily the fault of the Corps of Engineers. The agency has to clear hurdles placed in their way by other Federal agencies like the Department of Interior, and in some cases non-Federal project sponsors have difficulties on their end.

Congress has only enacted two WRDA laws in the last 14 years, and we have many goals we want to accomplish in WRDA, but one of the most important is to get WRDA back to a 2-year cycle to ensure Congress has a fundamental role in the development of the Corps of Engineers projects and in the oversight of the agency. Again, that is absolutely for me critical that we get back on a 2-year process. There is no reason we can't as long as we all dedicate ourselves to working towards that goal.

I want to again thank Chairman Gibbs for holding the hearing. And again, General Walsh, thank you for being here today and thank you so much for your service to the Nation, and your wife's service to the Nation, because I know that she has been there by your side all along. So again, thank you. And I yield back my time.

Mr. GIBBS. Thank you, Chairman Shuster. And I also thank you for your interest and your hard work too in working on this WRDA bill that really is going to improve our economic competitiveness and move our commerce up, especially our exports and job creation.

All right. At this time I yield time to Ranking Member Tim Bishop for any comments he may have.

Mr. BISHOP. Thank you very much, Mr. Chairman. I too welcome General Walsh and his colleagues, and I thank you very much for your service to our country.

Let me begin with a very simple statement. The Water Resources Development Act can create jobs and can provide critical protection and support for our communities, our businesses and our future. Over the last 6 months, this committee has had roundtables, listening sessions, discussions with stakeholders, meetings with the Corps of Engineers, and has held hearings, all with the intent of working towards developing a viable path forward on a WRDA bill.

Congress has been integral to the planning and construction of water resources since—projects since our Nation's founding. From the authorization of Aids to Navigation in the 1700s, to the passage

of several rivers and harbors acts in the 1900s, to the enactment of the first Water Resources Development Act in 1974, Congress has established an ordered process for integrating needed policy, direction and project authorization.

The original goal was to have a WRDA bill every 2 years, an ordered process that would support a definitive water management process. Since 1974, a period of almost 40 years, we have had ten subsequent WRDAs, not quite the 2-year average Congress had envisioned.

Our challenge is that the last successful WRDA was in 2007, and now we are faced with substantial hurdles with respect to water infrastructure needs, increasing numbers of water-related disasters, national financial challenges, and reluctance by this body to provide project-specific guidance to the administration.

We have heard repeatedly from Members of Congress and the public on the importance of WRDA to the Nation and to our local communities. No one has questioned the value of a well designed, constructed and managed Corps of Engineer project, whether they are for flood control, navigation, storm damage reduction or environmental restoration. The cumulative assemblage of these projects helps the Nation.

Our responsibility in this committee and especially in this subcommittee is to authorize WRDA projects and direct the mission of the Corps of Engineers. If we do not perform that responsibility, we end up with two things happening: one, the administration ends up prioritizing projects, often on an entirely different set of metrics than what we as Members of Congress would want; and two, the process becomes more convoluted and time-consuming, resulting in inefficiencies and frustration.

Let me reiterate. A well constructed and legislatively designed WRDA bill will provide jobs, provide direction and most importantly allow water projects to be constructed that will protect our communities, their economy and their lives. Nothing could be more important for us to do.

Today's hearing is about the process that the Corps goes through to develop, review and ultimately authorize Chief of Engineers Reports. These Chief's Reports become the vehicle for Congress to authorize a select group of new projects and get in line for appropriations to actually construct them. Hearings in this Congress have focused on several of the policy-related issues that may be addressed in this WRDA. This hearing is focused on addressing the 25 yet unauthorized Chief's Reports.

I wish to state clearly and unequivocally: a successful WRDA must include more than just policy and Chief's Reports. We have to find a way to address specific projects for flood control, hurricane and storm damage reduction, navigation, harbors and waterways, environmental restoration, and water supply. This requires that we provide the Corps with adequate resources and direction.

The bottom line is that we have to do more, and by doing more, we will create jobs, jobs that will help sustain our Nation's financial recovery.

Today we are going to hear about the amount of time that it takes to get a Chief's Report developed and shepherded through the process. The Chief's Report list today includes 25 vetted and

administratively approved projects. We have had some good discussions with our colleagues across the aisle and with Corps technical staff to look for ways to make the process more efficient. While we all may have our own ideas about why it takes so long, in the case of some of these Chief's Reports, upwards of 10 years to make it through the system, one thing has become clear to me, and that is we have met the enemy and it is us.

Congress, in our desire to help direct the administrative activities of the Corps of Engineers, has set up a long, convoluted, multistep process to move projects from planning to construction. We, the Congress, have overlaid a project process largely developed by technical experts with one developed by politicians, overlaid by yet another that is defined by the reality of the appropriations process, overlaid by yet another process, the budget oversight approach performed behind closed doors by the Office of Management and Budget. The end result is a mind numbing, convoluted, multilayered flow chart that now includes a minimum of 21 major steps along the journey. We have aided and abetted in the creation of this convoluted and time-consuming approach, and we now have a chance to move ahead if we work together.

In summary, our approach can be captured in three simple bullets: the Water Resources Development Act is designed to work most efficiently when it is done under regular order with Congress providing leadership on moving specific projects insist a timely manner; WRDA works when projects are funded at the appropriate levels, not nickel and dimed over 10 years and done in spurts and starts; WRDA works best when Congress, not the administration, determines project priorities and when it is done in a bipartisan way.

We are committed to working with the chairman of both the subcommittee and the full committee and staff to develop a WRDA bill that will meet the needs of the American people, our colleagues and the administration.

I thank you Mr. Chairman. I yield back.

Mr. GIBBS. Thank you. And I will yield myself time for an opening statement.

First like to welcome General Walsh and also thank him for his service as he looks for retirement here in October. I think the Corps is going to lose a huge asset.

Today we are holding a hearing to review the Army Corps of Engineers Chief's Reports, the process the Corps undertakes to develop these projects and some of the steps the Corps is carrying out internally to accelerate the process.

The U.S. Army Corps of Engineers is the Federal Government's largest water resources development and management agency. The Corps began its water resources program in the 1800s when Congress for the first time appropriated money for improving our river navigation. Today the Corps of Engineers constructs projects for the purpose of navigation, flood control, beach erosion control and shoreline protection, hydroelectric power, recreation, water supply, environmental protection, restoration, and enhancement in fish and wildlife mitigation.

The Corps of Engineers planning process considers economic development and environmental needs as it addresses water re-

sources problems. The planning process addresses the Nation's water resources needs in a system context and explores a full range of alternatives in developing solutions.

The U.S. Army Corps of Engineers is subject to all Federal statutes, including the National Environmental Policy Act, NEPA, the Clean Air Act, the Clean Water Act, the Endangered Species Act, the Fish and Wildlife Coordination Act, and all previous Water Resources Development Acts, Flood Control Acts, and Rivers and Harbors Acts. These laws and associated regulations and guidance provide the legal basis for the Corps of Engineers planning process.

For instance, when carrying out a feasibility study, the National Environmental Policy Act, NEPA, requires the Corps of Engineers to include an identification of significant environmental resources likely to be impacted by the proposed project, an assessment of the impacts, a full disclosure of likely impacts and a consideration of a full range of alternatives, including a no action alternative and action by other alternatives. NEPA also requires a 30-day public review of any draft document, and a 30-day public review of any final document produced by the Corps of Engineers.

Additionally, when carrying out a feasibility study, the Clean Water Act requires an evaluation of the potential impacts of a proposed project or action and requires a letter from a State agency ensuring the proposed project or action complies with State water quality standards. The Army Corps of Engineers also has to formulate alternative plans to ensure all reasonable alternatives are evaluated, including plans that maximize net national economic development benefits and other plans that incorporate other Federal, State and local concerns. Mitigation of advance impacts is to be included in each of the alternative plans reviewed in the study. The Corps of Engineers is also responsible for identifying areas of risk and uncertainty in the study so decisions can be made with some degree of reliability on the estimated costs and benefits of each alternative plan.

Typically, a plan recommended by the Corps of Engineers is a plan with the greatest net economic benefit consistent with protection of the Nation's environment; however, the Corps does have the discretion to recommend another alternative if there is overriding reasons for recommending another plan based on other Federal, State and local concerns.

By now many of us have seen the actual size of the typical studies carried out by the Corps of Engineers. On the desk down here on the dais is one feasibility study from the Louisiana coastline that is 9,000 pages. You can see it stacked up there.

While these are complex projects that need be reviewed by the public and other State and Federal agencies, the level of analysis required by other laws and regulations are crippling the project delivery process. For example, the study at the Sabine-Neches Waterway navigation project was authorized in June 1997 and the Chief's Report was transmitted to Congress in July of 2011. According to the feasibility study of the Sabine-Neches Waterway navigation projects, more than 120 alternatives at nine different depths were evaluated prior to a completed Chief's Report.

We are literally studying infrastructure projects to death, but this is not solely the fault of the Corps of Engineers. Congress

needs to change the way the Corps of Engineers carries out its business. It is no longer acceptable that these studies take dozens of years to complete. Ultimately the Federal taxpayer is on the hook for these studies and for the length of time it takes to carry them out, delaying the benefits these projects ultimately are supposed to provide.

As we move forward with what will be a policy heavy Water Resources Development Act, we will be focusing on accelerating the study and project delivery process as well as better prioritizing these worthwhile investments that the American public has relied on for decades.

At this time, again I want to welcome General Walsh as our one-person panel. General Walsh is the deputy commanding general for Civil and Emergency Operations of the United States Army Corps of Engineers. And he is also accompanied today by Mr. Theodore "Tab" Brown. He is the chief of the Planning and Policy Division for the Army Corps of Engineers.

So, General Walsh, welcome again, and the floor is yours.

**TESTIMONY OF MAJOR GENERAL MICHAEL J. WALSH, DEPUTY COMMANDING GENERAL FOR CIVIL AND EMERGENCY OPERATIONS, UNITED STATES ARMY CORPS OF ENGINEERS; ACCOMPANIED BY THEODORE A. "TAB" BROWN, P.E., CHIEF, PLANNING AND POLICY DIVISION, UNITED STATES ARMY CORPS OF ENGINEERS**

General WALSH. Thank you, Mr. Chairman and distinguished members of the subcommittee. I really am honored and it is a privilege to be testifying before you today to discuss the planning process and the Chief's Reports for the Army Corps of Engineers.

My full testimony will describe all 21 reports that have favorably completed the executive branch review since enactment of the WRDA 2007. These proposals fall within the main missions of the Corps of Engineers and all of them will provide a net benefit to the Nation.

I want to take the time here to discuss the four campaign goals of the Corps of Engineers and specifically the efforts we are making to transform the Civil Works program.

First, we must support the warfighter with our work in areas of operations under the combatant commanders and on U.S. installations around the world. Many of our deployed civilians have civil works experience, which supports the mission inside the theater, and this work also provides them a broadening experience that will assist them and us when they return from harm's way.

Second, we must transform Civil Works by modernizing the project planning process, enhancing the budget development process, using a smart infrastructure strategy to evaluate our portfolio of water resource projects and improving our methods of delivery.

Third, we must reduce disaster risk and continue to respond to natural disasters under the national response framework as well as our ongoing efforts and authorities under flood risk management.

Fourth, we must prepare for tomorrow, positioning our workforce and processes for the future challenges and focusing on research and development efforts that will help solve the Nation's greatest challenges in the Army and in the Nation.

The Corps has been working to better equip the Civil Works program to effectively meet the current and future needs and ensuring that decisionmakers are fully informed. The Corps planning process modernization effort emphasizes execution, instills accountability, and improves the organizational and operational model to produce quality products that address the water resource priorities.

The current focus of our planning modernization efforts is to facilitate the timely completion of decision documents that appropriately address the increasingly complex water problems that plague communities and constrain economic activity.

The Corps has recognized the need to modernize its approach through the initiative that we call SMART planning. SMART stands for Specific, Measurable, Achievable, Risk-Informed, and Timely. The SMART planning approach to investigations reduces resource requirements by appropriately focusing on the key drivers to resolving water resource problems while complying with all the applicable laws and regulations. The goal under SMART planning is to complete most feasibility studies within 3 years for $3 million or less. The end product is a decision document that has been fully coordinated by all three levels inside the Corps of Engineers organization. In shorthand, we call this goal 3x3x3. The Corps expects full implementation of this new approach in fiscal year 2014 and has been working with its Federal and non-Federal partners to use this new approach in evaluating water resource problems.

The Corps is prioritizing its current portfolio of planning studies and applying this new approach to new and ongoing studies, thus reducing the number of active studies in its portfolio and focusing on efforts to complete these studies more effectively by prioritizing funding.

Ensuring the continued performance of key features of our infrastructure is becoming more costly over time. Operational demands have also grown and changed, particularly over the past 30 years, creating additional stress, and we are working on the infrastructure strategy to address these growing needs.

The infrastructure strategy incorporates four focus areas: integrated approach to asset management, managing a system over its life cycle, evaluating whether a project or group of projects or related projects should remain a Federal responsibility prior to substantially furthering investment in that project, and potentially looking at alternative financing mechanisms.

Transforming the way we deliver Civil Works programs requires state-of-the-art processes and a highly skilled workforce that is capable to responding to current and future demands. The strategy is to have reliable and efficient methods of delivery by linking technical capabilities to uniform national standards, maintaining corps competencies, and having consistent methods and processes throughout the Corps.

The Corps has a strong tradition of working collaboratively with non-Federal interests and plan to deliver products. The current transformation initiative is no different. Our transformation partners include States, tribes, local governments, nongovernment organizations, nonprofit agencies, and the public. These partnerships are increasing and will likely continue to increase as we share a

common goal of looking at reliable and resilient infrastructure for our Nation.

Mr. Chairman, that concludes my statement. And, again, I appreciate the opportunity to address today.

Mr. GIBBS. Thank you. I will start a round of questions here.

