

**WATER RESOURCES DEVELOPMENT ISSUES AND
CORPS REFORMS**

HEARING
BEFORE THE
**COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS**
UNITED STATES SENATE
ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

ISSUES PERTAINING TO WATER RESOURCES DEVELOPMENT PROGRAMS
WITH THE U.S. ARMY CORPS OF ENGINEERS

—————
JUNE 18, 2002
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Printed for the use of the Committee on Environment and Public Works



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ONE HUNDRED SEVENTH CONGRESS
SECOND SESSION

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WATER RESOURCES DEVELOPMENT ISSUES AND CORPS REFORMS

TUESDAY, JUNE 18, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 2:30 p.m. in room 406, Senate Dirksen Building, Hon. James Jeffords (chairman of the committee) presiding.

Present: Senators Jeffords, Bond, Chafee, Corzine, Inhofe, Reid, Smith, Voinovich, and Warner.

Also present: Senator Feingold.

OPENING STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Senator JEFFORDS. The committee will come to order. Good afternoon and welcome. I would like to thank our witnesses for being here. Today, we are going to hear from the Administration and a panel of witnesses on the Army Corps of Engineers Water Resource Program.

Since the passage of the Water Resources Development Act of 1986, every Administration has submitted a biennial legislative proposal to the Congress containing project authorizations and policy initiatives. I understand a proposal from the Acting Assistant Secretary is at the Office of Management and Budget. However, we have not received a proposal yet. There is very little time remaining in this legislative session, and if we want to act this year we are going to have to have something to move on.

Working with Senator Smith and members of this committee, I hope to introduce a legislative proposal before the July 4 work period. Many want the legislative proposal that this committee considers to include what is being referred to as Corps reform. There have been press reports and GAO reports suggesting that the Corps needs and overhaul. One of the reasons we are here today is to get input from other witnesses on possible changes to the Corps Water Resources Programs—how the Corps could be more effective and efficient.

Senator Smith and Senator Feingold, who is joining us this afternoon and is here, have introduced legislation that would make several changes in the way the Corps does business. I intend to consider all views and work to develop legislation that will keep the Corps on its biennial planning schedule and help the Corps deliver their much-needed services of storm damage reduction, navigation and environmental restoration.

[The prepared statement of Senator Jeffords follows.]

STATEMENT OF HON. JIM JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Today we are going to hear from the Administration and a panel of witnesses on the Army Corps of Engineers water resources programs. Since the passage of the Water Resources Development Act of 1986, every Administration has submitted a biennial legislative proposal to the Congress, containing project authorizations and policy initiatives. I understand a proposal from the Acting Assistant Secretary is at the Office of Management and Budget. However, we have not received a proposal yet.

There is very little time remaining in this legislative session. If we want to act this year, we are going to have to move forward.

Working with Senator Smith and members of this committee, I hope to introduce a legislative proposal before the July 4th work period.

Many want the legislative proposal that this committee considers to include what is being referred to as Corps reform. There have been press reports and GAO reports suggesting that the Corps needs an overhaul.

One of the reasons we are here today is to get input from our witnesses on possible changes to the Corps' water resources programs—how the Corps could be more effective and efficient.

Senator Smith and Senator Feingold, who is joining us this afternoon, have introduced legislation that would make several changes in the way the Corps does business.

I intend to consider all views and work to develop legislation that will keep the Corps on its biennial planning schedule and help the Corps deliver their much needed services of storm damage reduction, navigation and environmental restoration.

Senator Smith.

**OPENING STATEMENT OF HON. BOB SMITH, U.S. SENATOR
FROM THE STATE OF NEW HAMPSHIRE**

Senator SMITH. Thank you, Mr. Chairman, and thank you for convening this very important hearing to discuss issues that pertain to water resources development—the program within the Corps. Obviously, Corps reform will and should be a very integral part of WRDA 2002, or the Water Resources Development Act. I want to make it very clear, I respect the Army Corps. I have been a supporter of the Army Corps for a number of years and seen first-hand the work that they have done. I am not opposed to the Corps. They have an important historical role to play. They have played it in the past and will play it again in the future, for national security, for mission areas of navigation, flood damage and environmental restoration.

So initially in drafting this legislation, which is really—I have worked on it now for almost 2 years—was to give the benefit of the doubt to the Corps at every step of the way. But it seemed to me, as I began to move through this that incident after incident of flawed analysis and in many cases overstatement of benefits, flat-out miscalculations, whether they were accidental or intentional, it still is difficult to ignore. In some cases, the misinformation, erroneous information is just outright intolerable.

Last week's GAO report on the Delaware River deepening project, which concluded that benefits were overstated by more than 300 percent demonstrates why independent peer review of certain project is in fact warranted. Numerous changes have been given to the Corps to take meaningful checks internally to address the concerns. I just want to make it very clear to the Corps, this is does not have to be, this is not meant to be, nor should it have to be a hostile takeover or in any way a confrontational matter. I

think we can work together to correct these concerns. But we have had numerous opportunities to do it, and it still has not happened. The Corps had a chance last month to redeem itself with the announcement that it was going to review the economic analysis of more than 170 projects. Three weeks later, the Corps determined that only eight of those projects would be subject to new analysis. Folks who had put faith in the exercise were frankly disappointed. How can you overlook reports in 1999, 2000, and 2001, and most recently last week issued by a lot of impartial, nonpartisan institutions such as the National Academy of Sciences, Army Inspector General and the GAO? All contained the same message—something is wrong. It is that simple.

We have a unique opportunity to help the Corps address some of its internal problems that have resulted in a loss of confidence, and that is exactly what I want to do—make everybody look good if we can correct the problems. We will save taxpayer money and we will I think save a lot of environmental damage.

In March, I introduced S. 1987, the Corps Modernization Improvement Act, with my colleagues Senator Feingold and Senator McCain. This is not a hearing on my legislation. I know that Senator Jeffords has an open mind on that. It is a hearing on the Corps and how we might address some of the needed reforms.

We have a lot of support building on this legislation. The Administration, though, has not endorsed the bill. It has endorsed the concept of reform. Senator Daschle announced this afternoon that he was joining Senator Feingold and Senator McCain and myself as cosponsors on this particular piece of legislation, which does get at reforms.

Briefly, S. 1987, and I will not go into the whole thing, which we have introduced and which Senator Feingold will be testifying on—he will get into the details—we assess the cost-benefit ratio, we assess cost-sharing, the inequities there. As an example, we might want to re-think how the O&M is funded for inland waterway systems. The Appalachian-Chattahoochee-Flint Waterway in Alabama, Georgia and Florida, for example, consumes 30 percent of the O&M budget, but only sees 3 percent of the national waterway traffic. That just does not make sense. Why should the taxpayers pay to maintain a deadbeat waterway that barely sees any traffic? I know Senator Graham of Florida has a stake in this issue and supports the authorization of at least the Florida segment of the waterway. I would like to work with him on that.

There is also a \$52 billion backlog—\$52 billion backlog over the last 25 or 30 years. We have talked about this in this committee now for a number of years, but we never seem to get to addressing that backlog. Frankly, the process has grown ugly, and I think Senator Voinovich when he stood firm with me on WRDA 2000 deliberations to keep environmental infrastructure out of the bill and Conference Report, saw first-hand how ugly it really was. I may need his help again as we look to do some of these reforms.

But I want to work with the Administration. I want to work with my colleagues on the committee. I want to work with the Corps to negotiate something meaningful. That is the spirit with which I address my criticisms today. I want to thank my colleague and cosponsor, Senator Feingold, for joining us here today. He has

worked a long time on this issue, and we were able to join forces and I am pleased that we were able to do that. I know he will be instrumental in helping us to usher Corps reform through, whatever the vehicle might be ultimately.

Finally, Mr. Chairman, one theme repeated in the written testimony of those opposed to Corps reform is that independent review will delay the study process. I would like to just say for the record, peer review would apply to every project, only a handful that merit such review. The review would be conducted concurrently with headquarters review, not in any other methodology. It is ridiculous to think that a 180-day concurrent review is going to add years to a study process. That is not going to be the case. How is it going to add any more years than the 30 years we have been sitting watching projects lay on the books accumulating \$52 billion in back dollars?

Some have said, why haven't you waited for the recommendations of the National Academy of Science, which is due to issue its report this summer? I understand enough about the issue to formulate a meaningful procedure. If NAS comes out with a dramatically different recommendation, then it will have my serious consideration. Finally, this issue is important enough to move forward immediately.

In closing, again, I really feel strongly that there should be no WRDA bill in 2002 without Corps reform. Let's not add insult to injury. But I look forward to what the witnesses have to say, and thank you, Mr. Chairman.

[The prepared statement of Senator Smith follows.]

STATEMENT OF HON. BOB SMITH, U.S. SENATOR FROM THE
STATE OF NEW HAMPSHIRE

Good afternoon. I would like to thank everyone for coming today to discuss issues pertaining to the water resources development program within the Corps of Engineers. Specifically, I hope to see this hearing highlight an issue of great importance to me: Corps Reform. I expect Corps Reform to be an integral component of the Water Resources Development Act of 2002.

I would like to take a moment to state for the record: contrary to what has been said about me, I am not opposed to the Corps of Engineers. The Corps certainly has an important role to play in both the national security of our country and in its mission areas of navigation, flood damage reduction, and environmental restoration. However, I think we have a unique opportunity to help the Corps address some of its internal problems that have resulted in a loss of confidence in this agency. Incident after incident of flawed analyses, overstatement of benefits, flat out miscalculations whether intentional or accidental are not only difficult to ignore, but outright intolerable.

Initially, I wanted to give the benefit of the doubt to the Corps. I'd like to quote my friend Senator Voinovich, who at a Corps budget hearing last year said, "fool me once, shame on you. Fool me twice, shame on me." Enough chances have been given to the Corps to take meaningful steps internally to address concerns.

One cannot overlook reports in 1999, 2000, 2001, and most recently, last week, issued by such impartial, non-partisan institutions such as the National Academy of Sciences, the General Accounting Office, the Army Inspector General, all of which contain the same message: something is not right in the Corps. Something is broken. And it needs fixing.

It is clear to me now that legislation is necessary to help the Corps fix what's broken. I want to work with the Administration and my colleagues on the Committee to negotiate something meaningful, yet effective. I am sure you all know by now that I introduced legislation, "the Corps Modernization and Improvement Act" to reform the Corps. In fact, I would like to thank my colleague and co-sponsor, Senator Feingold, for joining us here today to give his views on the issue. I have to credit him with first bringing the issue to my attention 2 years ago when we were on the

Senate floor considering the 2000 WRDA bill. I look forward to working with him to usher Corps Reform through this committee and the Senate.

One theme repeated in the written testimony of those who are opposed to reforming the Corps is that the Independent Peer Review process will unnecessarily delay the study process and will raise project costs. I would like to quickly address those concerns.

First of all, Peer Review would not apply to each and every project that the Corps constructs. I view this as only applying to a small handful of projects that for some reason or another merit further external review. Also, the way the provision is structured in my bill, the review would be conducted concurrently with headquarters review. It is ridiculous to think that a 180-day concurrent review is going to add years to the study process. Unless of course, that review reveals major flaws in the project analysis, in which case, the project should not go forward until the study is revised anyway.

Many have asked me why I am not waiting for recommendations from the National Academy of Sciences, which is due to issue a report this summer on Independent Review. For one, I think I understand enough about the issue to formulate a meaningful procedure. Second, if the Academy comes out with a recommendation that is dramatically different than what I have in my bill, I will look at revising my provision as the WRDA bill moves through the legislative process. Finally, I think this issue is important enough that it is worth moving forward now.

In closing, let me make my intentions clear: *there will be no WRDA 2002 without Corps Reform*. In case you didn't hear that, I repeat: NO WRDA WITHOUT CORPS REFORM. With that said, for those who are opposed, instead of issuing threats to hold up any WRDA bill that includes reform, work with me, and work with the community that supports Corps Reform to resolve our issues so that we can attempt to reach a workable compromise.

With that said, I look forward to the discourse we are about to hear.

Senator JEFFORDS. Senator Bond.

**OPENING STATEMENT OF HON. CHRISTOPHER S. BOND,
U.S. SENATOR FROM THE STATE OF MISSOURI**

Senator BOND. Thank you very much, Mr. Chairman, for calling this hearing. Secretary Brownlee, General Flowers, without taking the matter lightly, the last time I saw you here we had a good man who had to resign from office. So let me say from the outset that I think very highly of the Office of Management and Budget. I am here not to bury them, but to praise them faintly, and I am sure that no one other than Senators Reid and Domenici could write a better budget for the Corps. Having said that, we intend to help Senator Reid and Senator Domenici.

Mr. Chairman, you and Senator Smith, along with Senators Inhofe and Reid, received a letter sent to the committee recently saying that any legislation that would make a costly, lengthy and bureaucratic process more costly, more lengthy, and more bureaucratic, we will object to on any water resources bill that includes those provisions, and we will use whatever tools are necessary to prevent it from becoming law. That was signed by myself, Senator Lott, Senator Lincoln, Senator Carnahan, Senator Warner, Senator Cochran. I would like unanimous consent to add this to the record of the hearing.

Senator JEFFORDS. Without objection, it will be entered.
[The referenced document follows:]

U.S. SENATE,
Washington, DC, May 13, 2002.

Hon. JAMES M. JEFFORDS,
Chairman, Committee on Environment and Public Works,
Washington, DC.

Hon. BOB SMITH,
Ranking Member, Committee on Environment and Public Works,
Washington, DC.

Dear CHAIRMAN JEFFORDS AND SENATOR SMITH: Legislation was introduced recently for the "modernization and improvement" of critical programs administered by the U.S. Army Corps of Engineers. While we do not question the intentions of the bill sponsors, we believe this legislation would make a costly, lengthy, and bureaucratic process more costly, more lengthy, and more bureaucratic. Our constituents cannot tolerate this event. As the Subcommittee and Committee begin to formulate a Water Resources Development Act, we alert you that we will object to any water resources bill that includes provisions that make it more difficult for our citizens, particularly poor citizens, to get flood control, navigation, recreation and environmental projects approved.