We are talking about the process, and sometimes there has been multipurpose projects, navigation projects and eco-restoration projects in conjunction. Let's give an example: if we have a port for a deepening project, which we know we have major challenges to a lot of projects that way, should it be bootstrapped with a restoration project, ecosystem restoration project, or can we break these projects up and focus on the economic ones to help move our economy along and really look at the economic benefit. And not saying there is nothing of merit to environmental benefits, but if we can get an economic benefit right away by focusing on that project and maybe laying off the rest of the complex projects. Does the Corps see itself moving that way to look at the benefits, both economic and environmental, and say if we get this part of the project going, we can get this part done and then maybe work on the latter later when the resources become available, especially if the partnership of the local sponsor is having challenges meeting their obligations for their cost share?

General WALSH. Yes, sir. On a particular project, we have three major missions in the Corps, as you know: flood risk reduction, navigation, and ecosystem restoration. As we put forward the President's budget, we look at a balanced approach in making sure the portfolio is funded in all three of those major missions.

In a specific project that has different features, we work along with the local sponsors in putting together a schedule that tries to meet all of the requirements in that balanced project.

Mr. GIBBS. OK. I noticed in these 25 Chief's Reports we have here today before us, it is totaled about $14 billion of proposed spending. And I noticed on the navigation side, it is about $2.1 million, environmental restoration is about four times that, flood control is about $4 mil-—if I get it right, billion. So basically, what we are looking at, environmental restoration four times more and navigation twice as much on flood control.

Can you comment why there is such a difference in the numbers when you have four times more in navigation, twice as much in flood control? Why that would come about that way, especially when you consider the challenges we have out there on our infrastructure on rebuilding and refurbishing our hard assets.

General WALSH. Mr. Chairman, I think they came in, because that is how the Chief's Reports were completed. They were not, as far as I know, directed one way or another. I know that there are more Chief's Reports that are out there that will be coming in between now and the end of the year that will change that ratio drastically as well.

Mr. GIBBS. But you are aware that——

General WALSH. Yes.

Mr. GIBBS [continuing]. You know, that the ratios are sort of——

General WALSH. Yes.

Mr. GIBBS [continuing]. Way out of place there.

On your SMART process, you talk about SMART planning, I have a chart here of the Civil Works project delivery process. It is a 20-some-step process. This could take, I don't know how many years, maybe 15 years. Seven years to get a Chief's Report. Is that typical?

General WALSH. Yes, sir.

Mr. GIBBS. Are you familiar with this?

General WALSH. Yes, sir.

Mr. GIBBS. Is there any way in your SMART or your 3x3 that you can combine some of these different areas and condense them, do you have any recommendations?

General WALSH. Yes, sir. The key item that we are looking underneath the SMART planning process is to make sure that we have the project scoped realistically. Many times we have looked at a lot of alternatives that may have not quickly gone to a solution that is required by the project.

I am not looking at particularly cutting out particular processes there, but making sure we get through them more rapidly by putting together a planning charrette, which is where we bring all three levels of the Corps of Engineers, the headquarters, the division and the district together and we come and look at that scope rapidly, make sure that we agree so that we give direction to the district to move forward more rapidly.

Mr. GIBBS. And let me just interrupt you right there, General. I have got a question on that. When you bring the district, the region and the DC headquarters together, I assume the purpose is everybody is looking at it the same time, so it is not going through one level and then they don't know about it, but I guess my concern would be if it is done right, it makes sense, but my concern would be is that we don't have just a top-driven system from Washington that overrides and doesn't let the process work either, so I am really concerned about one-size-fits-all policies coming out of this town.

So if they are all looking at it the same time to speed up the time, that makes sense, but I would have a concern about taking the local and the regional more out of the picture of the decision-making process. How do see that fitting?

General WALSH. Sir, the local sponsor who typically comes up with a good deal of the funding has significant control of the of the process. When we go through the planning charrette, we are looking at the different alternatives and whether they are going to have policy issues as they bring things forward. We also look at risk assessments if there is a particular solution that they want to bring forward. There are half a dozen risks that you need to identify and work through to get through the policy review that we do here at the headquarters.

Mr. GIBBS. I think you have been in this position a little over a year now?

General WALSH. Yes, sir.

Mr. GIBBS. I think you have made some work to speed up some of these processes. What have you seen of the backlog? How are we doing on the backlog?

General WALSH. Sir, we have been working on the planning process specifically. We had about 650 feasibility reports that were out

there in various shapes, many of them unfunded for many years. We went through a process of putting these projects that were active into an inactive status and took those off the shelf. We reduced that to about 200, and will be funding those that are closest to being complete. We will put a priority on those, finish those and get to the next one.

Mr. GIBBS. That makes a lot of sense. My time is up. I yield to Ranking Member Bishop.

Mr. BISHOP. Thank you, Mr. Chairman. General Walsh, thank you very much. Just to pick up on one of the points that the chairman made in his question, he cited the Chief's Reports that are post-WRDA 2007. The 14 Chief's Reports that we are getting in between now and December 31st, their breakdown, navigation 21 percent, environment 14 percent, flood risk management 43 percent, and hurricane and storm damage 21 percent. So it just shows the difference that you had one crop that had a density in the environment, we now have another crop that has a density in flood risk management. So I would imagine that that is typical in terms of how projects distribute themselves over a period of time. Is that about right?

General WALSH. That is correct, sir.

Mr. BISHOP. Thank you. General Walsh, you have been perhaps the prime mover of the 3x3x3 process. It has been in place now for about 3 years. Can you identify with some degree of specificity how it has actually worked? Has it improved the efficiency? Has it reduced the time it takes to move a project from the point where it is initiated to the point where it is ready for construction or actually under construction?

General WALSH. Yes, sir. I believe that it will move the process forward in regards to getting a Chief's Report, mostly because we will have the full vertical team, that is the division headquarters, my headquarters and the district, working together before a project starts in what we call a planning charrette to make sure that we are looking at all the alternative solutions to a particular project. Really what we are looking at is at the start, make sure that we have realistically scoped what the possible solutions are. We then put together a risk register, those things that we have looked at but we think are not going to be a major player in a particular project. We will put a risk register together, say we looked at that particular issue and don't believe it is going to be a major part of the project, so people understand that we have looked at that particular issue and moved it off to the side.

So, yes, I think we are going to move things more rapidly as we move into a decision type of report, not getting so much data just to fill the report up and look at a lot of different things. What are the minimum things that I need to look at for the decisionmaker to make a decision. We have been looking at a more efficient and effective way of doing planning for a number of different chiefs. General Strock was looking at that specifically, General Van Antwerp as well. And General Bostick has adopted this approach in his Campaign Plan. So the 3x3 method of planning modernization is codified in the Chief's Campaign Plan.

Mr. BISHOP. What impact, if any, has the 3x3x3 approach had with respect to the process followed by other Federal agencies with respect to Corps-related projects?

General WALSH. Sir, we are working with the other Federal agencies both here in Washington and at the local level, explaining to them how the process works as we move from decision to decision to decision, so I think we are working together closely.

Mr. BISHOP. OK. Thank you. It remains the case, does it not, and please, please correct me if I am wrong, that the biggest impediment to moving a Corps project from its initiation to its completion is the funding source, whether it be the funding source from the Federal Government or whether it be funding from the non-Federal partner with which the Corps is working. Is that correct?

General WALSH. Yes, sir. The stop-and-start funding certainly hurts or increases the duration of a study.

Mr. BISHOP. OK. So when I said in my opening remarks that we have met the enemy, and it is us, in part what I was referring to was a process that we have imposed on the Corps, coupled with the process that exists in other Federal agencies, but the other is that we are simply not giving you sufficient resources to do the jobs that we have tasked you with doing. Is that correct?

General WALSH. There are two things, sir. One, a lot of projects throughout the U.S. and trying to get to them all with the limited funds that we have. What we are looking at now is taking those projects that are closest to completion, give those a little bit more on the budget priority, knock them out and go to the next one, but certainly how much funds we put on a project significantly impacts its duration.

Mr. BISHOP. Thank you. My time has expired. Thank you, Mr. Chairman.

Mr. GIBBS. Mr. Crawford, questions.

Mr. CRAWFORD. Thank you, Mr. Chairman. And General Walsh, thank you for being here today. In your testimony, you mentioned the need for the Corps to prioritize Federal funding on the highest performing projects and studies. Could you give us some more detail on how the Corps measures the performance of pending projects and studies?

General WALSH. There are a number of metrics that we look at. Certainly one that we utilize is the net economic development number, the cost-benefit ratio, but that is just one of the items that we look at. We also look at impacts to the environment and a number of other ratios as well, sir.

Mr. CRAWFORD. What role does the Corps division and district office play in determining priority projects?

General WALSH. Sir, when we were looking at the 600 projects that were on the shelf, I asked the division and district commanders specifically which ones that they would not be able to continue because of lack of funding or a non-Federal sponsor, and they sent back to us which ones they were not able to move forward. So they are clearly inside the loop and prioritizing.

Mr. CRAWFORD. OK. Let me shift gears a little bit. Can you give me your assessment of the MRT, Mississippi River and Tributaries project?

General WALSH. Could you repeat that question, sir?

Mr. CRAWFORD. Your assessment of the MRT.

General WALSH. Yes, sir. My assessment is that it has been quite successful from a systems approach. In 1928 after the 1927 flood, the Chief of Engineers at that time decided to look at the lower Mississippi as a system. The Nation has invested about $13 billion over the last 60 years on that project, and it has prevented hundreds of billions of dollars worth of flood damages.

In 2011, when we had the record high flows, we had to open up all three floodways so that we were able to move water laterally and not stack it up and lose some of our major cities.

In 1927, tens of thousands of people lost their lives. In 2011, there was no one that lost their life due to flooding because of that project.

Mr. CRAWFORD. And how would you gauge the recovery of the MRT in light of the 2000 flooding that took place? Has it recovered pretty well?

General WALSH. General Peabody has been repairing the levees and using the emergency supplemental funds that were appropriated, and so I think it is recovering very well. Right now there are heavy flows, heavy water down in the lower Mississippi, and the system hasn't been significantly impacted from the damages that we had from 2011.

Mr. CRAWFORD. Excellent. And, finally, in October 2012, the Corps began reducing lock hours of operation due to stagnant funding and the need to address a growing list of maintenance projects. Is it currently possible for the Corps to accept non-Federal funds to increase the hours of operation of Corps-operated locks?

General WALSH. Sir, we are looking at that specifically as to how to address the concern where we have for what I call levels of service. If you have over a thousand lockages a year, then we will continue to provide the 24/7 service that many folks have gotten used to. If you have less than that, then we are reducing those levels of service on a graduating scale.

We have a team trying to figure out how to pull together a public-private partnership on how to transfer some of those lockage responsibilities to someone else.

Mr. CRAWFORD. Thank you, General. And congratulations on your retirement and thank you for your service. Yield back.

General WALSH. Thank you, sir.

Mr. GIBBS. Representative Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chair. And to dovetail, General—and thank you for your service, and good luck on your retirement.

General WALSH. Thank you so much.

Mrs. NAPOLITANO. One of the things that is not spoken to is the sequestration impact on your staff, on your ability to move some of the projects. And if you were to by some crystal ball magic or something get the money to do the projects that need to be done, would you have the trained personnel to do it?

General WALSH. It is tremendously important that we have trained people. I look at really to be a master at this, you need three things. You need education, you need training and you need experience. A lot of our staff have that, but a lot of them are reaching that mature age and moving on to other places. So we are re-

vamping our training, particularly in the planning community. We are putting that training together now, and we are requiring that planners be certified in the work that they do.

Mrs. NAPOLITANO. So it is possible you may not have enough experienced personnel to carry out some of the projects if you did have some of the funding?

General WALSH. Congresswoman, we call this methods of delivery. If the planners in one particular district don't have the experience needed to bring a feasibility study home, they will go to other districts that have that trained personnel that can get that work accomplished.

Mrs. NAPOLITANO. You are borrowing from Peter to pay Paul?

General WALSH. No. Actually it is to work that experience part. And so those people that have a lot of experience, let's get them in there and they will——

Mrs. NAPOLITANO. OK.

General WALSH [continuing]. Bring the folks who have not done a feasibility study along with them. The sequestration has required us to put $253 million off to the side for the sequestration bill, which is significantly impacting the water resources program.

Mrs. NAPOLITANO. Thank you for the answer. The fact that in my area we have had a problem with raising levees, and one of the water agencies wanted to participate and be able to help pay for the study, and we were finding it very hard to have the Corps accept money. So that should be a priority, because there are entities that are willing to work, financially support a project or at least to increase the State portion of it to be able to get it done, because of many factors: security, the environmental, keeping more water captured, et cetera.

General WALSH. Yes. We have an ability to do that, it is called contributed funds, and there is a process where we are taking sponsors' funds above what is required, making sure we bring it through our oversight committees, and we are accepting their funds.

Mrs. NAPOLITANO. I would love to have some of that information, General.

The other question, from your experience, has the Chief's Report development process provided a viable process to address critical procedure or construction issues, and are there examples of where your report development process has uncovered concerns that have led to a project either being rescoped or abandoned?

General WALSH. Yes, Congresswoman. As we try to find solutions to the challenges that are out there, sometimes we will find where the solution costs more than the problem. We call it the national economic development number—NED—the benefit-cost ratio is less than one, and then we will stop work on that particular project. So, yes, as we go through the process, there are some that drop out because there is not a viable solution that we, the Corps, can be involved with.

Mrs. NAPOLITANO. Well, from your experience, does the Chief's Report development process capture, review the necessary technical and financial issues that are important for the implementation of most cost and time effective Corps construction projects? If not, can

you identify where additional oversight or review could be value added?

General WALSH. Congresswoman, WRDA 2007 requires an independent technical review of our work on particular projects that are over $45 million or are contentious. So Congress required us to do that, and have outside folks come and take a look at our work.

Since Congress put that into place, we have executed 29 projects going through the independent expert review panel at a cost of about $9 million. Most of those reviews have not changed anything in our reports in regards to the solutions. They have recommended a number of different areas where we tell the story slightly differently as we put our reports together.

Mrs. NAPOLITANO. Thank you for your answers. Mr. Chair, I yield back.

Mr. GIBBS. Mr. Denham.

Mr. DENHAM. Thank you. Good morning, General. It is a project the Corps has been working on prior to my time and my 3 years in Congress and even prior to my 8 years before that in the State Senate. I have continued to work with them before I was in elected office and now for nearly 11 years that I have been in elective office. And my question is not so much on the project as much as it is on the process. And you presided over a Civil Works Review Board on March 27th, and that resulted in a unanimous vote on Orestimba Creek, the project that I am talking about. And as you know, this project has been long overdue and many of the new SMART planning techniques that you discussed in your testimony eventually applied to this study.

So my question is, can you discuss the challenges that have led up to the delay in completing Orestimba Creek and how your new planning techniques were applied to get over the finish line, ultimately leading to a planning award that you received for the project; and secondly, do you think Orestimba can be used as an example for legacy projects going forward?

General WALSH. Thank you, Congressman. Yes. Part of the delay was the funding stream that came in for that particular project that would start and stop, $100,000 one year, $50,000 the next year, the following year there wouldn't be any funds, and so that caused a lot of concerns.

Another good portion of that project was where the local sponsors wanted to find a solution that was not viable, and so we looked for a dam or flood storage up in the foothills, and we had to look at that from an engineering perspective, also from an environmental perspective and its impact on California water. It took a number of years to look at that and describe, as mentioned by Congresswoman Napolitano, that that solution is not viable. It took a while to get through that.

Finally they came up with the solution that they delivered to the Civil Works Review Board 2 weeks ago, and it is an excellent product. We will put that out for State and agency review now. It is about 100 pages of what is needed to make that decision.

Mr. DENHAM. So now the study has been released for the 38 State and agency review, when do anticipate a completed Chief's Report?

General WALSH. We will put it out for public comments, address those comments, and I suspect we will have a Chief's Report by the end of the year.

Mr. DENHAM. And going forward, what do you believe is the best course for Congress to take in authorizing new projects and ensuring they are completed in a timely manner?

General WALSH. The process is to put together a WRDA and authorize the reports that the Chief of Engineers has gone through extraordinary details in making sure that they are complete and together. Before that report comes to Congress, we do a district quality control, make sure that that is reviewed from a quality control point of view. We take that report and bring it to another district to review it again, and we call that agency technical review, and then we have policy reviews up here at the headquarters. Twice it goes out for public review, State and agency review, and so by the time it comes over here as a Chief's Reports through the administration, we are giving you an excellent, excellent product. I usually call the Chief's Report the gold standard for Congress to authorize through a WRDA process.

Mr. DENHAM. And as we are moving through the WRDA process, is there anything that you can see that can help us to make this process more efficient, more streamlined, things that you would need congressional authorization for?

General WALSH. Sir, there are a number of items that we are working on as we are trying to streamline and husband the funds that we do have. We have a lot of projects that we should be looking at and perhaps seeing whether they should be de-authorized or repurposed or taken off the Federal books because they are not providing a Federal return. We are looking at the de-authorization process and how the administration can figure out how to work that particular process.

Another thing that we are looking at, sir, is our alternative financing. Is there a way for others to finance. If we are not going to be able to get a steady stream through the Federal appropriations process, maybe others can do that, very similar to here in Virginia, where they have a public-private partnership where the private organization has built portions of the highway and are being reimbursed from a different process. There are a number of different ideas that are not quite ready for us to share; we are still working on those things as we move forward.

Mr. DENHAM. And a final very quick question. Are dams no longer viable in California under the Corps opinion?

General WALSH. I am not sure how to answer that. I think those dams that I worked on when I was a district commander in San Francisco and Sacramento, they were needed for their intended purpose. There are some projects where the intended purpose is no longer necessary, and they should probably be transferred off of Federal books to somebody else who does need those particular projects, but I couldn't say from a blanket statement that any dam is not needed.

Mr. DENHAM. Thank you. I will follow up in writing on more specifics on my question. Thank you. Yield back.

Mr. GIBBS. Representative Frankel.

Ms. FRANKEL. Thank you, Mr. Chairman. And, you know, one of the reasons I am sitting here is because projects that Army Corps is working on are very, very essential to the economy of south Florida, where I represent, and also helps in safety, because just for example, Everglades restoration and major dredging projects in our ports are very, very important.

And I want to just say to both the chairman and the ranking member that I agree with both of your statements, and I am glad that we are stepping up to the plate to take responsibility, because just from my experience working back home, the process of getting a project—getting a Chief's Report is—you just could pull the hair out of your head really. I can't—I guess that is the best way I can explain it, without attributing blame, because I always think that—I think Congress should take the responsibility, and therefore, streamline this process and fund it where it is appropriate, but I don't think it is one or the other. I think it is both that perhaps—certainly we are not doing our job with the funding, but it seems to me that we have created some roadblocks, maybe overprotectiveness in certain areas that we could really give a little bit of leeway.

And, Mr. Chair, I wanted also to comment that I know the approach the Senate has taken, which is basically, it seems to me, to give away our responsibilities on these projects by, I think they have said that they are going to allow—authorize any project that has a Chief's Report. And from my point of view, I will say from south Florida, we have been waiting, for example, for a Chief's Report in Port Everglades for more than a dozen years; I don't know, maybe 15 years or so. I think we are on track now, but maybe not to be finished till the end of the year. And with the—it is a dredging project. With the expansion of Panama Canal, we really can't afford not to have an opportunity to be authorized just for the amount of money.

Mr. GIBBS. Would you yield for a minute? Would you yield? I believe the Senate WRDA bill gives any Chief's Report that goes through a Chief's Report, gives OMB the ability to move it forward. The Senate WRDA bill actually delegates our response—I believe our congressional responsibility to the executive branch in a 3-year timeframe, my understanding. So I believe that is what you are referring to.

Ms. FRANKEL. Yes. That is right.

Mr. GIBBS. OK.

Ms. FRANKEL. Yeah. Right. That is correct. So, I mean, I think that—well, I think we should keep the authority, Mr. Chairman, but I also—I am concerned about the timing of getting these Chief's Reports out and getting these projects authorized. And I wanted to emphasize the fact with the Panama Canal expansion, I think in 2015, is that the projected date, that, you know, ports like Port Everglades, and there are others, really need to get moving on these dredging projects.

So one of the questions—sorry. I have a very sort of simple question, which is, without authorization in this particular Congress, if we actually do pass legislation, is it true that there is—that you cannot go to the next—even if you get a Chief's Report, let's say by the end of the year, that you cannot go on to the next stage of

the planning and the design, that we would have to wait for another bill, another authorization?

General WALSH. To begin construction, we would have to have the project authorized. There is a process where we can start planning, engineering and design to do some of the work prior to that, but again, from a funding level, there is less and less ability to put planning, engineering, design funds on a project before it is authorized.

Ms. FRANKEL. Thank you.

And just—Mr. Chair, I just would urge that—I agree with your—I absolutely agree with your comments that we need to streamline what is going on, but I hope that we will not use that as an excuse not to move some of these very important projects forward. Thank you, sir.

Mr. GIBBS. Mr. Hanna.

Mr. HANNA. Thank you, Chairman.

Of the total number of projects that you work on, how many fit within the 3x3x3 criteria?

General WALSH. Congressman, it is going to start in fiscal year 2014, although most of the districts have taken and wrapped up with the ideas of SMART planning, looking at making sure we have the scope down correctly and are moving forward. The direction from the Chief out to the field is if you want to be in the budget request in the 2014, 2015 budgets, then you need to have your project rescoped using the 3x3x3 method. So you——

Mr. HANNA. But what does that look like in real terms? I mean, how many—you said we can look backwards and figure out how many projects would fit into that criteria. So as a percentage, what does it really cover, and are we avoiding the vast number of much larger projects that are even more important, letting them fall to the 8-, 10-, 12-, 15-year timeline?

General WALSH. No. Those projects will be in the 3x3x3 methods, with the exception of watershed studies; we are still looking at how to streamline a watershed study.

Mr. HANNA. You used from the 1974 Public Law 93–251, a discount rate for water—and this is in your testimony—Water Resource Development Act of 7 percent. You mentioned that this is not the same discount rate as used by the executive branch for budgeting and economic benefits.

How do you—since it is almost 40 years old, how accurate is that and how much sense does it make to have two discount rates out there?

General WALSH. Sir, as we put together the Chief's Reports, we use the current rate. And as it goes through the administration budget process, they use the 7-percent rate as they try to, I guess, equalize the studies that were finished 7 or 8 years ago or 30 years ago to those studies that are coming through now.

Mr. HANNA. How much time is spent spinning your wheels around a project that is funded and takes over 5 years and during the process actually the funding is lost and not refunded?

General WALSH. I am sorry, sir. I didn't understand the question.

Mr. HANNA. Congress funds these projects for a period of time, and clearly that time span in many cases before the process can be studied has expired. What does that mean in real terms to you?

General WALSH. Certainly it slows the project down, both Federal and non-Federal funding; if there is not a steady stream of efficient funding, the project continues to be inefficient and not able to deliver on its benefits.

Mr. HANNA. But does it also suggest, because you take so long to study these that the process shouldn't even be started unless the funding is given to you through the entire timeline?

General WALSH. We use the funds that are appropriated until——

Mr. HANNA. Hope for the best.

General WALSH [continuing]. And then put a project on hold for lack of funds.

Mr. HANNA. Thank you. Thank you, Chairman.

Mr. GIBBS. Representative Holmes Norton.

Ms. NORTON. Actually, the question of my colleague went to one of my major concerns. Given the number of projects that have been fortunate enough to be started but not completed, is that process—does that process of funding depend upon annual appropriations or upon funding in your—that you have set aside somehow in your own budget?

General WALSH. Typically, Congresswoman, that is from an annual perspective but there are a number of caveats that if you have funds that you didn't expend in 1 year you can carry those funds over and keep the project going with carryover funds as well.

Ms. NORTON. I am wondering what happens if a project is started, no funding for a number of years, I very much appreciate the new approach, seems to me a commonsense approach, I don't see how it could have been avoided in the first place of going to those who were closest to completed, but the very fact that you are only doing that now suggests that you weren't doing that before. If you weren't doing that before and you had all of these uncompleted projects, how did you keep the funds from being wasted?

How were you funding these projects if you weren't going to the ones that were closest to being completed?

General WALSH. Congresswoman, each of the projects that we have moved forward began with the idea that we are going to bring them to conclusion. As we are putting together a planning study, we are doing engineering analysis, we are doing real estate analysis, we are doing flood, economics, environmental and all of that data is still there and available and if we can't use it to move forward with the Federal project, perhaps the locals can use that for a project.

Ms. NORTON. I am interested in projects that may have been started and not completed.

How many projects were out there that have been started and for lack of funding have not moved forward?

General WALSH. Many.

Ms. NORTON. Now if you ever get back to such a project, don't you find that some of the work has to be repeated or that there has been deterioration from an engineering point of view? Would you describe to me what letting a project lie fallow for years waiting for funding does to that project, its completion and the efficiency of doing so?

General WALSH. It will significantly impact generating the benefits that the project was supposed to do.

Ms. NORTON. There is some deterioration and degeneration of work already done?

General WALSH. If we start a physical construction certainly that will be the case, and we have a project that we call Olmsted that will be out of authority at the end of the year and we will start slowing this project down to the point where we will be taking all the workers off of the site and just putting a security guard at it.

Ms. NORTON. If anybody is interested in Government waste, this is one of the most, one of the greatest wastes one could even imagine because if you ever get back to that project and you can't even assure me, General Walsh, can you, that you will ever get back to such a project because the funding may not be there?

General WALSH. Right. Without the authority and the funding to move forward to complete a project, we would have to close it down.

Ms. NORTON. So you are going to have a partially done project. All of that money should be counted as wasted. There is a project here in the District of Columbia which is considered quite high priority, and I am talking about the levee on the Mall. And the reason, of course, that it is high priority is that all your iconic monuments are located either on the Mall or in the vicinity of the Mall. You have difficulty with the contractor. I have been briefed on that.

What is the state of this levee project on the Mall to protect the National Mall where you were only funded for phase 1 and what will come of phase 2?

General WALSH. We will be able to use the funds appropriated to move forward as far as the funds are available and hopefully it will be enough to finish up phase 1. As you mentioned, we have had a challenge with the current contractor, and we have moved him off the site and asked his surety, his insurance bond, to come and take that project over. The district commander is still in negotiations with the surety.

Ms. NORTON. Is there any chance that the levee on the National Mall would be left unfinished?

General WALSH. If there is not enough funding then we would not be able to finish the project.

Ms. NORTON. But you say the funds had been appropriated, you had problems with, of course, the contractor. You have surety. Now that you have surety, can you assure me that with the available insurance the levee, the Mall levee will be completed?

General WALSH. I can't give you——

Ms. NORTON. At least phase 1.

General WALSH. I can't give you that assurance right now but I will talk to the division and district commander and respond to you.

Ms. NORTON. I wish you would get the response to the chairman, who I am sure will let me know within 30 days.

[The information follows:]

> The Corps and the surety are finalizing a takeover agreement to resume construction of Phase I of the project. Upon execution of the takeover agreement, construction of

the 17th Street closure structure would resume, and should be completed within available funding.

Mr. GIBBS. OK.

Ms. NORTON. Thank you.

Mr. GIBBS. Time is expired.

Mr. Webster.

Mr. WEBSTER. Thank you, Mr. Chairman. I have a question, General, there is a list of final reports that are still under development and we have four projects in the Everglades I know you know about and there is still one that is still not finalized which would be the fifth project. There is an italicized date here of December 2013, which would be this year, that the potential of it being finished. There is, though, a little sub thing that says, barring any legal problems. The project is the central Everglades pilot project and there is an ongoing decades old lawsuit dealing with water quality, and I would assume that would be maybe the biggest hold up, I don't know.

But my question is, is there any guarantees that that could be settled before the end of this year or anything that you might be able to tell me about that, that we could finalize that after it has been going on for a long time.

General WALSH. Yes. We are working on it diligently. We brief the Assistant Secretary of the Army fairly often on that particular project. I couldn't guarantee we are going to have it done but we are putting the appropriate amount of effort to make sure we can deliver on that.

Mr. WEBSTER. Would it be true if we were to stay with the way it is done right now in the 2007 WRDA bill and policy would remain the same, if we miss that deadline for getting the Chief's Report in, it would have to wait until the next passage of another WRDA bill in order to get included; would that be true?