As you know, projects administered by the U.S. Army Corps of Engineers are critical to the safety, economic health and environmental protection of many regions of the country. Water transportation is low cost, safe, relieves highway congestion, requires less fuel, and causes less air pollution than alternatives. Flood control projects have prevented nearly \$500 billion in flood damage since 1959 returning \$6 for every \$1 invested which does not factor in the value generated by economic activity such projects permit. For many rural and urban communities, flood protection is essential to their safety and economic opportunity.

As citizens who live in states that rely on Corps projects understand firsthand, the existing process is immensely cumbersome. Multi agency review, analysis and consultation takes not days or months but years and in some cases, decades. There are extensive and repeated opportunities for review and extended public comment as well as increasingly difficult environmental and local cost share requirements. Benefit cost and local cost share requirements, in effect, typically mean that the Federal Government may help provide flood protection to wealthy communities but will rarely, if ever, protect poor communities no matter the personal risk and economic hardship they face. After all these hurdles are met, there must be specific congressional authorization and multi-year appropriations and oversight. The effect of so-called "reform" legislation is to make an excruciatingly difficult process more difficult.

Additionally, Section 216 of the P.L. 106-541 requires the National Academy of Sciences to make recommendations regarding independent peer review of feasibility reports and a review of methods of project analysis. Prior to recommendations from the Administration and completion of the NAS recommendations, it would be premature to legislate prescriptive mandates.

We understand that many members of the Senate desire projects in WRDA, but the cost of raising the bar for the most needy in our regions compels us to use all the tools of the Senate to prevent it from becoming law. We believe it is important that you understand the extent of our opposition at this early opportunity.

Sincerely,

CHRISTOPHER S. BOND.
TRENT LOTT.
BLANCHE L. LINCOLN.
THAD COCHRAN.
JOHN W. WARNER.
JEAN CARNAHAN.

Senator BOND. Thank you.

Mr. Chairman, I would agree with the Senator from New Hampshire that the delays in approving Corps projects are intolerable. If there is some way we can speed up the process and make sure we get a judgment one way or the other so they do not languish for years, as you will hear from one of the witnesses before us today on the next panel, I think we might be able to do something. But if my sense is right, if this political process is going down the line of making it more bureaucratic and stifling even more the ability to develop needed flood control and other Corps projects, mak-

ing it more expensive and problematic for communities to get flood protection, then we probably just won't have a WRDA bill this year. I think I have bipartisan support from many regions to resolve this on the floor if necessary. I do not intend to pick this fight, but I respectfully advise that I am ready, anxious and with energy and enthusiasm will join it.

Secretary Brownlee and General Flowers, we have a referendum here in the Senate on the Corps. It is called the Energy and Water Appropriations bill. As you know, on a bicameral, bipartisan basis, Congress rejects the inadequate budgets sent up by Democrat and Republican Presidents—oh, excuse me—I forgot that about OMB. But this year, there are currently hundreds of adds in that bill. As I looked at the bill, I saw adds for projects in Nevada, New Hampshire, New Mexico, Ohio, New York, California, Montana, Delaware, Pennsylvania, Idaho, Virginia and Missouri—just to name some random States. I am sure that Chairman Reid could tell us how many more requests they had than they were able to fund.

Now, we see a strong editorial opposition to the Corps. Well, Washington, DC. and New York City and St. Louis, MO filled in their abundant wetlands over the previous century. So it is no surprise that newspapers in those regions want to pull up the ladder now that they are protected, and their economies are prosperous and people protected. But I hope you understand your job is to bear in mind that some people have been left behind. Mr. Robinson of Pinhook is just one of those people, and the people he represents. I hope you will listen to him.

We are at war and experiencing an economic slow-down, facing more trade competition, looking for more opportunities to increase family income and improve our communities. I think that is why Congress authorizes then funds studies, authorizes then funds design, authorizes then funds construction, and then funds O&M. Some do not like the way the benefit-cost ratio is calculated. I don't either, because it is far too stingy, takes far too much time and it is rigged to protect the haves and leave behind the have-nots. The day that Congress does not want water projects is the day that we do not need to do an Energy and Water bill. If someone would like me to take that suggestion and share it with Chairman Byrd, I would be happy to do so.

I thank the Chair.

[The prepared statement of Senator Bond follow.]

STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR FROM THE
STATE OF MISSOURI

Mr. Chairman, Secretary Brownlee, General Flowers, without taking the matter lightly, the last time I saw you we had a good man resign from office so I say from the outset that I think very highly of the Office of Management and Budget and I am sure that no one other than Senator Reid could write a better budget for the Corps.

Mr. Chairman, a letter was sent to the committee several weeks ago signed by Senators Lott, Cochran, Warner, Lincoln, Carnahan and myself. Mr. Chairman I ask UC to enter the letter into the Record.

Mr. Chairman, I think I can see where this political process is going and I predict that if the WRDA bill includes legislation to make it harder and more expensive and problematic for communities to get flood protection, then we will not have a WRDA bill this year. I believe I will have bipartisan support from many regions to resolve this on the floor, if necessary. I didn't pick this fight but I am ready, respectfully and enthusiastically, to join it.

Secretary Brownlee and General Flowers, every year there is a referendum on the Corps and it is reflected in the Energy and Water Appropriations Bill. There, as you know, on a bicameral and bipartisan basis, the Congress rejects inadequate budgets sent up by Democrat and Republican Presidents. This current fiscal year, there are hundreds of "adds."

I see adds for projects in Nevada, New Hampshire, New Mexico, Ohio, New York, California, Montana, Delaware, Pennsylvania, Idaho, Virginia and Missouri—just to name some random states. Washington, DC and New York, City and St. Louis, MO filled in their abundant wetlands over the previous centuries so it is no surprise that their newspapers want to pull up the ladder now that their regions are developed and their economies are prosperous and people protected, but your job is to bear in mind that some people have been left behind such as Mr. Robinson who we will hear from later.

We are at war and experiencing an economic slow down and facing more trade competition and looking for more opportunities to increase family incomes and improve our communities. That is why Congress authorizes then funds studies; authorizes then funds design; authorizes then funds construction and then funds O&M. I know that some don't like the way the Benefit/Cost Ratio is calculated. I don't either because it is far too stingy and it is rigged to protect the haves and leave the have-nots behind. The day that Congress doesn't want projects is the day we don't do an Energy and Water bill and if someone would like me to take that suggestion to Chairman Byrd, I can do so.

On behalf of mayors and farmers and shippers and communities, I will continue to press the bipartisan support for modernizing our water infrastructure.

Senator JEFFORDS. Senator Reid.

**OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR
FROM THE STATE OF NEVADA**

Senator REID. Thank you very much, Mr. Chairman, Senator Smith.

I look forward to working with you both and the entire subcommittee, including Ranking Member Inhofe, as we set about writing a WRDA bill this year. Traditionally, this committee works off the Administration's WRDA proposal, putting its imprint on that proposal. We have not received that proposal as of yet, and we plan to move forward in writing a bill regardless. I am happy to know you are going to do that, Mr. Chairman. The WRDA bill is very important, and especially important to me and I think the Western Senators generally. Large Corps projects tend to get attention when we write our WRDA bill, but some of the relatively small Corps projects can have a big impact in Nevada and in other places.

I am happy to see Senator Feingold here. I am happy—I am impressed that he would take the time to come into the committee about which he does not serve to give us his input. I think we need to do more of this in the Senate. I have often felt that if we had more non-agriculture Senators involved in writing the agriculture bill, we would have a much better agriculture bill. But the fact is that people attend who tend to be involved in agriculture on that committee, even though it affects all the States. The same applies here. We tend to get a lot of people who are involved in these water projects from States where it matters more, and we do not get enough input from other Senators who are not. So anyway, Senator Feingold, I am glad you are here.

One program we authorized in the last WRDA bill has been tremendously important to my State. Section 595 of that bill authorized design and construction systems for water-related environmental infrastructure and resource protection in rural commu-

nities. We have helped a number of small communities meet their water resource needs through this program. Another program of interest to me is the Restoration of Abandoned Mine Sites Program. It is difficult for people to imagine this, but in the town where I was born and raised and still have my home, Searchlight, we have thousands of holes around. Some of them are very dangerous. This program, the Corps helps address this with hard-rock mines.

Fortunately, in Southern Nevada where my home is, we have all these abandoned mines, it is very rare that there is water in any of them. There is just so little water there. But where this works so well, this RAMS Program, Restoration of Abandoned Mine Sites, is where there is water, so that we can help with areas that the mines have polluted the water.

The hearing today will touch upon measures to ensure that the Corps engages in its traditional work of navigation flood control. I am glad to see that they do that and do it so well. The two programs I mentioned above do not necessarily fall within the original mission of the Corps, yet the Corps has provided valuable assistance to Nevada through these programs. We should be mindful that the so-called mission creep to one Senator may be a very important, well-run program to another Senator.

Other measures proposed for consideration include those that would help ensure that Army Corps projects are economically and environmentally sound. The Army's own Inspector General, two National Academy of Science panels, and the General Accounting Office have offered constructive criticism on the economic and environmental performance of the Corps. I think we have to underline and underscore what I have said. Constructive criticism—it has come from the Army's own Inspector General, two National Academy of Science panels, and the General Accounting Office. I think we should take a look at where this constructive criticism has been offered. One example is one of the NAS panels recommended that some Corps projects would benefit from independent review. I think we have to take a look at that.

So I look forward to hearing testimony on these and related issues today as we move forward with the WRDA 2002 Program. I would say, Mr. Chairman, members of the Corps of Engineers are very proud people. They are proud of the work they do, as they should be. I have found them to be some of the most patriotic citizens that I have come in contact with back here, and that says a lot. So I appreciate the work they do and look forward to doing even better work in the future.

[The prepared statement of Senator Reid follows.]

STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Thank you, Mr. Chairman.

I look forward to working with you and ranking member Smith and the subcommittee ranking member Inhofe as we set about writing a WRDA bill this year.

Traditionally, this committee works off of the Administration's WRDA proposal, putting its imprint on that proposal. We haven't received that proposal as of yet and we plan to move forward in writing a bill regardless.

The WRDA bill is important to every member of the Senate. Large Corps projects tend to get all the attention when we write our WRDA bill. But some of the relatively small Corps projects can have a big impact in Nevada.

One program we authorized in the last WRDA bill has been tremendously important to my state. Section 595 of that bill authorized design and construction assist-

ance for water related environmental infrastructure and resource protection in rural communities. We have helped a number of small communities meet their water resource needs through this program.

Another program of interest to me is the Restoration of Abandoned Mine Sites (RAMS) program. Through this program, the Corps helps address water quality problems associated with hardrock mines.

This hearing will also touch upon measures to ensure that the Corps engages in its traditional work of navigation and flood control. The two programs I mentioned above don't necessarily fall within the original mission of the Corps, yet the Corps has provided valuable assistance to Nevada through those programs. We should be mindful that so-called "mission creep" to one Senator may be a very important, well-run program to another.

Other measures proposed for consideration include those that would help ensure that Army Corps projects are economically and environmentally sound. The Army's own Inspector General, two National Academy of Sciences panels and the General Accounting Office have offered constructive criticism on the economic and environmental performance of the Corps. For example, one of those NAS panels recommended that some Corps projects would benefit from independent review. (NAS, Inland Navigation System Planning, 2001.)

I look forward to hearing testimony on these and related issues today as we move forward with WRDA 2002.

Senator JEFFORDS. Senator Inhofe.

**OPENING STATEMENT OF HON. JAMES M. INHOFE,
U.S. SENATOR FROM THE STATE OF OKLAHOMA**

Senator INHOFE. Thank you, Mr. Chairman. I appreciate the opportunity to hear from our witnesses on our country's water resources needs, as well as comments on Corps reform.

However, I will have to admit some disappointment that instead of addressing what our water resource development objectives should be, we are instead discussing how to reform the Corps of Engineers. I seriously question whether this effort will yield the results proponents envision because in truth, much of what the Corps of Engineers does or does not do is ultimately decided by Congress, and not by the Corps. I find it also a little bit amusing right now that those very individuals who are trying to introduce more deliberation, more reports and more bureaucracy into this are the same ones who are supporting the Everglades Restoration Act, which was I guess one of the very largest Acts that we have ever considered—68 water projects in one Act with not one report from the Corps of Engineers.

This Nation is involved in a struggle for water resources. We need to decide what our national priorities are. Do we continue to use our national waterways for navigation and economic development? Or do we focus our efforts exclusively on environmental restoration? It seems to me the latter is the direction some would have us move. Neither economic development nor environmental restoration should automatically have a preference.

I assure you, Mr. Chairman, that the citizens of my State want both. We in Oklahoma, and you will have to listen to this because I think maybe even Senator Corzine does not know this, we are the Nation's most inland port, in my city of Tulsa, Oklahoma. Did you know that? Yes, yes we are. So we are very much concerned about it. It means hundreds of millions of dollars of economic development.

We in Oklahoma were recently reminded of how much economic activity the waterway in my State generates in terms of commerce on the Arkansas River. It was shut down for 2 weeks after this dis-

astrous collapse of the I-40 bridge, and we all were saddened at the loss of lives. In just that short period of time, the Port of Catoosa, which is right outside of Tulsa, lost over \$4.2 million. That means \$4.2 million that would have been pumped into the Oklahoma economy—creating jobs, providing economic opportunity, and for thousands it just did not happen. I would have to say, Senator Smith, that is no deadbeat waterway.

Senator SMITH. I do not believe I called it a deadbeat waterway.
[Laughter.]

Senator INHOFE. I know. It is very rarely that I disagree with my good friend, Senator Smith. I do in this case.

Unfortunately, I get the sense that many see the Corps reform as an opportunity to shift the Corps' traditional role of waterway development, enhanced construction, to solely environmental restoration. Mr. Chairman, I appreciate the need to achieve balance between these two equally important goals. I certainly hope that we as we move forward, we still strive for that balance.

With that in mind, let me just quickly, rather than go over these projects, I am going to name these projects and then enter into the record the description that I have, if that is all right. I make that request.

Senator JEFFORDS. Without objection.

First, the reconnaissance study of Sand Lake in Oklahoma; second, the technical change to the land transfer authorized by WRDA 1999; third, codification of the consent decree between the Corps of Engineers and the city of Edmond regarding Arcadia Lake; fourth, technical corrections to the definition of Indian lands; fifth, the transfer of flow easements on Grand Lake, Oklahoma to GRDA authority—by the way, that is a very large lake and is not a Corps lake, never has been a Corps lake; and last, authorization of the 12-foot depth channel in place of what is currently a 9-foot channel. It would be very, very meaningful.

So with that, I thank the Chairman.

[The prepared statement of Senator Inhofe follows.]

STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE
STATE OF OKLAHOMA

Thank you Mr. Chairman. I appreciate the opportunity to hear from witnesses on the country's water resources needs as well as comments on the Corps Reform. However, I will admit some disappointment that instead of addressing what our water resource development objectives should be, we are instead discussing how to reform the Corps of Engineers. I seriously question whether this effort will yield the results proponents envision because in truth much of what the Corps of Engineers does or does not do is ultimately decided by Congress, not the Corps.

This Nation is involved in a struggle for water resources. We need to decide what our national priorities are . . . do we continue to use our national waterways for navigation and economic development; or do we focus our efforts exclusively on environmental restoration. It seems to me, the latter is the direction some would have us move. Neither economic development nor environmental restoration should automatically have a preference.

I assure you, Mr. Chairman, that the citizens of my state want both. Oklahoma has the most inland port which has provided literally hundreds of millions of economic benefits to the state. We in Oklahoma were recently reminded how much economic activity the waterway in the state generates. Commerce on the Arkansas River was shut down for 2 weeks following the collapse of the I-40 bridge. In just that short time, the Port of Catoosa, outside of Tulsa, lost over \$4.2 million. That means that \$4.2 million that would have been pumped into the Oklahoma economy, creating jobs and providing economic opportunity for thousands did not happen. Clearly, my state cannot afford to lose the value of the waterway.

Unfortunately, I get the sense that many see Corps Reform as an opportunity to shift Corps traditional role of waterway development and hence construction to solely environmental restoration. Mr. Chairman, I appreciate the need to achieve balance between these two equally important goals. I certainly hope that as we move forward we will strive for balance.

With that in mind, I would to quickly highlight some needs of my state that I hope to have included in the Water Resources Development Act of 2002.

RECONNAISSANCE STUDY SAND LAKE IN OKLAHOMA

Sand Lake, OK was studied in 1950's and 1960's and found to be in the Federal interest. A proposed dam would have been located at the river mile 19.1 on Sand Creek near Bartlesville, Oklahoma. The project was authorized by the Flood Control Act of 1962 for flood control, water supply, water quality control, recreation and fish and wildlife. However the project was place in deferred status in 1984 pending resolution of conflict with the Osage Indian Nation regarding mineral rights subordination. The project was eventually deauthorized in 1999.

Since then, it has become clear that the city of Bartlesville must find a second water source. Currently the City gets all of its water out of Lake Hulah which became dangerously low this past spring. The community is interested in exploring again the feasibility of Sand Lake. Preliminary discussions with the Osage tribe indicate the tribe is willing to negotiate on the mineral rights.

TECHNICAL CHANGE TO A LAND TRANSFER AUTHORIZED IN WRDA99

WRDA99 (section 563) authorized the transfer of Corps property in Marshall County, Oklahoma to the State of Oklahoma. The property includes Lake Texoma and Denison Dam and is approximately 1,580 acres. The property has been and continued to be leased to the state for public park and recreation. As such, the state was made more improvements, not the least of which is a public golf course.

In determining the "fair market value" of the land, the state is requesting that the value of their improvements not be included in the fair market value calculations. The initial cost of the improvements were borne by the state, the existing authorization to convey the property would require the state to pay for those improvements again because they greatly enhanced the value of land.

I do not believe that state should not have to pay twice and will be requesting that a technical change be made to the WRDA99 language that would give the state credit for investment already made in the property.

CODIFICATION OF A CONSENT DECREE BETWEEN CORPS OF ENGINEERS AND THE CITY OF EDMOND REGARDING ARCADIA LAKE

The city of Edmond became a cost share partner with the Corps in 1979 for recreational development and water storage facilities on Arcadia Lake. In 1987 a dispute arose with the Corps over cost overruns on the recreation facilities. That dispute was settled in 1992 through a Consent Decree. Included in that Consent Decree was a provision that the city of Edmond thought would clarify a potential future dispute regarding the requirement to pay storage on future water use. Per the terms of the Consent Decree, the City was not liable for payment of future use water until such time that City decided to actually use the water. The cost of the future use water was set at \$27 million, which the City paid in October 1999.

In November 1996, the City was notified by the Corps that they had to begin paying interest on the future use water storage because the 10-year interest free period following the project's completion had expired (projected was completed in 1986). However, the City believes that the Consent Decree clearly stated that they were not liable for the future water until such time as they made use of it which occurred in 1999 when the City paid \$27 million. The Corps continues to charge the City interest from November 1996 to present. I will be requesting WRDA02 clarify that City is not liable for the interest from November 1996 to October 1999.

TECHNICAL CORRECTION TO THE DEFINITION OF "INDIAN LANDS"

Because Oklahoma does not have any Indian reservations, we need to make a clarification in the law with the respect to the definition of Indian lands. I will propose that the definition of Indian lands in Oklahoma for Corps of Engineers purposes be modified to be consistent that the definition for Indian lands in the Highway program.

TRANSFER OF FLOW EASEMENTS ON GRAND LAKE, OKLAHOMA TO GRAND RIVER DAM
AUTHORITY

I am working with both the Tulsa District Corps office and the Grand River Dam Authority (GRDA) to transfer Flow Easements on Grand Lake to the GRDA. Grand Lake is not a Corps lake and there is no logical reason for the Corps to be involved in the lake. Both parties are interested in seeing this transfer accomplished.

AUTHORIZATION OF 12-FOOT DEPTH ON THE ARKANSAS RIVER NAVIGATION CHANNEL

Currently the Arkansas River is authorized at 9 feet; however a majority of the system is greater than 12 feet because the natural scouring of the river. I will be proposing to make the channel a uniform 12 feet (minimum) to assist in navigation. This is an opportunity to enter into a private/public partnership because a company along the system is willing to put some of their own money into this project.

I think this could be used as a model for future projects and hope the Committee will give serious consideration to this proposal.

Thank you Mr. Chairman.

Senator JEFFORDS. Senator Corzine.

**OPENING STATEMENT OF HON. JON S. CORZINE,
U.S. SENATOR FROM THE STATE OF NEW JERSEY**

Senator CORZINE. Thank you, Mr. Chairman. I appreciate your holding the hearing on the Army Corps' Water Resource Development Program. Senator Smith's proposals are worthy of much discussion. It is good to see my friend, Senator Feingold, taking deep interest in this issue as well.

This is one of those things where I come actually without strong opinion from experience. I have seen the work of the Corps on projects such as beach replenishment and dredging of the New York-New Jersey harbor, as critically important vital projects that the Corps has extraordinarily good work. I look forward to working with them in the future on important projects.

At the same time, I have seen cases like the Delaware River dredging project where I think frankly the analysis is not up to the standards of some of the other work that I have seen the Corps do. I want to clearly identify and echo Senator Reid's comments about the people I have met in the Corps and their commitment to patriotic duty and work to support us. But I would say that my own experience with this one particular project where the GAO reviewed a \$311 million Delaware River deepening project, there were serious questions about the cost-benefit analysis that went through. Certainly, if I had looked at that in the world that I came from, I would have been quite frustrated with the conclusions relative to the facts that at least were provided by the independent review.

So there is a lot of work to do here, and I think that independent review was critical, and I think the review of the committee is a sound process to make sure that dollars spent are consistent with good cost-benefit analysis moving forward.

I am open to many of the ideas that Senator Smith's reform bill proposes, such as increased public participation and increased agency accountability. There is one particular provisions that does in fact trouble me, and that is the cost share flip on beach projects. Local governments simply, in my view, cannot shoulder the cost share flip. So I would like to see good healthy debate with regard to that topic.

Overall, I am glad we are having this hearing. I am glad we are studying this process and the cost-benefit analysis, business-like

approach to this I think is terrific. We have got very good professionals in the Corps and I look forward to working with them in many years ahead.

[The prepared statement of Senator Corzine follows.]

STATEMENT OF HON. JON S. CORZINE, U.S. SENATOR FROM THE
STATE OF NEW JERSEY

Thank you Mr. Chairman for holding today's hearing on the Army Corps' water resource development programs.

In New Jersey, I have seen how the work of the Corps on projects such as beach replenishment and the New York-New Jersey harbor are critically important to the state. And I'll be working with my colleagues on this committee to authorize several of those projects in this year's Water Resources Development Act.

At the same time, I have seen cases like the Delaware dredging project, where the analysis that the Corps has used to support its projects is severely flawed.

So while I support the Corps, I believe that we need to take a hard look at reforms that may be needed. In particular, I am concerned about the process by which the Corps analyzes project costs and benefits. I say that because of my experience with the proposed \$311 million Delaware River Deepening Project, which would involve deepening 108 miles of the Delaware River from the mouth of the river at the Delaware Bay north to the Ports of Camden and Philadelphia. In February 2001, I asked the General Accounting Office to take a look at the project especially the Corps' cost-benefit and environmental analysis. The report, just released this month, confirmed our suspicion that the Corps' economic analysis was flawed and ". . . does not provide a reliable basis for deciding whether to proceed with the project." (GAO-02-604 Report p. 2)

This independent review was critical, and I think we ought to examine how we might systematically do independent review of the economics of large projects.

While I am open to many of the ideas put forth in the various reform proposals, such as increased public participation and increased agency accountability, there is one particular provision of the bill that troubles me the cost-share flip on beach projects. Local governments simply can't shoulder the cost share flip, and I don't think they should have to.

In conclusion, I look forward to hearing from our witnesses, and working with my to move a WRDA bill this year.

Senator JEFFORDS. Thank you.
Senator Voinovich.

**OPENING STATEMENT OF HON. GEORGE V. VOINOVICH,
U.S. SENATOR FROM THE STATE OF OHIO**

Senator VOINOVICH. Thank you, Mr. Chairman.

I think that this hearing is one of the most important responsibilities of this committee—the biannual Water Resource Development Act. As Chairman of the Transportation and Infrastructure Subcommittee during the 106th Congress, I had an opportunity to work on this Act in 1999 and then again in 2000. Congressional authorization is an important step in the process to develop and carry out projects that will protect our Nation's water resources infrastructure. Equally important is having an adequate level of funding to build, operate and maintain these projects.

As we on this committee know, this Nation has an aging national water resource infrastructure. If we are to continue to ignore the upkeep, what will result is deterioration of our locks, dams, flood control projects that are not started or not sufficient to get the job done, and navigation channels that are inadequate to meet the needs of modern waterway traffic.

The risk of insufficient funding is clear—disruptions in waterborne commerce, decreased protection against floods and damage to the environment. Simply put, we need more money.

Mr. Chairman, since this committee did not conduct a hearing on the Corps of Engineers budget for 2003, I would like to say a few words about it. In the Administration's fiscal year 2003 budget, the Corps of Engineers faces overall reductions of 4 percent over fiscal year 2002. In addition, 30 percent cuts for investigations and planning; 16 percent cuts for construction, with virtually no starts in these two accounts.

We have asked the Corps to do an impossible job. The 2003 funding levels are hardly adequate to make a dent in the Corps' construction backlog, let alone address our first priority, which is maintenance. The Administration's budget for construction is \$1.4 billion, and the backlog of construction projects is \$44 billion. That is a difference of almost \$43 billion. In other words, the Administration's budget only covers 3 percent of the construction projects that we need.

In Ohio a number of important projects are underfunded. For example, the West Columbus flood wall, and I will not go into the details, and I am going for this statement to be put in the record; or the Mill Creek flood damage reduction project in Hamilton and Butler County—others.

Senator VOINOVICH. Maintenance of our critical water infrastructure should be our first priority, yet this is not reflected in the funding. The Administration-proposed maintenance budget for the Corps is \$1.9 billion, and there is already a backlog of over \$700 million in maintenance projects nationwide. Under the Administration's budget, the projected backlog would total \$884 million. So in other words, with this budget we are going to end up the year with a larger backlog of maintenance projects that need to be undertaken.

The impact of insufficient maintenance funds for Ohio, which is the Great Lakes and the Ohio River Division of the Corps, would exceed \$100 million. The average lock chambers on the Ohio River, for example, are well over 60 years old and require regular maintenance.

In short, this committee has authorized a number of environmental restoration programs for the Great Lakes and the Ohio River which have not been included in the Administration's budget request. One of the most significant reasons that the Corps has such wide funding gaps between what is needed and what is budgeted is the decreasing Federal investment in water resource infrastructure over the last several decades. Nevertheless, the Corps' mission has continued to expand in new areas.

While I do not rule out and generally support increased funding, as Senator Feingold knows, I do favor spending our limited Federal resources on the right things. We do not prioritize. We do not make tough decisions around here. Moreover, I believe our infrastructure is vitally important to our domestic security. I look forward to hearing from our witnesses to learn how Corps projects fit into Homeland Security and about their financial challenges.

All you have got to do is look at this chart right here and you can see what I am talking about. This is what we spent in 1932. These are 1999—it's an old chart I used a couple of years ago. But you can see that up in 1966, 1976, we were spending about \$5 billion. Here we are in 2000, we are talking about \$1.4 billion. If you

would put up the first chart—this is what they were supposed to be doing back in 1965. You can see how the responsibilities are—this is flood control, hydropower and navigation.

Put up the next chart. Now, we have got flood control, navigation; we've got shore protection; hydropower was down. We've got environmental infrastructure; we've got recreation; we've got the environment; we've got FSRAP—all these new responsibilities that are being given to the Army Corps of Engineers, and a lot less money than they had when they began with a whole lot less responsibilities when they were first asked to get involved in this.

Everybody is talking about their new homeland security issues, and yet we are already at a disadvantage in terms of our infrastructure. What if our bridges and dams go out? We do not need Osama bin Laden to destroy our assets in interstate commerce or travel. We are doing it for ourselves. We are hurting our own national security because we have not put the resources into the things that are essential to keeping this country going.

Today, we are also going to be hearing about legislative proposals to reform the Corps and how they do business. I believe that Congress and the Administration need to develop a strategy to address the Corps' backlog and improve the effectiveness of investments in our Nation's water resources infrastructure. The strategy should as its priority address projects that are economically justified, environmentally acceptable, and supported by willing and financially capable non-Federal sponsors.