General WALSH. People sometimes think that it just needs a Chief's Report submitted to Congress. What it really needs is a Chief's Report which has been submitted to the administration, goes through administration review and then sent over to Congress. I believe the current authority is those Chief's Reports that come to Congress from the administration are available for the Congress to authorize. So it would——

Mr. WEBSTER. Yes. I was only looking at my next step which is a big step is getting that Chief's Report.

General WALSH. The next step is the Chief's Report but it won't be over to Congress until it comes through administration review.

Mr. WEBSTER. But my question is if we miss that deadline, we would have to wait, if current policy stayed in place we would have to wait until the next WRDA bill in order to get that project moving.

General WALSH. Yes. That will be the next opportunity for regular order to authorize a project.

Mr. WEBSTER. Thank you. I yield back.

Mr. GIBBS. Mr. Nolan, do you have a question?

Mr. NOLAN. Thank you, Mr. Chairman.

And General Walsh, thank you for your service and your testimony here today.

I have got, I just have a couple of quick questions here. I don't know if you can answer them or not. I hope so.

A person who is quite familiar with the committee and the Army Corps and some others have suggested to me that in reviewing the Chief's Reports over the years that perhaps as much as two-thirds of Corps projects have been concentrated in the southern United States. And perhaps that is the result of Katrina and the BP oil spill, but the States of Mississippi, Louisiana, Texas, Alabama and Florida, how much of the total Corps budget in your judgment is spent in the Katrina impact area versus elsewhere in the United States?

General WALSH. Congressman, the Congress authorized $14 billion to build the flood damage risk reduction system around greater New Orleans. And so that large amount of funding kind of changes the ratio of what things look like from around the U.S.

I don't know what data your friend gave you, but certainly that $14 billion is—we are about $11 billion into that particular project, $3 billion left to work.

Mr. NOLAN. So if you exclude that, take that out of the picture, how does it apportion across the country do you think?

General WALSH. I hadn't looked at it from that perspective, Congressman. I have worked as a district commander in California in both San Francisco, Sacramento, and we had plenty of projects there to work on. I was a commander for South Atlantic Division and we had a number of projects also in the Southeast and then I was a commander for the Mississippi Valley Division. So from where I have sat it seems to be evenly placed. But I never sat down to work the numbers or the authorizations. It really would depend on what data that you are looking for, authorized projects or funds or I am not quite sure what that data would show.

Mr. NOLAN. I am trying to get a feel for where all the projects and all the money is going.

One other unrelated question but an important one, and that is how much additional revenue do you estimate is needed for the Corps to meet what the Corps perceives to be the Nation's existing needs?

General WALSH. Sir, I don't know if I can have an answer to that. Certainly the water resource needs of the future in America is going to become more acute, I think. Oil was the significant liquid in the last century. Water is going to be the significant liquid in this century certainly in the United States. As water becomes more dear we are going to have significant problems like we have between Georgia, Florida and Alabama on who is going to be able to take water out of the river, the same thing with the upper Missouri and the lower Missouri States are arguing over water as well. I think they are going to be more acute in the future and we are going to have to address those as we get to it.

Mr. NOLAN. Are you reasonably certain in your mind that we will need additional revenues to meet the ongoing needs of the future?

General WALSH. Yes, Congressman. We are going to have to address the water problems of this Nation in the future.

Mr. NOLAN. And that will require more revenue in your judgment?

General WALSH. And that will require more authority and more funding.

Mr. NOLAN. All right, thank you very much, General, for your service and the great job that you guys do.

General WALSH. Thank you, Congressman.

Mr. GIBBS. Mr. Davis.

Mr. DAVIS. Thank you. General Walsh, Mr. Brown, thank you for being here. Jen Greer, thank you also for being here. It is always nice to embarrass the staff once in a while as a former staffer.

General WALSH. I try and do that as well, Sir.

Mr. DAVIS. Well, good. Jen and I have worked together since she was in the St. Louis District and I have had the pleasure of working with the St. Louis District personnel, Rock Island personnel and Louisville District personnel for the last 16 years and you have some fine people that work for the Corps of Engineers. So thank you for what you do.

General WALSH. Thank you, Congressman.

Mr. DAVIS. I want to center most of my comments and questioning on the Metro East levee project in southwestern Illinois. As you may know the levee district, a local levee district was created in 2009 called the Southwestern Illinois Flood Prevention District which was set up to bring in revenue to provide the local share of upgrading our levees that protect many of the areas in southwestern Illinois.

It seemed at that time that FEMA was going to go through a de-accreditation process to move the levees into, to de-accredit them to put them in much more of a flood hazards zone and therefore rising costs for many of my constituents and Bill Enyart's constituents in southwestern Illinois.

The locals have done their job, they have put together the plan of action, they have made sure that they have gotten a revenue source to be able to move projects forward and they are a little frustrated right now.

The first issue that has been brought to my attention is that there seems to be multiple layers of review in the St. Louis District and in Washington, DC, and it seems to stall the project to the sense that we are sometimes fighting a battle of who is going to wait the longest, FEMA or the Corps or the locals to actually get this project done. At a time when Federal funds are limited and we are asking these local sponsors like the Southwestern Flood Prevention District to take on more responsibility for improving these deficient levees, what is the Corps doing to expedite and streamline the technical and regulatory review process of these locally sponsored projects?

In particular in the Metro East we have projects that are designed by private engineering firms, licensed professional engineers with documented expertise, but it seems these designs just get caught up in these layers that I mentioned. Can you explain this and answer this question?

General WALSH. Yes, Congressman. By the way, the local levee district was excellent in bringing in revenues so that they can fund the projects that they need to move forward. The Metro East project was authorized to provide about 500-year level of protections and the locals want to work through, not go right to the 500,

they want to go through a 100-year level or 1-percent chance of flooding to the 500-year. We have been working very closely with that board in making sure as they do the engineering, we have something that is called a 408 permit, to make sure that they are doing the engineering correctly before they significantly influence that levee. We wouldn't want, and I think you would agree, we wouldn't want them to do something on a levee that protects that city that was not a tried and true method of providing flood risk reduction in that particular area.

They were using a technique that we hadn't seen used in a large way in that area. So we had to make sure that it was not only cutting edge but also going to be providing the benefits that were talked about.

I think over time they recognized that that was not the solution and they have gone back and come up with a different more tried and true engineering solution to that project.

Mr. DAVIS. Well, thank you, General Walsh. My time is running out so I am going to throw a few things in my last line of questioning to get you to respond.

First of all, when do you expect the decision that might be made so that we can move through this 408 process? What is your, is any other information that the locals need to provide that is subject to review? And could we get a timeline on when a decision is expected?

Also, could you let me know when a decision is expected on the request by the locals for a project labor agreement? The comment period is still open. I want to know if you expect a decision soon and if so when.

And also, General, I look forward to working with you on a couple pieces of legislation that I have introduced. One is the private partnership, the Public-Private Partnership Act, the WIN P3 Act. I am really looking forward to seeing projects up and down the Mississippi and Illinois River move forward and I would love to hear a response on how you think that could affect the outcome of upgrading our locks and dams. And also since I represent an ag district we have a bipartisan piece of legislation called the Mississippi River Navigation Act. So hopefully both of these proposals that are in the Senate WRDA bill will be put in the House WRDA bill, and I would like your take on both of them.

So thank you.

General WALSH. Thank you, Congressman.

Mr. GIBBS. Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman.

General, thank you very much for the work that you and the men and women in the Corps do. It is extraordinarily important across the Nation, I believe we have some issues on the Missouri or one of the rivers this morning with some levee breaks, so the protection of our population from flooding is of utmost importance. It certainly is in my district, I represent 200 miles of the Sacramento River Valley, including the Feather and Yuba River systems and the Delta of California. For us, here in the dais, we have the responsibility, we just took $250 million out of your budget for this year in sequestration and asking you to do more. I don't think that is responsible for us to do such a thing but we did it. Hope-

fully we can replace that money and more. The earmark is an issue, we have had many discussions about that in this committee, and we really need to get at that. It is something that is very, very important. We have the responsibility and we have foregone that responsibility by eliminating our ability to direct projects, and I would, I think we all know that. We have to find the courage to revisit and overcome the earmark.

Specifically, General, you mentioned the 408 in the previous question. We have a 408 issue on the Sutter Butte Levee project, the Feather River program, about 40 miles of levee of utmost importance to Yuba City and the surrounding communities. I know this is being processed and I thank you for the work that is being done in getting that 408 approved and out of the way. There are no issues but if there is a further delay, we will miss this year's construction on a section of the Feather River Levee that has broken twice in the last 40 years. Earlier many lives were lost. This is a Shanghai Bend portion of that. I ask for your attention to that and, if possible, quick action on it so that that project can get underway. It is not Federal funding involved here, it is a local program and State.

Beyond that, there are going to be many issues. The WRDA bill that has been passed by the Senate only authorized those projects that have a Chief's Report at the time of enactment, which will probably cause projects that are important to Members in this House and maybe some Senators to be delayed, as was discussed a moment ago, for some period of time until there is a new WRDA bill. I think we ought to take a very close look at that.

General, your comments on this would be appreciated. How can we overcome that particular problem where we would be dependent upon a Chief's Report until there is a new WRDA bill which could be years in the making?

General WALSH. Congressman, both the chairman and ranking member talked about that in their opening statements. When the Water Resources Development Act started in the seventies it was planned that it would happen every 2 years. It hasn't and that is the method to authorize water resources projects. So I won't comment on the Senate piece but getting back to regular order as mentioned by the minority member probably is the approach.

Mr. GARAMENDI. I suppose it wasn't a fair question to you. That is a question for us I suspect. So my apologies, General. I will let it go at this. If you would just take a quick look at the Sutter Butte project on the Feather River, the 408 issue is before you and your shop and quick review, all of the issues were addressed in the earlier review and if you could pop that out it would be very helpful and we can get that project underway this summer in anticipation of next year's rain, particularly on the Shanghai Bend.

Thank you very much, General, and, Mr. Chairman, I yield back.

General WALSH. Yes, Congressman. We will take a close look at it. It hasn't made it to headquarters yet. I am expecting it later this month.

Mr. GARAMENDI. Mr. Chairman, if I might, General, California has been in the President's budget, has been well, not well cared for but there are many, many projects and a lot of work and I want to once again thank the Corps and the men and women in the

Corps for their work on those projects throughout California and we really appreciate it. Hamilton City and others. Thank you.

Mr. GIBBS. Mr. Ribble.

Mr. RIBBLE. OK, thank you, Mr. Chairman. My name is Reid Ribble. I am from northeast Wisconsin, including the cities of Green Bay and Appleton, so right on the shore of Lake Michigan there. And I apologize in advance if my questions are redundant from something you have heard before. I had to step out of the room for about 10 minutes and somebody else might have talked along the same line but I have heard a lot of comments today about how do we speed things up, how do we make this more efficient, how do we actually get there.

And based on your testimony today it sounds like a project typically begins with a reconnaissance study, which when that is done initiates a feasibility study, which is six steps in the feasibility study; concurrently going on there is a NEPA study, there are a series of checkpoints during this study to make sure you are complying with laws, and then after that there is a quality review of the study. After that there is an agency technical review of the quality review and then an external peer review.

Going on into your testimony, the MSC commander performs a quality assurance review on documents that they are going to transmit to Corps headquarters which then Corps headquarters performs a 45-day policy review in advance of the Civil Works review. After the CWRB determines a report is sufficient, they release, the study is released for a 30-day State and agency review. After the State and agency review is done, the report of the Chief of Engineers is finalized and processed and the final package includes the agency responses to that, a signed report of the Chief of Engineers transmits a recommendation to the Assistant Secretary of the Army for Civil Works. It then goes to there upon receipt of the report of the Chief of Engineers shall review and provide any recommendation regarding the project to Congress within 120 days. The ASA(CW) prior to transmittal of a Chief's Report to Congress is responsible for determining that the recommendations of the Chief of Engineers are compliant with other policy, including applicable laws, Executive orders, and regulations, which entails an additional review to make sure that there are no unresolved issues. In addition, at the end of this you say in addition then the Office of Management and Budget under Executive Order 12322 reviews the proposed project for consistencies with the principles and guidelines.

Well, I am glad that they are reviewed.

I am assuming some of these are required by law, that men and women like those of us sitting at the tables up here are making you do all these reviews. Some of them are probably your efforts to make sure that things are done right.

But it seems to me that we have created a system of review that is now handcuffing the Corps from doing things that your Corps competencies should be able to do without these layers.

And I am wondering is there a lack of confidence in your teams that you require all these reviews? Or how do we get to a place where we could actually streamline these things so that the process

can move forward which would save the taxpayers' money and work would actually get done which would boost our economy?

General WALSH. Thank you, Congressman. Sounds like you have got our process down. It is a difficult challenge to move a Chief's Report through all of the processes, which is why the Chief of Engineers has adopted our planning modernization process as part of his Campaign Plan so that we can do a Chief's Report in 3 years. That is his requirement to us, and we are moving forward with putting those together.

What that means is at the beginning of the process, we bring the three levels of the Corps of Engineers, the headquarters, the division and the district, and the non-Federal sponsor together and we go through to make sure that we are scoping the project realistically. If it is a flood control project, what are the solutions to solve those, let's look at the policy level issues at the beginning of it as we are scoping the project and bringing it forward.

Mr. RIBBLE. Can I interrupt you for a second? Is this process the same for all projects? Or is there a difference between a flood management project, which seems to be fairly complex, and maybe dredging the harbor way in Green Bay, Wisconsin, which seems pretty simple to me? Is the process the same?

General WALSH. If the project is going to get authorized by Congress, they have to go through this process. Now if it is a small project we have the Continuing Authorities Program for those projects that are $5 million and less, and some people say abbreviated process. But I think trying to get to a Chief's Report in 3 years is the key item that we are working on, to get through all of those hoops and hurdles that you just mentioned, and I call them hoops and hurdles, but there are good policy reasons on why we do a lot of those, particularly State and agency review and public review, because there are things that we might not have looked at as we are doing the engineering analysis. And so we are looking to get those things completed now in 3 years.

Mr. RIBBLE. And I would encourage you to the ability that you can to let us know what we can do to help you to streamline this process, whether it is concurrent review system or something, because this is hugely expensive to the taxpayer and the delay is even more costly to the economy.