The Corps needs to ensure that its planning process is open, objective and inclusive, and that each project evaluation meets the highest standards of professionalism and quality. Furthermore, we in Congress must be able to rely on the Corps to recommend for authorization, and funding only projects that provide a high return on investment of taxpayer dollars for economic development and environmental quality.

To that end, Mr. Chairman, we supported a provision in the WRDA Act of 2000. We have asked the National Academy of Science to conduct two crucial studies—one, an independent peer review of Corps projects; and No. 2, a study of Corps methods for conducting economic and environmental analysis of projects. These results are going to be due this summer. This is what we asked them to do. It really gets to the problem that Senator Smith talks about.

So I think this is an important issue. I look forward to hearing from our witnesses this afternoon about how they are going to face up to their challenges and restore people's confidence in the integrity of the Army Corps of Engineers.

Thank you, Mr. Chairman.

[The prepared statement of Senator Voinovich follows.]

STATEMENT OF HON. GEORGE V. VOINOVICH, U.S. SENATOR FROM THE
STATE OF OHIO

Thank you, Mr. Chairman.

As Chairman of the Transportation and Infrastructure Subcommittee during the 106th Congress, I am proud to have had the opportunity to help develop the Water Resources Development Act of 1999 and to use that experience in drafting and sponsoring WRDA 2000.

Congressional authorization is an important first step in the process to develop and carry out projects that will protect our nation's water resources infrastructure.

Equally important is having an adequate level of funding to build, operate and maintain these projects.

As we on this committee know, this Nation has an aging national water resources infrastructure. If we continue to ignore the upkeep, what will result is deterioration of our locks and dams, flood control projects that are not started or not sufficient to get the job done, and navigation channels that are inadequate to meet the needs of modern waterway traffic. The risk of insufficient funding is clear: disruptions in waterborne commerce, decreased protection against floods and damage to the environment. Simply put, we desperately need more money.

Mr. Chairman, since this committee did not conduct a hearing on the Corps of Engineers' fiscal year 2003 budget, I would like to say a few words about it. In the Administration's fiscal year 2003 budget, the Corps of Engineers faces overall reductions of 4 percent over fiscal year 2002, and in addition, 30 percent cuts for investigations and planning, and 16 percent cuts for construction with virtually no "new starts" in these two accounts.

We have asked the Corps to do the impossible. The proposed 2003 funding levels are hardly adequate to make a dent in the Corps' construction backlog, let alone to address our first priority, maintenance. The Administration budget for construction is \$1.4 billion and the backlog of construction projects totals \$44 billion. That is a difference of \$42.6 billion. In other words, the Administration's budget covers only 3 percent of the construction projects needed.

In Ohio, a number of important projects are under-funded. For example, the West Columbus Floodwall, which would provide flood protection to the downtown area of Columbus, would receive only one-third of the required \$7.4 million needed to complete the project in fiscal year 2003. The Corps has been involved with the construction of this project since 1989. The project is a wise investment that will prevent lost of life and property for approximately 17,000 residents and more than 6,000 homes and businesses located in the current flood plain. Most of these homes and businesses remain at risk until floodwall construction is completed.

In addition, the Mill Creek Flood Damage Reduction project in Hamilton and Butler Counties, Ohio needs \$9.4 million this year to protect a priority flood control area, but the President's budget only includes 11 percent of what is needed (only \$1.1 million) to fund the Corps' portion of next year's scheduled activities.

Maintenance of our critical water infrastructure should be our first priority, yet that is not reflected in the funding. The Administration's proposed maintenance budget for the Corps is \$1.9 billion and there is already a backlog of over \$700 million in maintenance projects nationwide. Under the Administrations' budget, the projected backlog would total \$884 million. So instead of reducing the maintenance backlog, we are adding to it.

The impact of insufficient maintenance funding for Ohio, which is in the Great Lakes and Ohio River Division of the Corps, would exceed \$100—million or 11 percent of the total backlog. This is a serious problem. The average lock chambers on the Ohio River, for example, are well over 60 years old and require regular maintenance.

In short, this committee has authorized a number of environmental restoration programs for the Great Lakes and the Ohio River which have not been included in the Administration's budget requests. Fortunately, Congress has appropriated small amounts of funding for these worthy programs. Still, I believe Congress and the Administration can do more to fund these programs to protect and restore the ecosystems of the Great Lakes and Ohio River and to protect our domestic infrastructure.

One of the most significant reasons that the Corps has such wide funding gaps between what is needed and what is budgeted is the decreasing Federal investment in water resources infrastructure over the last several decades. Nonetheless, the Corps' mission has continued to expand into new areas. While I do not, as a general rule, advocate increased levels of Federal spending, I do favor spending our limited Federal resources on the right things.

Moreover, I believe our infrastructure is vitally important to our domestic security. I look forward to hearing from our witnesses this afternoon to learn how Corps projects fit in with homeland security and about their financial challenges.

But all we need to do is compare recent funding levels. [CHART: Here is a familiar chart and one I've used before.] Our capital investment in the Corps of Engineers has dropped dramatically over the years. In 1966 at its peak, the appropriation was \$5 billion and by the 1990's it averaged only \$1.6 billion. For fiscal year 2003, the administration's construction request is \$1.4 billion. So we're spending less even less than we were a few years ago, and we're asking the Corps to do more things. We've expanded the mission for the Corps of Engineers substantially and given them less money. No wonder they have serious problems.

Everybody's talking about their new homeland security issues and yet we're already at a disadvantage in terms of our infrastructure. What if our bridges and dams go out? We don't need Usama bin Laden to destroy our assets and interstate commerce or travel—we're doing it to ourselves!

Today we are also going to hear about legislative proposals to reform the Corps of Engineers and how they do business. I believe that Congress and the Administration need to develop a strategy to address the Corps' backlog and improve the effectiveness of investments in our nation's water resources infrastructure. This strategy should as its priority address projects that are economically justified, environmentally acceptable, and supported by willing and financially capable non-Federal sponsors.

As the former Chairman of the subcommittee with jurisdiction over the civil works of the Corps, I know very well how the Corps has been scrutinized and criticized over the last couple of years. At the same time, the Army Inspector General has substantiated allegations that officials of the Corps exerted improper influence and manipulated a cost-benefit analysis in order to justify lock extensions on the Upper Mississippi River—Illinois Waterway.

These findings raise doubts about the integrity of the Corps' project evaluation and development processes. Quite frankly, there are many in Congress who have lost faith in the Corps. I believe, however, that the Corps plays a vital role in navigation, storm-damage mitigation, and environmental restoration throughout the United States and that we should assess the situation thoroughly and fairly before we insist on sweeping reform.

The Corps needs to ensure that its planning process is open, objective, and inclusive, and that each project evaluation meets the highest standards of professionalism and quality. Furthermore, we in Congress must be able to rely on the Corps to recommend for authorization and funding only projects that provide a high return on investment of taxpayers' dollars for economic development and environmental quality.

To that end, I supported a provision in WRDA 2000 directing the National Academy of Sciences to conduct two critical studies: (1) an independent peer review of Corps projects and (2) a study of Corps methods for conducting economic and environmental analyses of projects. These results are due this summer and I look forward reviewing the reports.

Mr. Chairman, this is an important issue and I look forward to hearing from our witnesses this afternoon on all of the challenges facing the Corps of Engineers and the reforms they believe are necessary to restore confidence and integrity in the Corps' ability to meet our nation's water resources needs. Once we have all the facts, we will be able to determine whether it is advisable to incorporate any reforms in the legislation for management of the Corps.

Thank you, Mr. Chairman.

Senator JEFFORDS. Senator Chafee.

**OPENING STATEMENT OF HON. LINCOLN CHAFEE,
U.S. SENATOR FROM THE STATE OF RHODE ISLAND**

Senator CHAFEE. Thank you, Mr. Chairman, for holding the hearing.

I tend to believe that the Corps can make the reforms internally, as opposed to legislatively. My experience in Rhode Island has been that the change of the Corps over the years that Senator Voinovich's charts showed is that they are changing into being a more environmentally responsible entity. It used to be in days gone by that to an environmentalist to say the Army Corps of Engineers is coming was about the scariest thing you could say.

Just yesterday in Rhode Island we were at a 25-acre former drive-in movie site that at one time was a marsh and had been filled in to become a drive-in movie theater. Now, the Corps is—we raised the money through various entities and the Corps is the major entity responsible for restoring that to a marsh—a 25-acre site.

So I do think a lot of positive things are happening with the Corps from my experience. I know there has been some criticism

on the large-scale projects, but in general I think that they can make the reforms internally, but I am willing to listen to the testimony this afternoon.

Senator JEFFORDS. Senator Warner.

**OPENING STATEMENT OF HON. JOHN W. WARNER,
U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA**

Senator WARNER. Sorry to be just a little late, Mr. Chairman. We were trying to get the Defense bill up. That is a matter which Secretary Brownlee is familiar with.

Listening to the discussion of my colleagues and so forth, I think we will have to call on General MacArthur to come back. He started his career as a second lieutenant in the Corps. Am I not correct on that, General? You proudly wear his emblems that were once owned by General MacArthur. Well, Secretary Brownlee, you spent a lot of time in the Senate of the United States as Staff Director of the Armed Services Committee. You are prepared to solve it. Go do it. Thank you very much.

[Laughter.]

Senator JEFFORDS. Senator Reid.

Senator REID. Mr. Chairman, could I submit questions to General Flowers and Secretary Brownlee, and have them respond in writing?

Senator JEFFORDS. That is allowable.

Now we are ready to hear from our first witness. Senator Feingold, please proceed and welcome to the committee. I know you spent a lot of time in preparation, and we look forward to hearing your testimony.

**STATEMENT OF HON. RUSSELL D. FEINGOLD, U.S. SENATOR
FROM THE STATE OF WISCONSIN**

Senator FEINGOLD. Thank you very much, Mr. Chairman. I am delighted and honored to appear before the Environment and Public Works Committee today. I want to thank you, Mr. Chairman, for honoring the commitment to a hearing on the Corps Water Program and the need for reform of the Corps that was made to me by the former Ranking Member, Senator Baucus and Senator Smith during the floor debate over the Water Resources Development Act of 2000. I am very pleased to be working with Senators Smith and McCain on this issue. I certainly admire Senator Smith's dedication in particular to the fiscal responsibility, as being a driving force in his desire for Corps reform.

As many of the statements today indicated, Corps reform is a work in progress. Reforming the Corps of Engineers will be a difficult task for Congress. It involves restoring credibility and accountability to a Federal agency that frankly has been rocked by scandals. It has been struggling to reform itself over the last year, and in many ways is constrained by endlessly growing authorizations and of course our rather gloomy Federal fiscal picture.

But this is an agency that Wisconsin and many other States across the country have come to rely upon. From the Great Lakes to the mighty Mississippi, the Corps is involved in providing aids to navigation, environmental remediation, water control and a variety of other services to my State. My office does have a strong

working relationship with the Detroit, Rock Island and St. Paul District Offices that service Wisconsin. So let me be clear, as many of the members of the committee have, I want the fiscal and management cloud over the Corps to dissipate so that the Corps can continue to contribute to our environment and our economy.

The two reforms bills now before the committee grew in part from my experience in two legislative efforts. First, as the committee knows, I sought to offer an amendment to the Water Resources Development Act of 2000 to create an independent review of Army Corps of Engineers projects. In response to the initiative, the bill's managers adopted an amendment as part of their managers' package that should help this committee the additional information it needs to develop and refine legislation in this issue through a study on peer review by the National Academy of Sciences.

Second, I also learned of the need for additional technical input into the Corps' projects through my efforts in working with Senator Bond on the reauthorization of the Environmental Management Program in the Upper Mississippi, which was the only permanent authorization in WRDA 1999. Included in the final EMP provisions is a requirement that the Corps create an independent Technical Advisory Committee to review EMP projects, monitoring plans and habitat and natural resource needs assessments.

Mr. Chairman, I have been deeply concerned that this provision has not been fully implemented by the Corps and I feel that as this committee has been historically concerned about the need to secure outside technical advice in Corps habitat restoration programs like the EMP, it should also be concerned about getting similar input for other Corps construction activities.

Early this Congress, I introduced the Corps of Engineers Reform Act of 2001, S. 646, and then as Senator Smith indicated, I joined with him and Senator McCain and introduced the Corps of Engineers Modernization and Improvement Act of 2002, S. 1987. S. 1987 includes many provisions that were included in my original bill, and it codifies the idea of independent review of the Corps, about which Senator Smith and I agreed in the 2000 Water Resources bill.

It also provides a mechanism to speed up completion of construction for good Corps projects with large public benefits by deauthorizing low-priority and economically wasteful projects. Further, it streamlines the existing WRDA 8060 authorization process. Under Senate bill 1987, a project authorized for construction but never started is deauthorized if it is denied appropriations funds toward completion of construction for five straight years. In addition, a project that has begun construction, but denied appropriation funds toward completion for three straight years, is also deauthorized.

The bill also preserves congressional prerogatives over setting the Corps' construction priorities by allowing Congress the chance to reauthorize any of these projects before they are automatically deauthorized. This process will then be transparent to all interests, because the bill requires the Corps to make an annual list of projects in the construction backlog available to Congress and the public at large via the Internet. The bill also allows a point of order

to be raised in the Senate against projects included in legislation for which the Corps has not completed necessary studies that would determine that a project is economically justified and in the Federal interest.

It is a comprehensive revision of the project review and authorization procedure of the U.S. Corps of Engineers. Our joint goal is to cause the Corps to increase transparency and accountability, to ensure fiscal responsibility, and to allow greater stakeholder involvement in their projects. We are committed to that goal and to seeing Corps reform enacted as a part of this year's Water Resources bill.

Mr. Chairman, I hope that as the committee examines this issue, it also reviews my original bill, S. 646, which is sponsored in the House of Representatives by my colleague from Wisconsin, Representative Kind. S. 646 includes a number of important concepts that I think are central to environmental protection and it should be part of Corps reform. The Corps is required to mitigate the environmental impacts of its projects in a variety of ways, including by avoiding damaging wetlands in the first place, and either holding other lands or constructing wetlands elsewhere when it cannot avoid destroying them. The Corps requires private developers to meet this standard when they construct projects as a condition of receiving a Federal permit. I think the Federal Government should live up to the same standards.

Too often, and others on the second panel will perhaps testify to this in greater detail, the Corps does not complete required mitigation and enhances environmental risks. I feel very strongly that mitigation must be completed; that the true costs of mitigation should be accounted for in Corps projects; and that the public should be able to track the progress of mitigation projects. In addition, the concurrent mitigation requirements of S. 646 would actually reduce the total mitigation costs by ensuring the purchase of mitigation lands as soon as possible.

Mr. Chairman, I feel that we need legislation to ensure a reformed Corps of Engineers. The Corps' recently released list of projects that it intends to review have been confusing and the review criteria remain unclear. I think we need a clearly articulated framework to catch mistakes by Corps planners, deter any potential bad behavior by Corps officials to justify questionable projects, and old unjustified projects, and provide planners a desperately needed support against the never-ending pressure of project boosters. Those boosters, Mr. Chairman, include congressional interests, which is why I believe that this committee which has sought so hard to stick to its criteria in project authorization, and has done the better job in holding the line in conference needs to champion reform so that we can end the perception that Corps projects are all pork and no substance.

I wish it were the case, Mr. Chairman, and I know that Senators Smith and McCain share my view, that I could argue that the changes we are proposing today were not needed, but unfortunately, I see that there is need for Corps reform legislation. I want to make sure that future Corps projects no longer fail to produce predicted benefits, stop costing the taxpayers more than the Corps

estimated, do not have unanticipated environmental impacts, and are built in an environmentally compatible way.

I hope this committee will seek to ensure that the Corps does a better job, which is what the taxpayers and the environment deserve. I am pleased to have this chance to meet with this committee and to testify, and I thank you for this opportunity to share my view with you today.

Senator JEFFORDS. Thank you very much, Senator.

I have to leave now to establish a quorum in the Finance Committee. As soon as I am not necessary for the Finance Committee's quorum, I shall return. In the interim, Senator Corzine will take charge.

Senator CORZINE. Are there any questions from my colleagues of Senator Feingold?

[No response.]

Senator CORZINE. If not, thank you very much. I appreciate your testimony and consideration.

We ask the next panel to please come up. Assistant Secretary Brownlee to start, thank you.

**STATEMENT OF HON. R.L. BROWNLEE, ACTING ASSISTANT
SECRETARY OF THE ARMY, CIVIL WORKS**

Mr. BROWNLEE. Mr. Chairman, I have a prepared statement which I would ask be entered into the record, and with your permission I will briefly summarize that statement.

Senator CORZINE. Without objection.

Mr. BROWNLEE. Thank you, Mr. Chairman. This is only the second time since I left the Senate Armed Services Committee staff last November that I have been invited to return to testify before a committee of the Senate, an institution which I have loved and which I so proudly served as a member of the staff for almost 18 years.

I am privileged to appear before you today on behalf of the Administration to talk with you about the Army Corps of Engineers, our Nation's water resources, and charting a path toward continued modernization of both. I have learned a lot about the Corps of Engineers since I assumed more direct management responsibilities for Civil Works in mid-March. Among the things I have learned is that the distinguished history of the Army Corps of Engineers is the history of our Nation. As the Nation has changed its priorities and values, the Corps has also changed as it brought these priorities to reality.

It is with this history, tradition and spirit that I address the subject of today's hearing, Corps reform. This Administration supports the goals of Corps reform and will work with this committee and other interested members to ensure that the most needed and most worthy projects are implemented, and to improve the ways in which we formulate projects and fund them.

I would also propose that we focus our attention on the question that perhaps lies on a higher strategic plane. What should our national policy for water resources be in the future? Our continued understanding of this question is critical to setting the future direction of the Corps. The debate over water resources typically centers around a more specific question. Where should we give priority to

the development of water resources for social and economic benefit, and where should we give priority to the restoration of these resources to their natural state? Sometimes we must choose one over the other. Sometimes we struggle to do both. As science and engineering evolve, we can enhance our opportunities to find more balance between these options, and working together make the right choices for the Nation.

We all agree that the Corps can and should modernize. But modernization of the Corps needs to be in accordance with the future direction of our national policy. While advances in science and technology can move us toward a new era of more environmentally sustainable projects and integrated water resources management, we must develop more effective public policies built on a new public consensus. In terms of our Nation's priorities, the war on terrorism is and should be our main focus. We must prioritize our national resources to ensure that we win this war.

At the same time, we also need to protect and sustain our Nation's natural resources. Our financial resources are not unlimited and decisions about the most important priorities must be made. This Administration has insisted on much stronger coordination and cooperation among agencies within the executive branch and wants to work more closely and effectively with you in the Congress on the plans and policies to address these long-term needs.

Corps reform is important. General Flowers and I agree that the Corps of Engineers should be changed and transformed to better serve the evolving needs of the Nation. However, reform of the Corps will follow in a more natural and logical way if we better define our policies and reach agreement on the right balance on the critical priorities.

I appreciate the opportunity you have given me to testify before this distinguished committee, recognizing that your knowledge of these subjects far exceeds what I have been able to learn in these past few months. I believe we have an opportunity working together to shape the Nation's future. As you know better than I, these are serious times and it is often hard to concentrate on the long term when the more immediate becomes urgent. I pledge to work with you on these important issues to achieve a national water policy that serves the best interests of all our citizens.

Mr. Chairman, this concludes my statement. General Flowers and I would be pleased to address any questions that you or the committee might have.

Senator CORZINE. Thank you, Mr. Brownlee.

General Flowers.

**STATEMENT OF LIEUTENANT GENERAL ROBERT B. FLOWERS,
CHIEF OF ENGINEERS, U.S. ARMY CORPS OF ENGINEERS**

General FLOWERS. Yes, sir. I also have a statement that I would submit for the record and would summarize orally if permitted.

Senator CORZINE. We will include it.

General FLOWERS. Mr. Chairman, members of the committee, it is an honor to be before you today. I would like to state categorically that the Corps must change. Mr. Brownlee has articulated what I believe to be the heart of the issue. It will be more beneficial for the country in the long run if the transformation of the

Corps is consistent with changes that have been occurring in the Nation's priorities and values regarding water resources.

The Corps can change, but we need your help and that of the Administration to transform today's Corps. In previous hearings, we have talked about too many projects on the books, some of which do not address solutions in a contemporary way. We need to solve this. We have, and I will bring forward for immediate deauthorization, about \$5 billion worth of inactive projects that technically remain on our books whose designs will not solve the original problem for which there is no longer support. We also have some ideas on other ways to clear some other unbuilt projects off the books.

We are also working to change the organization's internal process and procedures. We certainly must address concerns about economic analyses. We have had a couple of high-profile failures recently. That is unacceptable. During the past year, we have focused on revitalizing our planning capability within the Corps. Our ability to systematically analyze alternatives and make sound investment recommendations was once a major strength. I think it is still pretty good, but not as good as it once was and not as good as it needs to be.

The other part of this is independent review. It is possible, in my view, to have such a review without adding unacceptably to time and cost if that review is designed properly. We are eagerly awaiting the study findings this summer from the National Academy of Science that were directed in WRDA 2000. I am optimistic that the recommendations will provide us with a road ahead on this issue.

We are also looking forward to the second phase of the study that will look at the state-of-the-art of the Corps planning process. We also need to refocus the Corps with your help and that of the Administration so that we are approaching problems and opportunities on a watershed basis. For example, I have restructured the controversial Upper Mississippi Navigation Study to consider a wide range of options, from construction of new locks to non-construction alternatives such as system-wide environmental restoration.

We also need to ensure that the economic analyses used in the study is current and beyond reproach. The process is being overseen by an interagency national principles group, and so far it is working well.

I have revitalized the Environmental Advisory Board, a board of independent external advisers that will help us evaluate our processes. I have established a set of environmental operating principles that reiterates our commitment to approach our work in a more environmentally sustainable way. This will refocus our professionals on the long-term goal.

Quite frankly, though, we need to do more and we need the Congress' help if we are to truly take a watershed approach. Right now, existing laws and policies drive us to single focus, geographically limited projects where we have sponsors willing and able to share in the cost of the project. The current approach narrows our ability to look comprehensively and sets up inter-basin disputes. It also leads to projects that solve one problem, but may inadvertently create others. Frequently, we are choosing the economic solution over the environmental, when we can actually have both.

I believe the future is to look at watersheds first, then design projects consistent with the more comprehensive approach. We know that that will require collaboration early and continuously, but we believe it will minimize disputes later. So together, we need to develop and agree on criteria. Transformation of the Corps will not be easy, but we stand ready to work with you to address these issues.

Thank you, sir. This concludes my statement. I look forward to your questions.

Senator CORZINE. Thank you.

We will have a round of questions, 5 minutes each. I will begin off the Chairman's inquiries that he left.

Gentlemen, in your testimony, you both indicate the Corps must adapt to new conditions and change, and that you are anxious to work with Congress to do so. You cast our challenge in that regard broadly, indicating that we have to have a broad review of our Nation's water policy before settling on agency-level change. Why do you think this type of debate is necessary before moving forward with changing some ways the Corps does business? Is there something deficient in the Water Resource Planning Act which already requires the Corps to balance economic and environmental considerations that stands in the way of change?

General FLOWERS. Sir, it is an excellent question. I think the water basin or watershed approach will help do just exactly what you are leading toward—by taking a more holistic approach, by having the ability to look at all of the interests in a basin you have a better opportunity to provide the type of solutions that I think will be in keeping with the values of this Nation.

In history, we have periodically done this in our country. Comprehensive looks at the Mississippi authorized decades ago, but it appears today that we are now being driven to and have been on a more project-specific approach. When you are that way, you have the tendency then to build a project that solves one purpose and solves one problem, and may inadvertently create another.

So having authority to work on a watershed basis would provide us an opportunity to do better.

Senator CORZINE. If there anything that exists in the Water Resource Planning Act that stands in the way of that change that you are suggesting?

General FLOWERS. No, sir, but to my knowledge we do not have authority to conduct—we would require specific authority to conduct water basin-wide studies.

Senator CORZINE. The Corps has a growing backlog of environmental mitigation and incomplete mitigation projects, as documented by the General Accounting Office. This is problematic because the Corps is the chief regulator of wetlands under the 404 Program, and is also in charge of ensuring that private parties mitigate wetland losses. How can you ensure that the Corps holds itself to at least a high a standard as it holds private parties?

General FLOWERS. Sir, we are working very hard in our regulatory arena. We have asked and have been granted in the fiscal year 2003 budget additional funds for regulatory. Our regulators have the hardest job in the Corps. They are the face that the public sees most often, and they are probably some of the best environ-

mental specialists in the business. Having said that, we agree with findings that were made that the Corps has not done a very good job in following up on mitigation. We think that the additional funds provided in the fiscal year 2003 budget will help us in that area. We have committed to holding people accountable for being in compliance with Corps permits that are issued.

Senator CORZINE. Both the 1999 and 2000 National Academy of Sciences reports on the Corps criticized Corps planning models and their focus on maximizing national economic benefits, without balancing those benefits against environmental considerations. How could you modify Corps practices to account for the concerns of the NAS?

General FLOWERS. Sir, we are looking at—we are looking forward very much to the reports that were directed in WRDA 2000 from the National Academy of Science that basically asked them to take a very hard look at the Corps and that specific issue. We will get the first of the reports, that on independent review, later this summer, and the second next year on a very holistic look at Corps processes. We are looking very much forward to those.

In the interim, what we are doing is, we are working at an internal look at the Corps and how we do our planning. I mention in my testimony that it is a core competency that has eroded some over time. So we have a task force that has been appointed to help reestablish that core competency within the Corps, revitalizing the training for our planners, centralizing that planning capability so that we can have the best minds working on all of the analysis when they are required.

I think we directed as a result of the Delaware deepening project that you mentioned, the IG to take a very hard look at that, and we will continue to work that in the interim.

Senator CORZINE. Just one follow on—is that one of the projects that you were referencing when you said major projects that you were concerned about the flawed analysis?

General FLOWERS. Yes, sir.

Senator CORZINE. Senator Smith.

Senator SMITH. Thank you, Mr. Chairman.

Secretary Brownlee, welcome back in the harness.

Mr. BROWNLEE. Thank you, sir.

Senator SMITH. It's unusual to see you sitting across the table from me there, and not advising me on some matter that Senator Warner is asking about.

Senator WARNER. I think he prefers to ask questions rather than answer them. Have you noticed that?

[Laughter.]

Senator SMITH. General Flowers, I appreciated the spirit of your remarks and your candor, and I take them that way. I look forward to working with you, not against you, as we try to address some of the problems. My objective here is not to be out there banging away, highlighting necessarily problems, as much as it is to discuss and to try to make them better and to correct them.

Let me ask you, either one of you, but probably General Flowers, a most specific question. Somebody brought up on the panel here, it might have been Senator Bond, I am not sure, that there is a lot of I think political pressure, at least if it is not exerted, it would

feel—you may feel that it is in the sense of who it might be, whose district it is, whose State it is, or whatever. If we had independent review, and I would say to you that my objective on any kind of independent review is not to add another level of bureaucracy. On the contrary, it would be to expedite, rather than delay. But if we had some type of independent review, if it would be done in a way that did not lengthen the process, perhaps maybe, say, 6 months while the draft feasibility is being prepared, something along those lines. Would that remove some of the political concerns that you might feel in addressing a problem in somebody's State or district?

General FLOWERS. Sir, I do not know if it would remove political concerns. I think the Corps is not afraid of independent review. I testified last year that any type of external review or independent review that might be done, as long as it did not appreciably add time or expense to a project, would be welcomed by the Corps. We have had a number of our projects reviewed.

But I must state that as an organization, what we do is try to provide the best engineering and science that is available, and base our commendations on that. I was questioned in testimony last year—you know, General, did you receive political pressure when you put this budget together? The answer is yes. But if the question is, did it cause you to change any of your recommendations, the answer is absolutely not. They must be based on the best engineering and science available. That is why some of the things that have come up are so troubling, and I understand. We need to work together to get that fixed.

What I am saying, sir, I think is, I will make sure that the things we do are done right, but I need some help in making sure that we are working on the right things.

Senator SMITH. At least if there is independent review, you have got a little cover if they tend to agree with you. Right?

Let me ask you this, and maybe Secretary Brownlee could answer this, in the situation where you have very little traffic on a waterway, and then you see proposals to dredge it deeper or to do more with that waterway, is it unfair to ask those who use that waterway, that very limited waterway, is it unfair to ask them to increase their burden for the usage of it?