Thanks again for being here. I don't mean to be critical. I am just trying to get my arms around what we can do to get a better policy moving forward. And with that, Mr. Chairman, I yield back.

General WALSH. Thank you, Congressman.

Mr. GIBBS. Ms. Esty.

Ms. ESTY. Thank you, Mr. Chairman, and as I have recently had the pleasure of welcoming your crew from New England to my district a couple of weeks ago which made people very excited to have our Corps Day and you have an excellent crew, and I want to thank you. My grandfather helped build locks and dams on the Mississippi with the Corps back in the 1940s, so a long history.

In the past, as has already been mentioned by my colleague, Mr. Garamendi, Congress prioritized projects in the Continuing Authorities Program. Given that that is not now happening and we are much more restricted in that, I am concerned that the program is oversubscribed heavily. And can you talk to us a little bit about

how the Corps prioritizes projects in the Continuing Authorities Program at this point, how many projects are currently in the queue for example.

General WALSH. The Continuing Authorities Program is oversubscribed and trying to get to those projects that are closest to being complete, prioritizing those, funding those at the highest that we can for capability reasons and then bringing them to a conclusion and then going to the next one down on the list is the best way I know to go get them to completion and then go down so you can get the next one. So instead of lots of projects with limited funds, let's just work down the list.

Ms. ESTY. And if you can give is us any advice. For example, I have a big I have a project in my district in Meriden, Connecticut, that has matched funding coming in from EPA on some elements on brownfields funds coming in from the State government on a variety of different issues.

Is that something that would receive additional priority because you already have committed funds, HUD funds and elsewhere?

General WALSH. It would certainly be included in the thought process in regards to prioritization. But again I don't know where that project is and how close it is to completion. I would have to look at that, but certainly having more people at the table contributing funds to a particular project is something that we are looking forward to in the future.

We are looking forward to putting a future budget together based on the watershed approach. Right now we look at the program project by project and sometimes a project may have negative impacts in another area. So we are looking at how to evaluate all of the water resource needs in a watershed. We would bring together all the Federal agencies, nongovernmental and local governments, and try to figure out how to work on solving the water resource needs from a watershed approach.

Ms. ESTY. Well, I am very grateful to hear that because we are not in the water stressed regions of California but rather these issues on watersheds where if one community does one project, you can actually just aggravate issues further downstream with flooding issues. We are working very hard in Connecticut, for example, on restoration of borders of streams. Well, that has come in conflict with levee requirements in areas from 50 years ago and we are having a great deal of tension around that. So I think a watershed approach would actually be extremely helpful for a district like mine with New England where sadly with the increase of severe weather events, which was my previous hearing we were hearing about severe weather events on the Science Committee, that we are going to see more of this and we are going to see more rapid downpours putting stress on watersheds that previously didn't have flooding and now are going to have flooding.

So again we share concerns about inadequate funding making your job difficult, making your task and our shared task of ensuring the safety of our communities and our citizens, putting them at risk. And we look forward to working with you. Thank you for your service. I yield back the balance of my time.

Mr. GIBBS. Thank you.

Mr. Rice.

Mr. RICE. Thank you, sir, and thank you, General Walsh, for being here today. I have had the opportunity to meet with General Walsh, and your decades of service—distinguished service—I believe him to be an honorable and bright man who has done a lot for our country and your work on this 3x3 is critically important. I don't think there is anything more important than keeping our Nation competitive with the rest of the world. I think we are feeling a little bit in that regard not because of your efforts but because of ours, and infrastructure is the key to that. It is so hard to find the infrastructure dollars and when we have these processes and regulations in place that require these lengthy studies that you have to undertake, then a lot of those infrastructure dollars end up being diverted into the studies rather than into digging ports or laying asphalt or building levees.

So, that is my key concern.

I listened to the processes that Mr. Ribble ran out. I realize that we have got an incredible amount of work to do in that regard. Certainly we have to protect the environment, but we also have to protect our economy. So anything we can do, I think we have placed you in a vise. You are caught between Congress encouraging you, pushing you to make things happen more quickly and trying to satisfy the laws that we have in fact put in place. So I feel for you. I know you are in a tough spot. And I appreciate your efforts to do both. And I just want to know what we can do to help you accomplish that.

General WALSH. Congressman, I think the recognition that infrastructure is key to the future, being competitive is going to be very important. A lot of times when we talk about infrastructure, we talk about roads, rails and runways and sometimes we forget to talk about rivers. And so as we as a Nation address the infrastructure issues of the future we need to also need to recognize that fourth R as we move forward.

The American Society of Civil Engineers released their report a month ago that said that our infrastructure is a D, and not getting well fast. And so I don't know how—it will be a challenge to remain competitive as we move into the future, as other people are beginning to develop their water resources such as Brazil, India, China and others. And so I think we as a Nation need to recognize that the infrastructure is tremendously important and not so much an expense but an investment on future benefits.

Mr. RICE. I completely agree with you and use those same words when I look at projects like the Port of Miami which have taken over a decade for approval and don't involve any Federal dollars, and when I look at the fact that the Panama Canal will be open for these post-Panamax ships in a year and a half and we are going only going to have two ports on the east coast that can take them, Baltimore and Norfolk. I recognize that we have got to get ourselves out of the way and get these infrastructure projects built because if they drop the cost of transporting a container by 10 percent and we can't take these ships then we are placing our American businesses at a competitive disadvantage and we will lose real American jobs. So we have got to work ourselves out of this conundrum. We have got to simplify this process.

I so appreciate the fact that you have put yourself into this with this 3x3. My only encouragement to you is that we get it to a 1x1 because when I think about the fact that they have been working on in Miami port project for 13 years and you mentioned Brazil and India and China, I wonder how many ports have been deepened in those areas in that 14-year period, and even if we started digging today that Miami port project would not be completed by the time the Panama Canal is open.

So it is a real serious crux issue for this country. And I look forward to your suggestions on how we can deal with it. Thank you very much, sir. I yield back my time.

General WALSH. Thank you, Congressman.

Mr. DAVIS [presiding]. The gentleman from North Carolina, Mr. Meadows, is recognized.

Mr. MEADOWS. Thank you, Chairman Davis, and thank you, General Walsh, for being here. Mr. Brown, thank you as well. And I don't want to address any specific projects, but I do want to go back and follow up on what the gentleman from South Carolina was hitting on and it is about the speed of those projects.

We never kill a project, we just study it. And the problem with that is we study it and study it and study it until eventually it either goes away or it gets defunded or people holler so much that we have got to do something about it. And so with the 3x3 process, I see a lot of our problem being more regulatory and administrative law versus just laws that are dedicated by Congress. And so what I would ask you to comment on specifically is what regulatory agencies do you see, whether they be Federal or State agencies, are creating the most burdensome regulatory compliance issues that you are having to deal with in order to get some of your studies done so that we can get construction to actually happen?

General WALSH. Well, sir, we work with all the Federal and State regulatory agencies.

Mr. MEADOWS. So if you could eliminate one which one would it be?

General WALSH. I don't know I would eliminate the mission of any of the agencies that are out there. Certainly, and I know you might agree if you have traveled to a lot of international places, there are places that don't put as much effort in their environment, their water and air, and it is just deplorable. I think our environmental laws were put in place and have significantly helped our environment.

Mr. MEADOWS. So you are saying you wouldn't change any of them? Because what I am trying to find out are what are the regulatory things that you are having to deal with that if you were in my position you would say well, let's get rid of this and you are saying every regulation and every policy that we have out there right now has an ultimate good, I think your quote was it is good policy.

So you are saying you wouldn't get rid of anything to speed up the process?

General WALSH. At this point as we go through the regulatory processes, people are looking at the things that were authorized by Congress for them to look at if they are talking from a Federal perspective.

From the State, certainly the State historic preservation is something that we need to look at as we go through a particular project. And I think there, to look at things from a historical perspective is important and we should be doing that as well. So I can't think of something that I would say this is the red star cluster that I should ask you to take out.

Mr. MEADOWS. Not a single Federal regulation that you would get rid of?

General WALSH. Not a red star cluster that I would tell you, no, sir.

Mr. MEADOWS. All right. Are there any other agencies that you would prefer to be under your purview where you don't have to work with somebody from a different agency so you can streamline the process that way?

General WALSH. Sir, I think the laws of the land have put these agencies and processes into place to look at——

Mr. MEADOWS. Let's assume that we can change the laws. What would you change?

General WALSH. I wouldn't be able to put that out to you right now in regards to change. We work very closely with our regulatory agencies so that we can respond to their requirements and meet the national goals from an environmental point of view.

Mr. MEADOWS. And so if we give you additional time, can you come up with recommendations that you can submit to this committee or are we just going to be going to have these kind feasibility studies that are sitting here in front of me forever that 90 percent of the people don't read anyways? What can we eliminate to streamline the process?

General WALSH. What we are looking at now is, again, bringing the three levels of the Corps of Engineers to look at a project, at the scoping mechanism. We are looking at how to scope it realistically, and so I think that is what is really going to drive a smaller project volume than what you see there to what I am looking at—probably a 100-page report that we can bring over here to Congress.

I think we can streamline from that perspective.

But having our reports go through environmental, State and agency review I think is important to meet all of the needs of a particular project.

Mr. MEADOWS. All right. So I am out of time and I will yield back, but this last question. So am I to understand there is not a single regulatory act or agency at this point that you would do away with to streamline the process other than the State historic?

General WALSH. No, sir. I wouldn't. I would not be able to provide a list of those things that were put in place by law and that I have to abide by. And I did not say that the State Historic Preservation Office should be eliminated.

Mr. MEADOWS. I thank the Chair's indulgence. I yield back.

Mr. DAVIS. The gentleman from Long Island, New York, is recognized for 5 minutes.

Mr. BISHOP. Thank you, Mr. Chairman. I want to pick up where the gentleman from North Carolina just ended. We have, I thought Mr. Ribble did an excellent job of delineating the process, the overwhelming majority of which has been imposed on you by us. And

so I guess I want to ask the specific question, and I know you can't answer it now, but I do know that as we are preparing WRDA 2013 there have been conversations at the staff level about how we can try to streamline the process.

Can I ask that you come back to us, not now, in writing, with whether of the 21 steps, are there any specific steps that we could either eliminate or consolidate with other steps? Or are there blocks of steps that we can either eliminate or consolidate as we look to go forward here?

General WALSH. Yes, sir.

Mr. BISHOP. Thank you, General. I appreciate it. I think that would be very helpful for all of us as we try to work our way through this process.

The other thing I just want to sort of emphasize a point that I made earlier and then ask a question about that. When Mr. Denham asked you the questions about the project that he is interested in in California and his concerns about how long it has taken, your response was, I am summarizing your response, that basically the funding stream was uncertain which delayed the project and that there was then, I won't say a disagreement, but some lack of consensus with your local cost share partner in terms of the right way to undertake the project, is that correct?

General WALSH. Yes, sir.

Mr. BISHOP. So, two, a project that had a long gestation period and two of the problems were the problems that we have been talking about which are funding and cost share partner having either insufficient funds or a different idea on how the project should go forward.

General WALSH. That significantly impacts the duration of a project.

Mr. BISHOP. So here is my question. I represent eastern Long Island. I have about 300 miles of coastline, including about 75 miles of Atlantic coast. We now have $5.3 billion through the Sandy supplemental that will go to the Corps to repair Sandy-related damage and mitigate against further damage if we are to get another storm of the same intensity as Sandy. Now that is a lot of money.

Will that not give us an opportunity to see how the Corps can work through a process when the funding stream is guaranteed and, at least in this particular case, for Fire Island and Montauk Point reformulation study area projects, the local cost share, Federal Government is going to take 100 percent of the cost share. So that will give us a mechanism or probably a living example for us to see how the Corps process works when it is adequately funded, right?

General WALSH. Yes, sir.

Mr. BISHOP. OK. And that we also had that opportunity with Katrina right? Which we have got an awful lot done in a relatively short period of time with Katrina.

General WALSH. Yes, sir. The three things we had at Katrina was full Federal funding, an abbreviated NEPA process, and a commitment from the Nation to get it done in a short amount of time.

Mr. BISHOP. I guess what I am saying is I want to make sure we keep our eye on the ball, that we are all talking about regulatory agencies and 21 steps—and by the way I don't mean to di-

minish the importance of those, but we could eliminate all of that, and if we give you funding in dribs and drabs year after year after year, projects are going to take a hell of a long time to get done, right?

General WALSH. That is correct, sir.

Mr. BISHOP. Thank you very much, gentlemen. And I really appreciate your work and I wish you well in your retirement. Thank you.

General WALSH. Thank you, sir.

Mr. DAVIS [presiding]. Hello again, General. I left off my line of questioning, I ran out of time and didn't give you adequate time to respond to some of those questions. So I would like to reiterate a few of them.

First off, can you give me an estimated time of when you think the 408 permit process for the Southwestern Illinois Flood Prevention District might be all issues settled and offered?

General WALSH. Sir, the last time I looked at that was about 3 months ago. I would have to get an update from that. Three months ago we had not yet had the submission from the local sponsor. So I couldn't give you an answer because we hadn't gotten the submission and I don't know if we have it yet. So I will have to go back and look at it and certainly can have one of my staff call your staff later this week and tell you where we are in that process.

Mr. DAVIS. Thank you.

General WALSH. That particular issue had us look at 408 issues, both minor 408 and major 408, and if it is a minor 408 issue, they can resolve that locally, and if it is a major one it has to come to headquarters for our review.

The last time I worked at that particular project, we decided that it was a major 408. But again if the submission has changed then it may be minor but I don't know the details.

Mr. DAVIS. Thank you very much for that.

I know the locals have also requested to use a project labor agreement on one portion of construction, on the Wood River cutoff wall project in Wood River, Illinois.

Do you have an estimated time of when a decision will be made of whether or not that request will be granted or denied?

General WALSH. I think it is still out for comment and as soon as the comment period closes, the district commander will make a decision. I will have to have staff get back with you later this week on the timeframe because I am not familiar with that.

Mr. DAVIS. OK, thank you for that.

Another one of my pieces of legislation that I talked about hopefully it is going to be included in any WRDA bill that passes our Chamber just like it is in the Senate, is our Public-Private Partnership Act, the WIN P3 Act, which I think could give the Corps some valuable tools to move projects that are essential right now up and down the Mississippi River in and around my district that are essential to my constituents' jobs and our local economy.

Can you comment on how you think that piece of legislation or that language that is in the Senate WRDA bill in the language that is in our bill how could it positively affect some of the large infra-

structure projects that you may be working on in the future throughout this country?

General WALSH. Congressman, generally, we don't make comment on pending legislation. So I won't comment on either the Senate or your——

Mr. DAVIS. But it is a good bill.

General WALSH [continuing]. Your bill as well. But I think and we are working on how to use public-private partnerships in the future. Certainly our hydropower systems are running at about 89-percent efficiency. If we had more investments in our hydropower system and bringing the efficiencies up from 89 percent to normal industry standards, which is about 98 percent, if we can't fund that out of the general fund then let's bring in a public-private partnership, fund the difference and figure out a way for him to pull his investment out of that particular project.

I have got guys working on trying to figure out how to do public-private partnership in water resources in the future, and that hasn't developed far enough along for me to share yet.

Mr. DAVIS. OK. I have another bill, the Mississippi River Navigation Act, that I know you can't comment on. So let me ask you can you comment on how further study, more navigation tools for the Corps and forecasting improvements can help Corps prevent further problems like we saw last year during the low water on the Mississippi when it comes to navigation?

General WALSH. Certainly we have a project that is called NESP, Navigation Ecosystem Sustainment Program, that is work on the upper Mississippi and we are trying to figure out how to forecast grain prices 50 years from now and that is challenging to do and put together a decent cost-benefit ratio on that. But we are still looking at what kind of tools can we use to pull that together.

In regards to floods and droughts, at the beginning of this year we were in the flood stage and we were briefing everybody that needed to be briefed and 2 months later we were in the drought stage and we had to blow up the pinnacles down in the St. Louis area and now we are in flood stage again. I don't know, certainly working with the director of National Weather Service I don't know if the climatologists were giving us this variability in the last 4 months. I don't know that we have a tool that could do that. But certainly we are working with what I call the fusion cell between the Corps of Engineers, the National Weather Service, and the USGS to figure out how and where should we be investing resources so that we can have a better predictability on water and water resources.

Mr. DAVIS. Well, thank you very much for those comments.

I am concerned about the flooding that is going on right now. I understand that you have to deal with a wide variety of issues, droughts, floods. Thank you for all your district service in helping to fight the floods along the Mississippi right now. My heart goes out to the hard work that they are putting in on a daily basis.

We want to give you more flexibility to be able to address those situations, which is why I put that bill forward. So if that is something we can do to allow you to come in and address emergency situations, I think we should work together to make that happen.

My last line of questioning has to do with infrastructure. As I mentioned before, I have been working for your local districts for upwards of 16 years and we have talked about upgrading large lock and dam projects along the Mississippi and Illinois. I have heard comments from the Corps that even if we were to fully fund those projects that are authorized that it would take upwards of 40 years to complete the projects.

Could you comment on the length of time that you think it will take to actually upgrade the locks and dams along the Mississippi and Illinois Rivers?

General WALSH. Right now the funding stream is restricted with the Inland Waterways Trust Fund, which generates about $80 million a year and out of the general fund comes another $80 million, so $160 million a year to do the major work on the locks and dams. And so with that small funding stream, we are just not going to be able to keep up with the infrastructure that needs to be repaired.

There is a lock down in Louisiana, it is call the Inner Harbor and it is 89 years old. As you go through that and the locks open and close, you can see concrete falling off the lock walls into the river. We are not going to get to that at this current funding stream for another 15 years. So it is going to have significant impacts on our infrastructure with the funding stream as it is currently structured.

Mr. DAVIS. I completely agree, which is why we have our WIN P3 legislation that we are hoping to pass.

I am concerned too about Olmsted. I think the Corps had the best intentions to build this in the wet and to come in as close to budget as possible but going from $775 million on a 7-year construction cycle to $3.1 billion, we have got some issues when it comes to large infrastructure projects.

What has the Corps learned in constructing that project that we can then take away to ensure that we don't hit those limits again or exceed them again?

General WALSH. One of the issues that we are having with the Olmsted lock and dam again is the amount of funding that we can bring to that project. At $120 million a year is just a struggle to put together an efficient program to get that complete. What we have demonstrated down in Louisiana is if you give us, and Mr. Bishop already talked about that and the same thing for Hurricane Sandy, full Federal funding, we can go get it accomplished.

In this case we are taking Federal funding and trust fund funding and moving forward at this little amount each year.

The other piece is I think we just did not put together a good cost estimate when we initially put the project forward. So what we are doing now is we put together a center of expertise on cost reviews. That is in the Walla Walla District so every big project that we have we send over to Walla Walla. They make sure that we are doing a fair job saying how much it is going to cost as we move these projects forward.

We will be pulling the men off of this project and right now we have three shifts. We will be pulling them off at the end of the year because there is not enough authority for us to put any more funds on that project. So it will have a significant impact on the benefits

that were supposed to be derived from this project because of the funding, because of funding authority at this point.

Mr. DAVIS. I hope we can work together and come up with a solution to that issue and a solution to make sure that project is completed.

I want to thank you again, General, thank you, Mr. Brown, for being here. Thank you, Jen Greer, for being here too. He pointed you out this time. Thank you all for attending this hearing and the hearing is adjourned.

[Whereupon, at 12:05 p.m., the subcommittee was adjourned.]

**DEPARTMENT OF THE ARMY**
**U.S. ARMY CORPS OF ENGINEERS**

**COMPLETE STATEMENT**
**OF**

**MAJOR GENERAL MICHAEL WALSH**

**DEPUTY COMMANDING GENERAL FOR**
**CIVIL AND EMERGENCY OPERATIONS**

**BEFORE THE**

**COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**
**SUB-COMMITTEE ON WATER RESOURCES AND ENVIRONMENT**

**UNITED STATES HOUSE OF REPRESENTATIVES**

**On**

**"A Review of the U.S. Army Corps of Engineers Chief's Reports"**

**June 5, 2013**

Mr. Chairman and distinguished members of the Subcommittee, I am Major General Michael Walsh, Deputy Commanding General for Civil and Emergency Operations – U.S. Army Corps of Engineers (Corps), and I am honored to be testifying before you today to discuss the planning process and Chiefs Reports for the Corps. My testimony will briefly describe the 21 reports that have completed Executive Branch review since enactment of the Water Resources Development Act (WRDA) 2007. These proposals fall within the main mission areas of the Corps (commercial navigation, flood and storm damage risk reduction, and aquatic ecosystem restoration). Also, I will address three other proposed projects that have reports by the Chief of Engineers but are still under review.

Before I discuss the planning process and the actual Chief's Reports, I would like to discuss the Corps' Civil Works Transformation initiatives. For the last several years, the Corps has been developing a strategy to addresses major challenges including ensuring the performance of the key features of the Nation's infrastructure, and responding to shifting demographics, changes in societal values, and climate variability. The intent is to better equip the Civil Works program to effectively meet current and future needs and ensuring decision makers are fully informed. This strategy is focusing on four main areas - planning modernization, budget development transformation, infrastructure strategy, and methods of delivery.

The Corps planning modernization effort emphasizes execution, instills accountability, and improves the organizational and operational model to produce quality products that address water resources priorities. Part of this modernization focuses on improving the knowledge and experience level of Corps planners through additional training, professional certification, and updated planning guidance. The current focus of our planning modernization effort is facilitating the timely completion of decision documents that appropriately address the increasingly complex water problems that plague communities and constrain economic activity. For decades, the Corps has seen a steady increase in the costs and time required to complete investigations. This trend delays the realization of benefits from the construction of a project. The Corps has recognized the need to modernize its approach, through an initiative that we call SMART Planning.

SMART stands for Specific, Measurable, Achievable, Risk-Informed and Timely. SMART Planning encompasses a new approach to investigations, accountability, and portfolio management. The new approach to investigations reduces resource requirements, both time and money, by appropriately focusing on the key drivers in resolving water resource problems while complying with all applicable laws and regulations.

The goal under SMART planning is to complete most feasibility studies within 3 years for $3 million dollars or less. The end product is a decision document that has been fully coordinated by three levels of the organization (Corps headquarters, the Corps division office, and the Corps district office) from study inception to completion. As a shorthand, we are calling this goal "3x3x3". The Corps expects full implementation of

this new approach in FY 2014 and has been working with its Federal and non-Federal partners to use this new approach in evaluating water resources problems.

The Corps is prioritizing its current portfolio of planning studies and applying the 3x3x3 approach to new and ongoing studies; thus reducing the number of active studies in its portfolio and focusing efforts on completing these studies more effectively by prioritizing funding. The more timely completion of studies will allow the Corps to better use its investigation funding. Since enactment of the Water Resources Development Act (WRDA) of 2007, 21 reports on proposed projects have been forwarded to this Committee, 10 of which were completed in fiscal year 2012.

The Civil Works budget is performance based. In order to achieve budget transformation goals, we must continue to prioritize Federal funding on the highest performing projects and studies. We are working to ensure that the budget development process considers the entire portfolio of potential studies and projects. The funded projects will be completed more quickly, thereby facilitating the realization of benefits for those projects that offer the best return on investment for the Nation.

The Civil Works transformation links national objectives, strategic goals, and current and emerging needs using a systems-based watershed approach. When implemented, this new process will compare outcomes of competing studies and projects based on their returns. Collaboration with our customers, stakeholders, and the public (including input from the Congress) will enable us to successfully implementing this approach.

Ensuring the continued performance of the key features of our infrastructure is becoming more costly over time, in part because of the age of the components of some of our projects, but also due to increases in the cost to repair and rehabilitate them periodically. Operational demands have also grown and changed, particularly over the past 30 years, creating additional stress and we are working on an infrastructure strategy to address these growing needs. The infrastructure strategy incorporates four focus areas: an integrated approach to manage assets, managing the system over its life cycle, evaluating whether a project or group of related projects should remain a Federal responsibility prior to making a substantial further investment, and potential alternative financing mechanisms.

Preliminary efforts in this area include the development of a national inventory of Corps assets that includes the results of an assessment of the condition of each major infrastructure component. This will help us to develop a long term strategy to manage these assets and reduce risk, as well as help us determine where priority investments need to be made. End of life cycle decisions will be made regarding which projects to retain and recapitalize, which projects to repurpose, and which projects to recommend for de-authorization and decommissioning.

Transforming the way we deliver the Civil Works program requires state of the art processes and a highly skilled workforce that is capable of responding to current and future demands. The strategy is to have reliable and efficient methods of delivery by

linking technical capabilities to uniform national standards, maintaining core competencies, and having consistent methods, processes and approaches throughout the Corps. The desired end result is high quality and timely products and services delivered to our customers and stakeholders. To that end, for example, the Corps has established Centers of Expertise for major dam safety modifications, inland navigation design, and deep draft navigation economics.

The Army Corps of Engineers has a strong tradition of working collaboratively with non-Federal interests to plan and deliver products. The current transformation initiative is no different. Our transformation partners include states, tribes and local governments, non-governmental organizations, non-profit agencies, and the public. These partnerships are increasing and will likely continue to increase as we share a common goal of having reliable and resilient infrastructure for our Nation.

I would now like to describe the life cycle of a Corps project. Typically, a project begins with a reconnaissance study performed in accordance with Section 905 (b) of WRDA 1986. The purpose of the reconnaissance study is to determine if the water resources problem warrants Federal participation and warrants moving to the next step which is the initiation of a feasibility study. Upon completion of a favorable reconnaissance report by a Corps district, the district commander transmits the report to the Major Subordinate Command (MSC) for approval.

The district initiates negotiation of a feasibility cost share agreement and project management plan with a potential non-Federal sponsor upon approval of the reconnaissance report by the MSC Commander. These documents define the scope and cost of the feasibility study. The district concurrently develops the feasibility study and environmental documentation in accordance with applicable laws, policies, and regulations including the Nation Environmental Policy Act (NEPA). The primary purpose of a feasibility study is investigate and determine if there is a Federal interest in implementing the recommended solution to the identified water resource problem. The study must follow the six-step planning process which includes:

- Identifying the problem and opportunities
- Inventorying and forecasting conditions
- Formulating alternatives
- Evaluating alternative plans
- Comparing alternative plans
- Selecting a plan

Throughout the feasibility study there are several key checkpoints to ensure the planning process is being executed in a risk-informed and decision-focused manner transparently incorporating the full vertical Corps team, partners, and stakeholders. The first major checkpoint is to ensure alignment between all levels of the Corps and the non-Federal partners on the definition of the future without project conditions and the identification of the water resource problem(s) and solutions to be investigated during

the study. The next major checkpoint is to confirm that both the plan formulation and selection process leading to the identification of the tentatively selected plan is consistent with applicable laws, policies, regulations, and guidance. The district progressively documents decisions, risks, and analysis throughout the study process and this documentation and information feeds the main feasibility report. The district conducts a quality control review on the draft feasibility report and all other referenced or supporting documentation and data. The documentation and models produced will undergo agency technical review (ATR) and the Corps will initiate the independent external peer review (IEPR) process in accordance with Section 2034 of WRDA 2007.

The draft feasibility report must satisfactorily address issues identified during the checkpoints prior to initiating the 30-45 day NEPA public review, final ATR, IEPR, and a Corps Headquarters policy review. Upon completion of the review period and receipt of the review and legal certifications, the district commander transmits the feasibility report to the MSC. The district commander's transmittal includes a recommendation and a draft Finding of No Significant Impact (FONSI) or Record of Decision (ROD). The MSC commander performs a quality assurance review on the documents and transmits the final recommendation to Corps Headquarters, which then performs a 45-day policy review in advance of the Civil Works Review Board (CWRB). The CWRB meeting determines if the report is sufficient and ready to be released for a 30-day State and Agency Review in accordance with the Flood Control Act of 1944, as amended by 33 U.S.C. 701-1. Upon completion of State and Agency Review, the Report of the Chief of Engineers is finalized and processed and the final package includes the Agency responses to IEPR panel comments as required by Section 2034 of WRDA 2007. A signed Report of the Chief of Engineers transmits the recommendation to the Assistant Secretary of the Army for Civil Works ASA(CW), the chairpersons of the Senate Committee on Environment and Public Works, and the House of Representatives Committee on Transportation and Infrastructure. In accordance with Section 2033 of WRDA 2007 and upon receipt of the Report of the Chief of Engineers, the ASA(CW) shall review and provide any recommendations regarding the project to Congress within 120 days. The ASA(CW), prior to transmittal of a Chief's Report to Congress, is responsible for determining that the recommendations of the Chief of Engineers are compliant with Army policy, including applicable laws, Executive Orders, and regulations. This entails a review to ensure there are no unresolved issues and that the project being recommended is economically justified, environmentally and technically sound and that the proposed project was formulated and recommended in accordance with the Water Resource Council's "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies" (Principles and Guidelines). In addition, the Office of Management and Budget (OMB), under Executive Order 12322, reviews the proposed project for consistency with the Principles and Guidelines and the policy and programs of the President.