Mr. BROWNLEE. Senator, the decision on those kinds of projects of course are made here. Generally, the projects get authorized and appropriated and then the Corps ends up doing them. The issue of fairness with respect to the expenditure of Federal funds is one that is probably a lot bigger than I am, but I do not know and I listened very intently to your example. I also listened very intently when Senator Voinovich made some of the points he made, to make a note to go back and look into those things. Senator, the fairness of that, I do not know. We spend a lot of money on a lot of things in this country—on national security and economic development. As I indicated, those decisions are usually made here by committees like this and on the floor of the Congress. The responsibility does lie here.

Senator SMITH. General Flowers, I mentioned it, and I think somebody else mentioned it in their remarks, the example of the 118 projects, the economic analysis that came back. Some have said it was 80, not 118—but whether it is 80 or 118, came back in 17

days. Can you just shed some light on that? Is there a reason why it was only 17 days? Could you enlighten the committee a little bit on that?

General FLOWERS. Yes, sir. As a result of an out-briefing we received from the Government Accounting Office, it indicated to me that for good governance, I needed to initiate a stop on any projects that had economics over 5 years old, because essentially what was found was economics that had been done over 10 years ago and had not been properly validated or updated. I wanted to make sure, very embarrassing, but essentially there was no audit trail to the original benefits that were derived for this project. So I wanted to make sure that we did not have same situation occurring in projects where we had done economics that were over 5 years old. There were some 171 projects that were reviewed. Of those 171, there were eight projects that were going to require some additional analysis. In other words, those remaining projects, the economics did have an audit trail and were verifiable by the people who had done the work.

Senator SMITH. Is it possible for you to provide the committee with the economic analyses on those projects? How much of an effort does that require?

General FLOWERS. Sir, yes, sir. In fact, the economic analyses on all of those projects is public record. So absolutely.

Senator SMITH. It would be helpful to me just to see the process, to see if we are being unfair in terms of saying you came back in 17 days with 80 or 118 or somewhere between number of projects. I would like to just have the opportunity just to review that to see what your process is so that I can understand it better. So I would appreciate it if you could provide that for the record at some point.

General FLOWERS. Yes, sir.

Senator SMITH. Thank you, Mr. Chairman.

Mr. BROWNLEE. If I could just add, sir. When this information came to light, I would just like to point out to the committee that General Flowers and his people came to see me on this. They were extremely embarrassed and frustrated by this kind of a report. Certainly, in the discussions I have had with them they are extremely conscientious about this sort of thing and it is horribly embarrassing to them that this happened. But they have already taken steps to consolidate some of their expertise in these areas to help improve. As has been indicated before, hopefully the recommendations of the National Academy of Sciences that this committee put in motion will help also.

Senator SMITH. Thank you very much.

Senator JEFFORDS. Senator Bond.

Senator BOND. Thank you, Mr. Chairman.

General Flowers, you have a lot of projects on your plate. These are not projects you stay up late at night and dream up. They are local and regional projects. Who brings these ideas to you and where do you get them from?

General FLOWERS. Sir, you are making a great point, and that is the Corps does not dream up any of its projects on our own. All of these projects come forward based on some public request, either from elected officials, local entities. Many of them come about as a result of studies that are conducted into the feasibility of accom-

plishing some goal like flood control or environmental restoration. That is the way they come about.

Senator BOND. How many of the projects you undertake that are not authorized by Congress, appropriated for by Congress, are signed-off on by the President?

General FLOWERS. Zero.

Senator BOND. Zero—about zero—between zero and none.

General FLOWERS. Yes, sir.

[Laughter.]

Senator BOND. You know, there is a lot of talk about the huge expenditures of your agency. Current expenditure for construction is about \$1.4 billion. If you look in constant 1999 dollars, back in the 1960's and 1970's we were spending about \$4 billion. In other words, this is down to just a little over 30 percent of what it was. Senator Voinovich has noted previously that in the last 30 years our population has grown 40 percent. Our GNP has grown by a factor of four and our water infrastructure investment has declined by 70 percent. Now, out of that figure, how much of the current budget, which has already been diminished by two-thirds, is for environmental work?

General FLOWERS. Sir, about 20 percent.

Senator BOND. About 20 percent. Thank you.

If government were to reduce water transportation options, is it not obvious to say that this would be bad for shippers such as farmers; good for our foreign competitors; and, say, good for railroads, who also carry goods?

General FLOWERS. Sir, potentially.

Senator BOND. The National Academy of Science has said that the market for American grain over the next 5 years is highly uncertain. The market over the next century is unknowable. They also said no one can know or predict with confidence the demand for water transport or almost anything else 50 or more years in the future. Are they wrong?

General FLOWERS. No, sir.

Senator BOND. It seems that we are being held to a standard of what the shipments are going to be 50 years from now, and I believe the National Academy of Sciences said what common sense would tell us, that you cannot know and the actions we take now are going to make a major impact on those shipments.

I am concerned about the process. Cost-benefit analysis—almost nobody else does them. We in Congress still want to have projects. Everybody is pushing for projects. We try to substitute your forecasts for our judgment. It is simple for us to tell you just to go and stack up the pennies and if there is more in one pile than in the other, then it is deauthorized. But it seems to me that we would be better off—you and we and the public we serve would be better off—if the Administration issued projected ranges of costs and benefits and options, and laid out environmental issues, and included separate analysis from resource agencies, and then had the Administration give their political go or no-go recommendation, and let Congress earn the money we are paid by determining if the projects are or not priorities worth authorizing and appropriating, and stop trying to determine with the false security of a mathematical formula what should and should not be authorized.

These are judgment issues and we value your expertise. Is there any sense in doing something like that?

General FLOWERS. Yes, sir. I think again working on a much more regionalized-type approach would help us. One of the things, for example, that we are doing on the Upper Mississippi study is we are examining a very wide range of alternatives with maximum input possible, running a series of scenarios. Then we are working with a very large group to try and narrow this group of scenarios down to as narrow a band as possible, and then base recommendations on that, rather than on one finite prediction on what might happen.

Senator BOND. Let me just ask one final question. Despite the apparent holiness of a full report and benefit cost analysis, a good number of environmental projects, many of which I support very strongly, have no cost-benefit report. I see the budget requests a whopping \$98 million for a Columbia River project. There are individual earmarks from members on this committee and the Energy and Water Appropriations bill which have none of the sacred cost-benefit analysis. We also see the occasional combined sewer operation funding pop into legislation. Do you see this happening? Are many of these projects authorized, particularly in the environmental area, without the same cost-benefit analysis that are required for the water transportation or levee protection projects?

General FLOWERS. Sir, yes they are. Environmental restoration projects do not necessarily need a positive benefit-cost ratio to be brought forward.

Senator BOND. I thank you, General, and thank the Chair.

Senator JEFFORDS. Senator Corzine.

Senator CORZINE. Thank you, Mr. Chairman.

Can I go back to the Delaware River dredging project, but more in the context of how we sort through to deal with this. I am a little troubled in what I thought I heard in response to the last question. You are not arguing that we should not do cost-benefit analysis, whether it is against a given project or whether it is a broader base in our watershed proposal—or am I hearing you say that you think those are not effective elements of proposal evaluation?

General FLOWERS. It is our current evaluation process that we use the benefit-cost analysis. I am not arguing against using benefit-cost analysis because I think it can prove valuable. What I was arguing for was authority to do a more comprehensive watershed or water basin approach so that you can lay out all of the interests and make smart decisions and lay out priorities.

Senator CORZINE. As you know, in the Delaware River dredging project there was a 108-mile basin study, so it was fairly comprehensive in the context of how you are describing the situation. I am in no way saying that there are not judgments that need to come into play. But one of those elements that one ought to evaluate, at least in my view, in looking at returns on dollar invested is whether the balance is in play on the cost-benefits.

But that aside, I am troubled. How do you think we got into the situation we did with regard to this Delaware project that saw a flip of the benefits almost 100 percent. It was pretty remarkable, and it is easy with 20–20 hindsight to go after analysis. But was

there interference on the political side from those of us who sit on this side of the microphone? How did we get into such a situation?

General FLOWERS. Sir, I think it is really tough to answer that question with great knowledge and finality because the real answer is, I am not sure, but we are working to try and make sure that we do not have this happen again.

What you have is across the Corps right now, each one of our districts has a planning capability and does the analyses for projects within their district. Some of our districts have projects frequently and large projects and are very practiced in doing these analyses. Other districts only do them rarely, so they may not have all of the expertise that is necessary to do a good initial analysis. Whether that happened in this case or not, I do not know. My suspicion is that that was a factor.

What is embarrassing is that subsequent required re-analyses which are required by our regulations, were not properly accomplished. I suspect what happened was there was an initial report done more than 10 years ago and the economic analysis was in that report. When subsequent updates were done, they never went back and questioned those original values and simply updated the values in the original report. So now when we go back and try and reconstruct where those initial benefits come from, there is no employee any longer working in that section that did the original analyses. Very tough. So what you try to do in the future is set it up so you never have that happen again.

Our intent is to take a look at our planning capability, make sure we have the best minds looking at these projects, incorporate reviews and that is what we will do for this particular project.

Senator CORZINE. It does argue for that third party oversight—not oversight per se, but peer review of the analysis to make sure that it is squaring with facts and circumstances and can be challenged, I presume, particularly on these mega-projects.

General FLOWERS. Yes, sir. We have the capability, I think, to do much of that internally—in other words, to have a review by a body independent within the organization. Then if some other review is deemed necessary, that is all right as well.

Senator CORZINE. Thank you, General.

Senator JEFFORDS. Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

I think that the charts that Senator Voinovich held up I had forgotten. I had seen those before, but I had forgotten the history of this and the funding problems. I think each one of us up here could tell you a story about, well I would use the Montgomery Point Lock and Dam, which is actually in Arkansas, but it affects everything forward on up toward upstream.

I was elected to the House 16 years ago. We were talking about it back then. Then we started in the engineering—we started in as it progressed along. We got a little bit of funding and then a third of the funding and then a fourth of the funding the next time. This thing could have been done, it is estimated, by less than one-half of what the total cost would be today, because we just never get these things done. That is something that if you don't do, there is no way to predict in advance whether to the wheat farmers going

one way or the oil people going the other way, whether or not they are going to be able to get all the way down to the Mississippi.

These things are just—we have to get some way we can get these things done. I know that is not the purpose of this hearing, but it is one that I hope that the general public can look at the charts that Senator Voinovich held up and be concerned with them.

Now, General Flowers, we are really dealing here with three things. You have got your national security. You've got economic development and environmental protection—three things. How do you do all three things?

General FLOWERS. Sir, I think the Corps is a great contributor in all three areas. National security—many of the ports that we maintain are our strategic deployable ports for this country. I think the inland waterway system gives us an agility to move within our borders that is the envy of most of the rest of the world.

Senator INHOFE. I might add in moving our National Guard around from place to place, that has ended up being the most cost-effective way of doing it, and has saved a lot of money to other areas of defense, hasn't it, Secretary Brownlee?

Secretary BROWNLEE. Yes, sir.

General FLOWERS. We have been able to use the expertise we have gained. We have set up an infrastructure security partnership. It is an association of associations, several Federal agencies, many national associations such as the American Society of Civil Engineers, the architects, the contractors, to come together and share information on how to better protect the Nation's built environment. So we are making a contribution there.

I think when you look at the economy, money that is put into infrastructure that has a positive benefit-cost ratio does in two ways—short-term, there is an infusion of money into the local economies through the contracts that are done; and then longer term to the treasury in terms of benefits realized. So I think we contribute that way economically. So national defense and the economy are two things that I think the Corps is a great contributor in.

Senator INHOFE. There is a phrase that I had not seen before, but I saw in your written statement. You said, scenario-based comprehensive planning. So I will go ahead and add that to a question I am going to ask. What legislative tools and financing changes do you need to pursue this scenario-based comprehensive planning, enhance public participation, increase roles for peers and technical experts in streamlining of your economic planning and engineering processes?

General FLOWERS. Sir, I think what we would ask for would be the authority to do comprehensive basin-wide studies, using an interagency process and apply more macroeconomic and larger-scale scenarios to take a look at outcomes. I think the engineering and science is good enough today, sir, to do very models that have great fidelity, using the automation, the digital terrain data and so forth that we have, and to provide better options to the decision-makers for prioritizing and making sure that we are in fact accomplishing the right work.

Senator INHOFE. Mr. Chairman, I heard Senator Corzine talk about oversight, and I kind of whispered to Senator Smith, isn't

that what we are supposed to be doing here in this committee—providing the oversight? I would just like to ask you, General Flowers, what more can we do that is going to resolve some of the problems, answer some of the objections that are out there right now, that is precipitating the legislation?

General FLOWERS. Sir, I think the committee already acted through WRDA 2000 when it directed the National Academy of Sciences to take a look at the Corps, to one, independent review; and second, to take a look at the core process and make recommendations. That is ongoing right now. So I think we are looking forward to the results of that, and we intend to incorporate them as we move into the future.

I think as I indicated, the Corps does need changing. We do need transforming. I think working together, we will do that, to make ourselves better servants of the public for the future.

Senator INHOFE. All right. Thank you.

Senator JEFFORDS. Senator Voinovich.

Senator VOINOVICH. In my statement, I noted the fact that your budget is \$1.9 billion for maintenance. It is only a couple of years ago that we had a \$454 million backlog. Now, even with this budget it is going to be \$884 million. Is that adequate to get the job done, General? Secretary Brownlee, is that adequate to get the job done?

Mr. BROWNLEE. Senator, as you well know, we have backlogs in almost every maintenance program we have in the military, and certainly we have maintenance backlogs in the Corps of Engineers projects. These are a matter of priorities. As I indicated earlier, our resources are not unlimited and we are prioritizing on the margin in many cases.

Senator VOINOVICH. Well, the President's priorities are the war on terrorism, homeland security, economic security, with emphasis on jobs. I just wonder, have either one of you or both of you sat down and laid out specifically for somebody over at OMB how this maintenance budget impacts on our homeland security, on our economic security, on jobs?

General FLOWERS. The answer is yes, sir. I think some really tough calls have to be made. My job is to make sure and articulate to the leadership what the status of the systems are and what the requirements are, and then articulate the best case I can, and then make sure that whatever money we are given, we apply in the best way we can to satisfy the needs of the American people. That is the commitment.