When the Corps evaluates and formulates a proposed project, in comparing the costs and the economic benefits over time, it uses a discount rate that varies each year, as required under section 80 of the Water Resources Development Act of 1974 (Public Law 93-251). The Executive Branch uses a different discount rate for budgeting

purposes to measure the performance of Corps of Engineers construction projects whose primary purpose is to provide an economic return to the Nation. That interest rate is seven percent.

I will now provide a brief overview of the 21 proposed projects that have completed Executive Branch review since enactment of WRDA 2007. The Army has previously provided the results of those reviews along with the following project information to the Congress.

**Mississippi River Gulf Outlet, St. Bernard Parish, Louisiana Deep Draft De-authorization Study**

In January 2008, the Chief of Engineers signed a report on the deauthorization of the Mississippi River - Gulf Outlet (MRGO) deep draft navigation channel in Louisiana. The report is a final response to the authority provided in the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 and Section 4304 of the U.S. Troop Readiness, Veterans" Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007. Public Law 109-234 authorized a comprehensive plan at full Federal expense to deauthorize deep draft navigation on the MRGO extending from the Gulf of Mexico to the Gulf Intracoastal Waterway. Public Law 110-28 directed accelerated completion of the final report of the Chief of Engineers. Construction to close the MRGO was completed in July 2009.

**Topeka Flood Risk Management Project, Topeka, Kansas**

In August 2009, the Chief of Engineers signed a report on flood risk management improvements on the Kansas River in the vicinity of Topeka, Kansas. The report is a response to authority contained in Section 216 of the Flood Control Act of 1970 to determine whether any modifications to the local flood risk management projects are advisable to improve the reliability and performance of the existing levee system.

The Report recommends modifications to the following four existing levee units:

- the South Topeka Unit: a control berm and modifications to the Kansas Avenue Pump Station and three manholes; and replacement of about 2,000 linear feet of floodwall.
- the Oakland Unit: a control berm, a stability berm, and pump station modifications.
- the North Topeka Unit: a control berm, a series of pumped relief wells, and the removal of an unused pump station.
- the Waterworks Unit: a stability berm.

The levee improvements would provide greater than 90 percent reliability against damages from the base flood, which has a 1 percent chance of occurrence in any given year (formerly referred to as the "100-year flood"). Based on October 2012 price levels, the estimated first cost of the project is about $23.8 million and will be shared 65 percent Federal ($15.5 million) and 35 percent non-Federal ($8.3 million).

**Mississippi Coastal Improvements Project, Hancock, Harrison, and Jackson Counties, Mississippi**

In September 2009, the Chief of Engineers signed a report on comprehensive water resources improvements associated with hurricane and storm damage reduction, flood risk management, and ecosystem restoration in the three coastal counties of Mississippi. The report is in response to the authority provided in the Department of Defense Appropriation Act, 2006.

The Mississippi Coastal Improvements Program (MsCIP) is a comprehensive, systems plan for reducing flood and storm damage risk that incorporates structural and nonstructural risk reduction approaches and environmental restoration features. To address the most critical needs, the report recommends 12 near-term elements which would restore over 3,000 acres of coastal forest and wetlands; restore about 30 miles of beach and dunes; and flood proof or acquire approximately 2,000 tracts within the 100-year floodplain. Based on October 2012 price levels, the estimated total first cost of the project is approximately $1.2 billion, to be shared 65 percent Federal ($815 million) and 35 percent non-Federal ($439 million). However, in Public Law 111-32 (Supplemental Appropriations for the Fiscal Year ending September 30, 2009), the Congress appropriated all of the funds for the barrier island element of the project ($439 million), at Federal full expense.

**West Onslow Beach and New River Inlet (Topsail Beach), North Carolina**

In September 2009, the Chief of Engineers signed a report on hurricane and storm damage reduction along a five-mile reach of Atlantic Ocean shoreline at Topsail Beach, North Carolina. The report is a final response to the Energy and Water Development Appropriations Act for General Reevaluation Report of the West Onslow Beach and New River Inlet (Topsail Beach) Shore Protection Project and the remaining shoreline at Topsail Beach.

The report recommends a locally-preferred plan that includes a 26,200 foot long dune and berm system including a dune three feet lower than the National Economic Development Plan and extends 400 feet southwest to include additional properties that are vulnerable to coastal storm damage. The ASA(CW) approved a policy exception in May 2008 allowing the Corps to recommend the locally preferred plan. The locally preferred plan cost approximately 24 percent less than the NED plan resulting in a cost saving of nearly $11 million. The 400-foot extension costs an additional $320,000 and would be funded entirely by the non-Federal sponsor. Based on October 2012 price levels, the total initial cost of the plan is estimated at $47.9 million and will be cost shared 65 percent Federal and 35 percent non-Federal. The project also includes 50 years of periodic nourishment at $264.7 million based on October 2012 price levels. This cost would be shared equally with the non-Federal sponsor.

**Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, Caloosahatchee River (C-43) West Basin Storage Project, Hendry County, FL**

In January 2011, the Chief of Engineers signed a report on ecosystem restoration improvements for the Caloosahatchee Estuary as part of the larger Comprehensive Everglades Restoration Plan (CERP). The report recommends capturing and storing excess C-43 runoff and regulatory releases from Lake Okeechobee. The excess water captured and stored would be released to augment flows to the estuarine environment at the mouth of the Caloosahatchee River during the low flow seasons. The reservoir will provide environmental water supply benefits to the Caloosahatchee Estuary and water quality benefits that will reduce the salinity and nutrient impacts of runoff to the estuary. The project will also provide water supply benefits and some flood attenuation.

Based on October 2012 price levels, the total initial cost of the project is estimated at $594.4 million and will be cost shared 50 percent Federal ($297.2 million) and 50 percent non-Federal ($297.2 million).

**Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, C-111 Spreader Canal Western Project, Florida**

In January 2012, the Chief of Engineers signed a report on ecosystem restoration on the Spreader Canal located in the Everglades, one part of the larger Comprehensive Everglades Restoration Plan (CERP). The C-111 Spreader Canal Western Project, along with a follow-on Eastern Project, will modify the existing C-111 Canal to change the flow of ground and surface water as a first step in the restoration of the southeastern portion of the Everglades ecosystem. The project will create a nine-mile hydraulic ridge just east of Everglades National Park, designed to keep more of the natural rainfall and water flows within Taylor Slough. The hydraulic ridge will be created by two above ground detention areas—a 590-acre site at the Frog Pond area and a 2–mile modification of the Aerojet Canal. The detention areas will be fed by two 225 cfs pump stations and conveyance canals. Hydroperiods and hydropatterns within the wetlands of the Southern Glades and Model Lands will be improved by the construction of a new operable water control structure in the lower C-111 Canal, incremental operational changes at existing structure S-18C, changes in operations at the existing S-20 structure, construction of a plug at existing structure S-20A, and the installation of ten earthen plugs in the C-110 Canal. The project is essential to achieving the restoration of Taylor Slough and downstream areas of Florida Bay and Everglades National Park, helping to improve ecological conditions in approximately 252,000 acres of wetland and coastal habitat. The increased flows in Taylor Slough will also serve to return salinities to more natural levels in portions of Florida Bay and its associated estuaries. The detention areas and canal levees will also provide public recreational opportunities.

Based upon the October 2012 price levels, the total initial project cost for this project is $177 million and will be cost shared equally ($88.9 million).

**Biscayne Bay Coastal Wetlands, Comprehensive Everglades Restoration Plan, Central and Southern Florida Project, Florida**

In May 2012, the Chief of Engineers signed a report for ecosystem restoration on Biscayne Bay located in the Everglades, as one part of the larger Comprehensive Everglades Restoration Plan (CERP). The Biscayne Bay Coastal Wetlands Project will modify the flow of freshwater to Biscayne Bay as a first step in the restoration of the southeastern portion of the Everglades ecosystem. The project purpose is to redistribute freshwater runoff from the watershed away from the existing canal discharges and into the coastal wetlands adjoining Biscayne Bay to provide a more natural and historic overland flow through existing coastal wetlands. This project will also help restore saltwater wetlands and the near-shore bay through the re-establishment of optimal salinity concentrations for fish and shellfish nursery habitat. The project will restore freshwater flows in Deering Estates, Cutler Wetlands, and wetlands adjacent to L-31E. This will be accomplished through a series of pumps, culverts, spreader canals and mosquito ditch plugs throughout the project area.

Based upon the October 2012 price levels, the total initial project cost for this project is $192.4 million and will be cost shared equally ($96.2 million).

**The American River Watershed (Common Features) Project, Natomas Basin, Sacramento and Sutter Counties, CA, Flood Risk Management Project**

In December 2010, the Chief of Engineers signed a report on flood risk management for the Natomas Basin portion of the American River Watershed in the vicinity of Sacramento, California. This report supplements the 29 June 1992 and 27 June 1996 reports of the Chief of Engineers, and the March 2002 (revised July 2002) Post-Authorization Change Report, and were prepared as an interim general reevaluation study of the American River Common Features Project. The present study was conducted specifically to determine if there is a Federal interest in modifying the currently authorized project features to address flood risk management issues related to levee seepage and stability in the Natomas Basin portion of the Common Features project area. The Common Features Project was authorized by Section 101(a)(I) of the Water Resources Development Act (WRDA) of 1996 (Public Law 104-303), as modified by Section 366 of WRDA 1999 (Public Law 106-53) and as further modified by Section 129 of the Energy and Water Development Appropriations Act, 2004 (Public Law 108-137); and as amended by Section 130 the Energy and Water Development and Related Agencies Appropriations Act, 2008 (Division C of Public Law 110-161).

The report recommends modification of the authorized Common Features project to include a comprehensive plan to reduce the systemic risk associated with seepage and stability for the ring levee system surrounding the Natomas Basin. The principal features of the recommended modifications include widening of about 41.9 miles of existing levee, installation of about 34.8 miles of soil bentonite cutoff wall and about 8.3 miles of seepage berms, and bridge remediation at State Route 99. In addition, mitigation features pursuant to the Endangered Species Act are recommended, including creation of 75 acres of canal habitat and up to 200 acres of marsh habitat, creation of up to 60 acres of landside woodlands, creation of 1,600 linear feet of tree

plantings, and establishment of a monitoring program for assessing mitigation performance.

Based on October 2012 price levels, the total project cost of the project is estimated at $1.42 billion and will be cost shared 65 percent Federal ($943.3 million) and 35 percent non-Federal ($479.5 million).

**Louisiana Coastal Area (6)**

In December 2010, the Chief of Engineers signed a report recommending ecosystem restoration in coastal Louisiana. The report identifies six separable elements that consist of diversions, marsh creation, and shoreline restoration. There are six specific projects covered under the December 2010 report signed by the Chief of Engineers. Based on October 2012 price levels, the total project cost for the 6 projects is estimated at $1.46 billion and will be cost shared 65 percent Federal ($954.4 million) and 35 percent non-Federal ($513.9 million).

**Amite River Diversion Canal Modification:** The primary purpose of this project is to stabilize and restore the natural hydrology of the Maurepas Swamp ecosystem, one of the largest remaining cypress swamps in coastal Louisiana. It provides habitat to threatened and endangered species and buffers Lake Maurepas from the highly developed I-10 corridor. Based on October 2012 price levels, the total project cost for this project is estimated at $8.4 million and will be cost shared 65 percent Federal ($5.5 million) and 35 percent non-Federal ($2.9 million).

**Convey Atchafalaya River Water to Northern Terrebonne Marshes:** The primary objective of this project is to reduce the current trend of marsh degradation in the project area that is a result of subsidence, sea level rise, erosion, saltwater intrusion and lack of sediment and nutrient deposition by utilizing fresh water and nutrients from the Atchafalaya River and Gulf Intracoastal Waterway. Based on October 2012 price levels, the total project cost for this project is estimated at $290.9 million and will be cost shared 65 percent Federal ($189.1 million) and 35 percent non-Federal ($101.8 million).

**Houma Navigation Control Lock:** The purpose of this project is to provide multipurpose operation of the proposed canal lock, if and when constructed, to achieve the project purposes previously described in Convey Atchafalaya River Water to Northern Terrebonne Marshes. Based on October 2012 price levels, the total project cost for this project is estimated at $1.54 million and will be cost shared 65 percent Federal ($998,000) and 35 percent non-Federal ($538,000).

**Small Diversion at Convent/Blind River:** The purpose of this project is to reintroduce the periodic flooding by the Mississippi River to the Maurepas Swamp and Blind River area. This will restore not only freshwater, but also nutrients and sediment from the River, improving water distribution and hydrology, and improve habitat for many fish and wildlife species. Based on October 2012 price levels, the

total project cost for this project is estimated at $120.5 million and will be cost shared 65 percent Federal ($78.3 million) and 35 percent non-Federal ($42.2 million).

**Terrebonne Basin Barrier Shoreline Restoration:** The purpose of this project is to reintroduce vital sediment into the coastal sediment transport system in the vicinity of Isles Dernieres and Timbalier Islands. This reintroduction of sediment will restore geomorphic and hydrologic conditions need to support essential habitat for fish, migratory birds and other wildlife species. The recommended plan includes beach, dune, and marsh restoration of Raccoon, Whiskey, and Trinity Islands. While additional authority is needed to raise the total project cost to allow implementation of the entire recommended plan, the Whiskey Island component of the recommended plan was identified be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007. The Whiskey Island component includes renourishment every 20 years to maintain the constructed features. Based on October 2012 price levels, the total project cost for this project is estimated at $673.4 million and will be cost shared 65 percent Federal ($437.7 million) and 35 percent non-Federal ($235.7 million).

**Medium Diversion at White Ditch:** The purpose of this project is to restore the supply and distribution of freshwater and sediment. It is a key component to demonstrating both the ability to stem or reverse the coastal land loss trend and provide a mechanism to combat relative sea level rise in coastal Louisiana. Based on October 2012 price levels, the total project cost for this project is estimated at $373.6 million and will be cost shared 65 percent Federal ($242.8 million) and 35 percent non-Federal ($130.8 million).

**Surf City and North Topsail, North Carolina**

In December 2010, the Chief of Engineers signed a report on hurricane and coastal storm damage reduction along a ten mile reach of Atlantic Ocean shoreline near Surf City and North Topsail Beach, North Carolina. The report recommends constructing a sand dune at an elevation of 15 feet and a berm with a crown width of 50 feet and a top elevation of seven feet above NGVD over approximately ten miles of shoreline.

Based on October 2012 price levels, the total initial project cost for this project is $125.4 million and will be cost shared 65 percent Federal ($81.5 million) and 35 percent non-Federal ($43.9 million). The project also includes 50 years of periodic nourishment at $212.4 million based on October 2012 price levels. This cost would be shared equally with the non-Federal sponsor.

**Cedar River, Cedar Rapids, Iowa**

In January 2011, the Chief of Engineers signed a report on flood risk management improvements on the Cedar River. The report recommends constructing concrete floodwalls, earthen levees, closure structures and pump stations. Concrete floodwalls comprise approximately two thirds of the total alignment length totaling 2.17 miles. The remainder of the alignment length includes 0.75 miles of earthen levee and a total length of 0.23 mile for all closure structures.

Based on October 2012 price levels, the total initial project cost for this project is $103.4 million and will be cost shared 65 percent Federal ($67.2 million) and 35 percent non-Federal ($36.2 million).

**Sabine-Neches Waterway, Southeast and Southwest, Texas**

In July 2011, the Chief of Engineers signed a report on navigational improvements along the Sabine-Neches Waterway (SNWW). The waterway currently consists of a jettied entrance channel, 42 feet deep and 500 to 800 feet wide, from the Gulf of Mexico; a channel 40 feet deep and 400 feet wide to Beaumont via the Neches River; and a channel 30 feet deep and 200 feet wide to Orange via the Sabine River. When the channel was completed in 1960, it was common for crude oil tankers to average 40,000 dead weight tons (DWT) with loaded drafts of 36 feet. Today, vessels over 90,000 DWT are now used routinely for crude oil imports to both Beaumont and Port Arthur. The recommended plan consists of navigation improvements in seven phases:

1) Deepening the SNWW from 40 to 48 feet and offshore channel from 42 to 50 feet in depth from offshore to the Port of Beaumont Turning Basin;
2) Extending the 50-foot-deep offshore channel by 13.2 miles, increasing the total length of the channel from 64 to 77 miles;
3) Decreasing the width of the Sabine Bank Channel from 800 to 700 feet;
4) Tapering and marking the Sabine Bank Channel from 800 feet wide (Station 23+300) to 700 feet wide (Station 25+800 through the end of the channel);
5) Deepening and widening of Taylor Bayou channels and turning basins;
6) Easing selected bends on the Sabine-Neches Canal and Neches River Channel; and
7) Constructing new and enlarging/deepening existing turning and anchorage basins on the Neches River Channel.

Based upon the October 2012 price levels, the total cost for all phases of the project is $1.1 billion with Federal cost share requirement of $779.4 million and non-Federal cost share requirement of $359.2 million.

**Fargo-Moorhead Metropolitan Area, North Dakota and Minnesota**

In December 2011, the Chief of Engineers signed a report on flood risk management improvements in the vicinity of Fargo-Moorhead Metropolitan area. The recommended project consists of constructing a diversion channel in North Dakota, tie-back levees, a staging area, and a storage area to reduce the existing and future flood risk and damages to public and private infrastructure in the metropolitan area. The locally preferred plan (LPP) is the plan that provides the locally desired level of benefits and follows the locally preferred alignment in North Dakota. The LPP includes: a 36-mile, 20,000 cubic feet per second (cfs) diversion channel; a 50,000 acre-feet storage area; a 150,000 acre-feet staging area; 10 miles of tie-back levees; control structures on the Red and Wild Rice Rivers and Wolverton Creek; aqueduct and spillway structures on

the Sheyenne and Maple Rivers; drop structures on the Lower Rush and Rush Rivers; and non-structural mitigation for impacts in the storage area.

Based on October 2012 price levels, the total initial project cost for this project is $1.8 billion with a Federal cost share requirement of $801.5 million and a non-Federal share of $979.8 million. The local sponsor is responsible for paying 100% of the cost associated with the LPP above the selected NED plan.

**Marsh Lake, Appleton, Minnesota Ecosystem Restoration Project**

In December 2011, the Chief of Engineers signed a report on ecosystem restoration for the Marsh Lake area. The purpose of the project is to restore of the habitat structure, form and function of Marsh Lake. The report recommends restoring the Pomme de Terre River to its natural channel; modifying the dam with a fishway for fish passage; constructing a drawdown water control structure; breaching a dike to restore connectivity to an abandoned fish rearing pond adjacent to the dam; installing gated culverts at Louisburg Grade Road to maintain pool elevations in upper Marsh Lake; and providing compatible recreation features, including shoreline fishing access, picnic facilities, canoe access and a pedestrian bridge over the dam.

Based upon the October 2012 price levels, the total initial project cost for this project is $10 million and will be cost shared 65 percent Federal ($6.4 million) and 35 percent non-Federal ($3.6 million).

**San Clemente Shoreline, California**

In April 2012, the Chief of Engineers signed a report on coastal storm damage reduction along the San Clemente shoreline in California. The primary objective of the project is to reduce shoreline erosion and protecting coastal infrastructure from storm-induced wave attack. The infrastructure includes the Los Angeles to San Diego railroad corridor, which is a vital link for passenger and freight service and has been designated as a Strategic Rail Corridor by the Department of Defense.

The recommended plan identifies initial construction of a 15-meter (50-foot) wide beach nourishment project along a 1,040-meter (3,412-foot) long stretch of shoreline using 192,000 cubic meters (251,000 cubic yards) of compatible sediment, with periodic renourishment on the average of every 6 years over a 50-year period of Federal participation, for a total of 8 additional nourishments.

Based upon the October 2012 price levels, the total initial project cost for this project is $11.5 million and will be cost shared 65 percent Federal ($7.5 million) and 35 percent non-Federal ($4.0 million). The project also includes 50 years of periodic nourishment at $86.8 million based on October 2012 price levels. This cost would be shared equally with the non-Federal sponsor.

**Jacksonville Harbor (Mile Point) Navigation Project, Duval County, Florida**

In April 2012, the Chief of Engineers signed a report on navigational improvements at the confluence of the St. John's River and the Intracoastal Waterway (IWW) known as the Mile Point area. Due to crosscurrents there is a navigational restriction on the ebb tide that affects all vessels that have a transit draft greater than 33 feet inbound and 36 feet outbound, inhibiting the free movement of vessel traffic. The crosscurrents at Mile Point are also of concern for erosion on the Mile Point shoreline. Great Marsh Island and the Mile Point Training Wall divide Chicopit Bay, which is located to the south of the Mile Point erosion area. The recommended plan consists of removal of approximately 3110 feet of existing training wall; construction of a new relocated 2050-foot eastern leg of training wall; construction of a new 4250-foot western leg of training wall at Great Marsh Island with the creation of up to 53 acres of salt marsh restoration through the beneficial use of dredged material; and construction of a flow improvement channel in Chicopit Bay to restore the historic channel through Chicopit Bay and offset any adverse effects of closing off Great Marsh Island.

Based upon the October 2012 price levels, the total initial project cost for this project is $36.9 million and will be cost shared 65 percent Federal ($27.8 million) and 35 percent non-Federal ($9.1 million).

**Ohio River Shoreline, Paducah, Kentucky**

In May 2012, the Chief of Engineers signed a report on flood risk management improvements along the Ohio River in Paducah, Kentucky. The primary purpose of the project is to minimize the risk of loss of life and damages to public and private infrastructure through the reconstruction of existing levees and floodwalls completed in 1949. Many of the original major components are still in use well beyond their normal expected service life. As system components continue to age, without reconstruction, the risk of project failure continues to increase. The primary features of the recommended plan include: rehabilitation of pumps, motors, motor control systems, and major pump plant; components and other miscellaneous items at each of the 12 existing pumping plants; construction of a new pumping plant at Station 111+67A; slip-lining 37 existing deteriorated corrugated metal pipes; and bank protection.

Based upon the October 2012 price levels, the total initial project cost for this project is $19.8 million and will be cost shared 65 percent Federal ($12.9 million) and 35 percent non-Federal ($6.9 million).

**Broward County Water Preserve Area, Central and Southern Florida Project, Florida**

In May 2012, the Chief of Engineers signed a report on ecosystem restoration for Broward and Miami-Dade County Florida. The project will contribute to the environmental restoration of south Florida by providing regional water storage that will reduce demands on the Everglades and Lake Okeechobee for water supply. Anticipated fish and wildlife habitat benefits of the project include reduction of withdrawals of water

from Lake Okeechobee and Everglades wetlands, reestablishment of natural hydro-patterns within existing natural areas, and improvement of water quality in Water Conservation Area 3. The report recommends construction of two above-ground impoundments and associated pumps and water control structures: the C-11 Impoundment with an effective interior storage of 1,068 acres and two wetland marsh mitigation areas north of the C-11 Impoundment with 488 acres of wetland marsh; the C-9 Impoundment with an effective interior storage of 1,641 acres and two wetland marsh mitigation areas north of the C-9 Impoundment with 339 acres of wetland marsh; canal conveyance improvements to connect the two impoundments; and an approximately 4,633 acre seepage management area east of the Water Conservation Areas.

Based upon the October 2012 price levels, the total initial project cost for this project is $866.7 million and will be cost shared equally ($433.4 million).

**Louisiana Coastal Area – Barataria Basin Barrier Shoreline Restoration Project, Lafourche, Jefferson, and Plaquemines Parishes, Louisiana**

In June 2012, the Chief of Engineers signed an ecosystem restoration report to restore and protect Barataria Basin Barrier Shoreline. The Barataria Basin Barrier Shoreline is approximately 55 miles south of New Orleans, Louisiana, and is a key component in regulating estuary hydrology and slowing the rate of wetland loss. Caminada Headland, forming the western portion of the barrier shoreline, has experienced some of the highest rates of shoreline retreat on the Gulf coast. Shell Island forms the eastern portion of the barrier and has disintegrated into several smaller islands and shoals and is gradually converting to a series of bays directly connected to the Gulf of Mexico. The report recommends dredging and placing 5.1 million cubic yards (mcy) of sand to restore and create about 880 acres of dune at Caminada Headland; placing 5.4 mcy of material landward of the dune to restore and create approximately 1,186 acres of marsh; restoration of Shell Island to its pre-Hurricane Bob (1979) single island configuration using about 5.6 mcy of sand to build approximately 317 acres of dunes. Approximately 2.1 mcy of sediment would be placed to restore about 466 acres of marsh. The Caminada Headland restoration will be implemented using Section 7006 of WRDA 2007. Implementation of Shell Island Restoration will require additional authorization.

Based upon the October 2012 price levels, the total initial project cost for this project is $436.3 million and will be cost shared 65 percent Federal ($283.6 million) and 35 percent non-Federal ($152.7 million).

**Savannah Harbor Expansion Project, Savannah, Georgia**

In August 2012, the Chief of Engineers signed a report on navigation improvements within the Savannah Harbor. The general reevaluation report satisfies the statutory requirements in WRDA 1999 to develop a mitigation plan as well as providing a basis for raising the authorized total project cost.. The selected plan includes dredging 31 miles of the existing navigation channel and one existing turning basin (Kings Island Turning Basin at Stations 98+500 to 100+500) 5 feet deeper (to an authorized

navigation depth of 47-feet), deepening eight berths at the Garden City Terminal, constructing three bend wideners, constructing two meeting areas, and constructing an approximately 38,000 foot (7.1 mile) long extension to the existing ocean bar channel. Mitigation is proposed for unavoidable impacts to significant resources such as loss of shortnose sturgeon and striped bass habitat, conversion of tidal freshwater, brackish and salt marsh in the project area, and changes in dissolved oxygen levels in the inner harbor.

Based upon October 2012 price levels, the total initial project cost for this project is $662 million with the Federal share totaling $461 million and the non-Federal share totaling $201 million.

**Freeport Harbor Channel Improvement Project, Brazoria County, Texas**

In January 2013, the Chief of Engineers signed a report on navigation improvements within the Freeport Harbor Channel in Brazoria County, Texas. The project will improve the existing Freeport Harbor Channel that provides a deep-draft waterway from the Gulf of Mexico to the City of Freeport through the original mouth of the Brazos River. The Freeport Harbor Channel and the Brazos River are completely separated due to diversion dams resulting in an entirely tidal system. The report recommends the locally preferred plan which consist of deepening the Outer Bar Channel in the Gulf of Mexico to -58 feet mean lower low water (MLLW); the outer end of the jetties in the Gulf of Mexico to the Lower Turning Basin to -56 feet MLLW; the Upper and Lower Turning Basin near Brazos port Turning Basin to -56 feet MLLW; and deepening and widening the lower 3,700 feet of the Stauffer Channel to -51 feet and 300 feet wide respectively. The remainder of Stauffer Channel will be deepened to -26 feet MLLW.

Based upon October 2012 price levels, the total initial project cost for this project is $237 million with the Federal share totaling $121 million and the non-Federal share totaling $116 million.

There are three other proposed projects with reports by the Chief of Engineers that the ASA and Office of Management and Budget are in the process of reviewing. These are Mississippi River Gulf Outlet Ecosystem Restoration; Canaveral Harbor; and Neuse River Basin.

Mr. Chairman, this concludes my statement. Again, I appreciate the opportunity to testify today. I would be pleased to answer any questions you may have.



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