Senator VOINOVICH. Well, the fact of the matter is that, are you going to be able to maintain the commitment? You are talking about some strategic things that are needed here in this country, and that are in pretty bad shape and could go down and impact on us negatively in terms of our security and in terms of our economic security.

Mr. BROWNLEE. Senator, I might add that in too many cases, decisions are made on the margin not between things that are not needed or not wanted, but in many cases between things that are both needed and both wanted. As you know, decisions have to be made here on this committee and as well as within the Administration. I know we are doing the best we can.

Senator VOINOVICH. The thing that really bothers me is that we are increasing the Defense budget 14.5 percent, domestic budget 2 percent. I know full well that is not going to be the case. We will add on to it. We had a budget surplus of \$313 billion, now we are borrowing over \$300 billion to take care of 2002, and it will be more in 2003. Somebody has got to sit down and start looking at this. The Administration has to look at their Defense budget. If this maintenance is very important to you, then they may have to nick that Defense budget to put some more money into the domestic side of this thing to deal with the problems that you have. It is really disturbing to me that nobody wants to do that.

Everybody wants to do everything. The Administration knows dog-gone well that we are probably going to come up with some more money. We are going to add to the debt and down the road undermine our national economy. It may not happen right away, but it is going to happen sooner or later. Son of a gun, somebody has got to start talking about doing some of these tough things around this country.

General, you know, his successor quit or got fired. I understand part of it was is he told them that he did not have enough money. I told him when he came to see me that he ought not to take the job unless he told them, I am not taking it unless I have the money to run the operation. It is get-down time. I am going to be talking to Daniels about some of this stuff in terms of these budgets.

The other thing is this \$5 billion that you are talking about. How are you going to get away with knocking off \$5 billion with all the politics involved and all these people here at this table and over in the House and Senate?

Mr. BROWNLEE. We didn't say we would get away with it, sir. We said we would just . . .

[Laughter.]

General FLOWERS. We were asked by the committee last year, and I think it was you and Senator Graham that basically said, we really want you to come take a look at the projects out there and come back to us with ones that you think. So, we have identified \$5 billion so far in projects that we do not think meet their intended purposes any longer, and we would like to bring them forward and have them deauthorized. We will follow the procedure to do that, and we are prepared to do that very soon.

Then there are some other projects that we would like to pull together an interagency panel and have another look taken at as to whether or not we should move these projects along or also look at them for possible deauthorization. We would like to work within the Administration and with the other Federal agencies to pull together a proposal, and then vet that. But I think that is the proper way to proceed.

Senator VOINOVICH. Well, I want to tell you, I am going to help you knock off that \$5 billion, even if some of them have got to do with the State of Ohio. I was thinking, Mr. Chairman, that maybe if we have the BRAC process where we go through an independent group and then give them a bunch of them and say, here, here it is, and you cannot nitpick it and choose, and you have got to go with it.

But I think it is incumbent on us to really look at this big backlog of the capital projects and deal with them. The other thing is this, is that if you have got to choose between money for maintenance and for these capital projects, I think the maintenance has got to come No. 1. That is your everyday stuff. If you do not take care of that, then you cannot keep going.

So I just think that we really need to have more dialog here, Mr. Chairman, in terms of where you are going with this budget, because that is the most important thing, and how we can help you with that issue.

Senator JEFFORDS. Thank you, Senator.

Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Secretary Brownlee, did you comment at all on Senator Feingold's testimony?

Secretary BROWNLEE. Senator, as I said initially, we certainly support changes within the Corps to improve their processes and how things are done. It has been my observation since the few months that I have been having these direct management responsibilities and looking back over what the Corps has done and not done in the past, the Corps pretty much does what it is told to do. The Corps does what it is directed to do.

The Corps has changed over time. Looking back, in fact, I found a copy of a Miami Herald, December, 1947 which describes the horrible floods in Florida—2,000 people homeless in Dade County. Almost the whole southern part of Florida was flooded. The national consensus was and the elected representatives decided that there should be flood projects down there to prevent that in the future. The Corps was given that mission and they did that very effectively. They redirected that water to the ocean, both the Gulf and the Atlantic Ocean.

Now, we find ourselves, and I just came back from there last week. I spent Thursday and Friday both flying over the Everglades and going up the river in one of these propeller-driven boats. Now you find the Corps very deeply involved in projects to restore the Everglades as near as possible to its original state. The Corps did not dream these projects up on its own. The Corps was directed to do this.

So I guess the message is that I find the Corps to be made up, just like I found the people in the Senate when I worked here, to be made up of good, honest, hard-working, dedicated Americans trying to do the right thing. We are all working, as I found over the years, with limited budgets. Everybody has unfunded requirements and priorities. As you work with some of these transformation projects in the Department of Defense, it is the same thing. Everybody wants to go to heaven and nobody wants to die.

[Laughter.]

Mr. BROWNLEE. So here we are. I was privileged—General Flowers asked me out to speak to the Corps. I did not want to do it until I had had the job for about a month, and I do have another job. But what I told them was, I want you to do your job professionally and quietly. I want you to know that we are not trying to be a growth industry and we are not seeking new business, but what we do, we want to be known for the excellence and the profes-

sionalism of it. All of the people that I have met within the Corps of Engineers, I believe, are striving for that.

So certainly we want to improve the methods by which the Corps does its business. I also believe, as I indicated in my statement, that we need to work hard to try to develop a national consensus on what our policies ought to be with respect to our water resources. I think we are beginning to realize that these water resources that we may have taken for granted over the years are not infinite.

So anyway, I know this committee knows a lot more about these matters than I do, but I do have to say that I have been impressed by the efforts I have seen in the Corps thus far, and their ability to do what they do with what they have.

Senator CHAFEE. Thank you, Mr. Secretary.

General Flowers, Senator Feingold was, I believe, talking about specific legislation that he and Senator McCain are introducing relevant to the Corps. Do you have a position on that legislation?

Senator JEFFORDS. Are you aware of the legislation? Have you seen it?

General FLOWERS. Sir, I have not reviewed in detail the legislation. I am aware of some of the provisions.

Senator CHAFEE. That is fair enough.

Senator JEFFORDS. Can we ask you to take a look and give us your recommendations or any comments that you have? We would appreciate that.

General FLOWERS. Yes, sir.

Mr. BROWNLEE. Senator, I did read through the side-by-sides of the legislation as near as I could, and those of you who have done that know that is kind of an agonizing process, but I forced myself to do it. The last thing I would want to do is be critical of somebody's efforts to make something better, because I know Senator Smith and I worked for him many years on Armed Services Committee, and everything I saw him do was characterized by his dedication and desire to make things better, and tireless efforts in that regard, I might add.

But as I looked at this legislation, I just kind of jotted down some questions that came to my mind. I might just kind of track through those questions, if you would like, for the committee's benefit. The first one was, how will the National Academy of Science's recommendations on independent review, which is expected to be received later this summer, be factored into this bill? I know Senator Smith said he was certainly willing to consider that, and I sure he will. I just do not know how that would be factored in.

Are the bill's current provisions expected to be consistent with the Academy's recommendations? I am not sure if any of us know that at this point in time. How do provisions of the bill directly contribute to improving the technical capability and competence of the Corps of Engineers? Is the primary goal of the bill to shift the emphasis of the Corps away from economic development and more toward environmental restoration, or at least to make it more difficult to justify economic development projects? What would be the effect of the bill on the Nation's marine transportation system and the resulting impact on international trade and competitiveness? In

general, how does this legislation equip the Nation to better deal with growing water resources challenges of all kinds?

I just submit those, not to anybody specifically, just—I think that

Senator CHAFEE. You do not have a firm position on the bill—just some questions?

Mr. BROWNLEE. As I indicated, Senator, the Administration, the Corps, myself—we are all willing to work—I have talked to Senator Smith's staff—to work with the members of this committee, the interested members. Senator Bond mentioned a letter that had been signed which I have seen. I would certainly expect that we work with a group, that it could include members of that group. If there is a way to do a Corps reform bill in that regard, we are certainly willing to pitch in and help.

Senator JEFFORDS. Thank you very much, and thank you for very, very excellent testimony. It gives us confidence when we listen to you that we will be able to make some improvements and have it work a little bit better.

Senator SMITH. I might just say, Mr. Chairman, while they are getting prepared to leave the table, that I take those questions in the spirit they are intended. The objective is to work together to hear your input, and we will go back and review those topics that you brought up. It is also obvious that you are not quite ready to go to heaven yet.

[Laughter.]

Senator JEFFORDS. Thank you very much.

We do have another panel. Obviously, we have a number of people here—all very good, excellent witnesses. But if you want to impress the members that are left, if you can keep your statements to around 3 minutes, that would be appreciated. Under the rules, you are allowed five, so I will not interrupt you, but we would be grateful if you can do that.

Senator SMITH. We will just ask you nasty questions after it is over.

[Laughter.]

Senator JEFFORDS. We will start with Mr. Chase.

Senator BOND. Mr. Chairman, as I mentioned to you, I was ready to make a Faustian bargain with you to give up my right to ask questions if you would let me give a very brief introduction to two good friends who are here. I have a longstanding appointment that I have to make.

Senator JEFFORDS. You have a deal. You have a deal.

Senator BOND. I figured that this would be a good deal. This would save you about three and a half minutes.

Senator JEFFORDS. That is right.

Senator BOND. Chris Brescia has been an expert on river transportation issues. I hope that you will read very carefully his very thoughtful statement. I have read it, and it will be submitted in full for the record. It really gives an idea of the importance of this water transportation issue.

My second friend is Mr. Jim Robinson of Pinhook, MO. He has been working on closing a hole in a levee for 26 years. They first testified before this body, the first testimony was by Senator Eagleton. He has come up here time and time again. Back in 1999, 2000,

he came up after the President flew into the delta and said we were going to protect the delta. The Vice President's office came out, look at it—Alvin Brown of the USDA came out and look at it. They were assured by the Council of Environmental Quality that they were going to get it done. After the election, it was sent back to the Corps for its supplemental, supplemental, supplemental, supplemental study.

Mr. Robinson, it is a real pleasure to welcome you and Mrs. Aretha Robinson. When you testify, I hope you will tell us why your family settled where you did and why you stay. Tell us why you, your families and your neighbors do not just do what all the smart people have done and move to Washington, DC. to get a job where the wetlands are already permanently destroyed, and you do not have to worry about little issues like stopping floods. I think that the testimony that you have given will be very, very compelling. If anybody misses it, I will be repeating it frequently.

I thank you, Mr. Chairman, and Senator Smith, and I thank all of our witnesses.

Senator JEFFORDS. The first witness is Mr. Chase.

STATEMENT OF TOM CHASE, DIRECTOR OF ENVIRONMENTAL AFFAIRS, AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. CHASE. Thank you, Mr. Chairman.

I have been going through my testimony trying to cut it back, and I will do my best.

On behalf of the 85 public seaport members of the American Association of Port Authorities, we thank the committee for the opportunity to discuss the importance of the Corps of Engineers' programs.

There are two points I want to leave with the committee today. First, the Nation's marine transportation system is highly decentralized, market-driven, and returns untold benefits to U.S. businesses and consumers. Second, the Congress needs to fully fund the Corps of Engineers' Civil Works Program and authorize new navigation projects and policies that meet the needs of the Nation's businesses and consumers. We urge the Congress to seriously review the impacts of any proposed changes to the procedures used to evaluate navigation projects to avoid needlessly increasing the cost or further delaying the construction of deep-draft navigation projects.

The deep-draft commercial ports of the United States handle over 95 percent of the volume and 75 percent of the value of cargo moving into and out of the Nation. All commercial ports and navigation channels serve multistate needs. On average, each State relies on between 13 to 15 ports to handle its imports and exports. For example, 14 ports handle more than 1 percent of Vermont's foreign trade. Four ports are on the West Coast, four ports are on the Gulf Coast, and six are on the Atlantic Coast.

Between 1993 and 1997, U.S.-foreign waterborne trade grew by 4.6 percent per year to over one billion metric tons, and now accounts for about 20 percent of global waterborne trade and almost 30 percent of U.S. gross domestic product. The number of containers moving through U.S. ports doubled between 1990 and 2000, from 15.3 to 30.4 million TEUs—the unit of a 20-foot equivalent

unit container. The volume is expected to double again over the current decade.

Because of the increased efficiency provided by containerization and the substantial investments that have been made in new and larger vessels, ports and navigation panels, freight rates have declined by between 52 and 72 percent in real terms during the period of 1978 and 1998. The U.S. marine transportation system, including its deep-draft navigation channels, provides over 13 million jobs and \$200 billion in taxes to all levels of government.

In every sense, the Nation's public ports are partners with the Federal Government in making these benefits happen. With the passage of the Water Resource Development Act of 1986, there was a dramatic change in the relationship between the U.S. port industry and the Federal Government. For almost 200 years, the Federal Government had the sole responsibility for maintaining and improving the Nation's navigation channels. State and local port agencies and the private sector have always been and continue to be fully responsible for building and maintaining land-side facilities. In 2000, the cumulative local investment by just public ports in facilities and navigation channels was nearly \$1.1 billion.

However, in 1986 for the first time, the ports themselves, as local sponsors, began to pay for Federal navigation channels. Now, ports are being called upon to invest hundreds of millions of dollars in the development of these navigation channels—channels that by definition benefit the entire Nation. Despite Congress' intent that Federal water resource projects should take into account regional economic development benefits, the principles and guidelines for water resource projects established in 1983 sets the maximization of national economic developments as the definitive threshold for Federal involvement in such projects. This policy continues even after non-Federal interests became responsible for cost-sharing projects. Thus, non-Federal interests are required to pay up to 60 percent of the cost of Federal navigation projects, but any regional benefits derived from these projects may not be included in justifying the project.

Notwithstanding the increasing financial burden ports are carrying, we have discovered after 15 years of working with the policies established in WRDA 1986 that there are inherent flaws in the relationship between the local sponsor and the Army Corps. For example, local sponsors are required to provide assurances that legally cannot be given under State constitutions, such as open-ended indemnification of the Federal Government. In other cases, local sponsors are called upon to arrange for the relocation of certain utilities which puts this law in conflict with the 1899 statute that would require the utilities to relocate their own facilities when they would hinder or obstruct navigation.

In our written testimony, we provide additional specific areas of concern with the provisions of WRDA 1986 and recommend specific amendments that will correct these problems.

Finally, we are greatly concerned by proposals to alter the procedures the Corps of Engineers uses to evaluate water resource projects. We believe many of these proposals will add to the complexity in evaluating projects and increase the cost and time needed to study and build these projects. The Federal Government has

always built navigation projects in an effort to spur economic development for the benefit of the whole Nation. Congress should not abandon this principle now when the world's markets have never been more open and the promise of global trade has never been brighter for bringing prosperity and freedom to all corners of the world.

Thank you, Mr. Chairman. That concludes my remarks.

Senator JEFFORDS. Thank you for an excellent statement.

Now, we turn to Montgomery Fischer. Monty, how are you? Glad to have you here—the Director of Water Policy for the National Wildlife Federation. Good to have you with us, and please proceed.

**STATEMENT OF MONTGOMERY FISCHER, DIRECTOR OF
WATER POLICY, NATIONAL WILDLIFE FEDERATION**

Mr. CHASE. Thank you, Mr. Chairman.

Chairman Jeffords, Senator Smith, members of the committee, thank you for the opportunity to present the National Wildlife Federation's views on proposals for a Water Resources Development Act. As the Chairman has just noted, I am Montgomery Fischer, Policy Director for Water Resources at NWF. I have 30 years of experience working on water resources protection. After graduating from the University of New Hampshire, I worked as a commercial fisherman, as well as in government, academia, and the nonprofit sector.

Mr. Chairman, the Corps has a vital role to play in managing our Nation's water resources. However, much of our Nation's wildlife are suffering as a result of artificially altering critical aquatic habitat. Through its Civil Works and regulatory programs, the Corps has often had devastating impacts on the health of aquatic ecosystems. In my written testimony, I have described our serious concerns about a large number of Corps projects that could result in unacceptable environmental damage and unnecessary costs to taxpayers.

There is a serious and growing crisis in public confidence in the projects and programs of the Corps. Any new WRDA bill must address this issue to restore the public's confidence and trust. With the right direction from Congress, the 21st century Corps can become the Nation's premier environmental restoration and protection agency. The National Wildlife Federation congratulates Senator Smith, Senator Feingold and Senator McCain, who have co-sponsored Corps reform legislation, particularly S. 1987, the Corps of Engineers Modernization and Improvement Act, and S. 646, the Corps of Engineers Reform Act.

Mr. Chairman, these bills contain critically needed common sense reforms that improve and modernize the way the Corps responds to the Nation's water resources needs. The bills improve the Corps' accountability, modernize its principles and practices, improve mitigation of wetlands, and improve the Corps' overall fiscal responsibility. No WRDA should move forward without incorporating these basic, common sense reforms.

I will now make five brief points highlighting some of the key reforms that we are urging Congress to incorporate in the next WRDA. First, Mr. Chairman, over the past decade, the Corps' own internal review process has been significantly weakened from what

was already a weak and inadequate process. Without a strong Washington-level technical and policy review of Corps documents and plans, there is too much potential for the national interest to get lost along the way, as evidenced by the Upper Mississippi navigation expansion, the Delaware River Deepening Project, and a number of others.

Mr. Chairman, the Delaware Deepening Project represents not only an appalling failure by the district to apply the Corps' current planning requirements, but also a complete failure on multiple occasions by the division headquarters to catch gross abuses, basic errors and a 300 percent overstatement of Project benefits. Something is terribly wrong. A system of independent project review, a critical element in both S. 1987 and S. 646, would greatly strengthen the Corps' programs. It can take place without delaying the overall planning process and would help to restore confidence in the agency.

The second issue is the need to update the Corps' planning guidelines. The 1983 principles and guidelines have been frozen in time for almost 20 years. At the same time, economic and environmental sciences have evolved in response to changing public needs and attitudes toward the environment and natural resources. The National Wildlife Federation urges the committee to incorporate the recommendations contained in the 1999 National Academy of Science's New Directions Report, in particular establishing ecosystem protection and restoration as co-equal goals with economic development. S. 1987 and S. 646 include important provisions that respond to these recommendations.

Third, the National Wildlife Federation urges the committee to adopt the wetlands mitigation provisions of S. 646, which would clarify the definition of "concurrent mitigation" and improve standards for mitigation. We also support proposals in both bills that would redirect the Corps' from claiming benefits derived from draining wetlands. Current Corps projects threaten to destroy hundreds of thousands of wetland acres. The Yazoo Pump alone puts over 200,000 acres at risk.

Fourth, Mr. Chairman, in addition to independent project review, updating the Corps' principles and guidelines, and improving wetlands mitigation, the National Wildlife Federation urges the committee to reduce the backlog of incomplete projects through expedited deauthorization and prioritization, as well as to require regional port planning to help ensure that U.S. ports can meet national transportation needs consistent with protecting the environment.

Finally, the National Wildlife Federation appreciates the substantial efforts made by this committee and Congress in past WRDAs to authorize environmental projects and programs, particularly restoration of the Florida Everglades. We thank Senator Smith and Senator Graham especially their leadership on this project, and we look forward to continuing to work with them and with you, Chairman Jeffords, to save this endangered ecosystem. Without a focused and highly disciplined Corps program, however, there may be insufficient resources available for successful implementation.

Mr. Chairman, I am happy to answer any questions that you and other members of the committee may have for me at this time.

Senator JEFFORDS. Thank you again. That was an excellent statement.

Mr. Ellis.

**STATEMENT OF STEVE ELLIS, DIRECTOR OF WATER
RESOURCES, TAXPAYERS FOR COMMON SENSE**

Mr. ELLIS. Thank you.

Good afternoon, Chairman Jeffords, Senator Smith, Senator Chafee. I am Steve Ellis, Senior Director of Water Resources at Taxpayers for Common Sense, a national nonpartisan budget watchdog group. I would like to thank you for inviting me to testify today on behalf of two of the Nation's leading taxpayer groups—Taxpayers for Common Sense and Citizens Against Government Waste. I also have a supportive statement from National Taxpayers Union, which I would like to submit for the record, along with my full testimony.

The United States has gone virtually overnight from budget surpluses to deficits. We are engaged in a costly and lengthy war against terrorism. In this context, fiscal restraint is more important now than ever before. Undoubtedly, the Corps has faced some of the sharpest criticism in its history over the last 2½ years, stemming from revelations that the Corps committed serious mistakes or manipulated project evaluation studies that could waste billions of taxpayer dollars.

Back in 1836, the House Ways and Means Committee chastised the Agency for bungling 25 projects that were over-budget, behind schedule and not performing as planned—and I did say 1836. As Yogi Berra put it, "It is *deja vu* all over again."

We applaud General Flowers and the Acting Assistant Secretary's recognition that the Corps is in need of reform. The second step in the Corps reform twelve-step program is to allow and encourage intervention. We stand ready to work with the Corps, Congress and the Administration. However, credibility in the Corps can only be restored through credible reform in the 2002 Water Resources Development Act that achieves these four fundamental goals: make the Corps more accountable; set clear priorities for the Corps; modernize the project planning process; and ensure everyone pays a fair share.

In March, Senators Smith, Feingold and McCain introduced the previously discussed S. 1987. This comprehensive reform proposal meets each of these four goals in a serious and effective manner. We urge the committee to adopt S. 1987 as the basis for reform in WRDA. The need for more accountability in the Corps becomes more apparent by the month, as a growing list of project studies have been found to have been manipulated or to contain egregious errors. As an example, the GAO report on the Delaware River Deepening Project found that the Corps had made an appalling series of, quote, "material errors," and repeatedly cited, quote, "miscalculations, invalid assumptions, and reliance upon outdated information," that the Corps used to overestimate benefits by more than 200 percent.

A key way to restore credibility to the Corps' project planning process is to implement independent peer review for costly and controversial projects, including the following elements: independent outside review panels; integrating the review into the existing public comment period; and capped review costs.

There is an obvious need for Congress to set clear priorities for an agency saddled with a \$52 billion construction backlog. Increasing the Corps budget is not a solution to this problem, which would be like trying to bail water out of a sinking boat with a huge hole. The system needs to be fixed first and foremost through common sense reforms such as a project-blind process for deauthorizing outdated, marginal and unnecessary projects that have yet to be constructed.

Recently, Taxpayers for Common Sense conducted an analysis of the backlog, which found that the median project was only 24 percent constructed. The backlog slows down the construction of all projects, whether they are good or bad. Following up on a 1999 National Academy of Sciences recommendation, S. 1987 would also require the Corps to work with the National Academy of Sciences in modernizing the 1983-vintage planning guidelines to include common sense concepts like regional port planning.

Our Nation and its thinking certainly have changed since the New Deal era, but the Corps still relies on the 1936 Flood Control Act standards to call a billion dollar project economically justified if the benefits outweigh the costs by just even one dollar. Just as you would never make an investment knowing you would get no return on your dollar, taxpayers deserve no less.

Cost-sharing is another tool for breaking the backlog and saving taxpayers billions. A 1995 Wharton School of Business study found that the market-based economics and cost-sharing rules championed by President Reagan in WRDA 1986 saved Federal taxpayers 50 percent or more than \$3 billion. The financial effect on local communities was marginal—a 12 percent increase—even though they were paying a significantly greater share of the cost.

In conclusion, we recognize the Corps of Engineers' work affects millions of Americans. Many projects have had a positive effect, protecting countless lives from floods and bringing the fruits of Midwestern farmers' labor to the rest of the world. But there are also many projects that have had a negative effect on people's lives, have harmed other industries and users of the Nation's waters who are not the Corps' traditional clients, and most outrageously squandered taxpayer dollars on these activities.

The Corps must be accountable to the taxpayer. Therefore, it is imperative that Congress enacts real Corps reform this year. No Water Resources Development Act should pass without reform. At risk is the public's confidence in the Army Corps of Engineers and any hope that Congress can restrain itself from ever-escalating pork barrel spending, even in the midst of a very expensive and vital war on terrorism.

Thank you.

Senator JEFFORDS. Thank you, Mr. Ellis. We will take into consideration obviously your comments and appreciate the work you have done.

Dr. Dickey.

STATEMENT OF EDWARD DICKEY, Ph.D.

Mr. DICKEY. Thank you very much, Mr. Chairman.

I speak today based on my two decades of experience in the Office of the Assistant Secretary of the Army for Civil Works and my years as Chief of Planning for the Corps of Engineers, and my education as an economist.

Why has it become increasingly difficult for the Civil Works Program to compete for budgetary resources? In my view, the answer is simple. Past policies and practices have not resulted in a uniform inventory of compelling investments and available funds are often not applied to the best projects. Congress needs to provide a consistent and unambiguous policy framework and allow the executive branch to develop recommendations to Congress within that framework. Authorizing legislation is also the opportunity for Congress to eliminate earlier accommodations of special interests which have so powerfully shaped the program in the past and which now limit its ability to compete for budgetary resources.

Looking first at the planning framework, Congress assigned responsibility for the Corps' planning framework to the President and the U.S. Water Resources Council in the Water Resources Planning Act of 1965. I believe that the present principles are carefully crafted and collectively define a planning framework that is both powerful and simple. The principles should be left unchanged and moreover, for reasons that I have outlined in my written testimony, no additional planning objectives should be specified.

Instead, Congress should direct the U.S. Water Resources Council to review its guidelines and update them to reflect the improvements in the economic and other evaluation techniques and changes in law and policy that have occurred in the last two decades.

One area in which Congress apparently is concerned is the issue of productivity, and S. 1987 would address it through the 1.5 requirement. I think that is better addressed through addressing the issue of the discount rate directly. The discount rate used in the evaluation of water projects is specified in law, section 80 of the Water Resources Development Act of 1974. It is not based on any economic theory and it grandfatheres the discount rate for certain projects, thus creating false expectations about the project's prospects for future funding.

In some instances, Congress has legislated how the Corps of Engineers is to measure certain economic benefits. Again, my written testimony lays those out. S. 1987 would go further toward legislating benefit procedures. Congress, in my view, should affirm its commitment to using the best available analytical techniques in every civil works project by abrogating past benefit-defining provisions and by avoiding new constraints on objective benefit-cost analysis.

One reason for the decline in the quality of executive branch project review is that Congress has authorized dozens of projects without waiting for completion of the report development and review process. Except in the most extraordinary circumstances, Congress should authorize only those projects that have completed executive branch review.

Since the reforms of 1986, Congress has exempted particular projects from cost-sharing, and in other cases eroded cost-sharing formulas by requiring consideration of ability to pay in establishing financing requirements. Congress should apply the project-specific cost-sharing formulas to all projects without exception or exemption.

Finally, it needs to look at the issue of demand management to ensure that the Corps has the necessary authority to make demand management an integral part of its management of the Nation's inland waterway system. The Corps also needs to be supported. We heard the Chief and the Acting Assistant Secretary talk about reorganization. The Corps desperately needs to reorganize its planning capability. It has tried that in the past. It has failed because Congress has opposed it. Congress needs to make clear that it supports that.

Finally, it needs to make clear that it supports the Corps' own internal efforts at review reform. There is no substitute for high quality Corps of Engineers' studies that are reviewed through the many Federal Agency experts, and that review occurs in the normal course of project development if Congress allows it to work.

Mr. Chairman, that concludes my statement.

Senator JEFFORDS. Thank you very much, Doctor—very helpful. Ms. Holland.

STATEMENT OF LISA HOLLAND, STATE COORDINATOR, FLOOD MITIGATION PROGRAMS, SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Ms. HOLLAND. Good afternoon, Chairman Jeffords and distinguished committee members. Thank you for the opportunity to testify before your panel today.

My comments today will focus on the areas the Association of State Floodplain Managers believe should be considered in the text of a reform act.

My name is Lisa Holland, and I am the Federal liaison for the Association of State Floodplain Managers, as well as the Manager for the floor Mitigation Programs within the State of South Carolina's Department of Natural Resources.

The Association of State Floodplain Managers and its State chapters represent over 4,500 State, local and private sector officials, as well as other professionals who are engaged in all aspects of floodplain management and hazard mitigation. All are concerned with reducing our Nation's flood-related losses. I will summarize our written statement, which has been submitted for the record.

The U.S. Army Corps of Engineers is an institution with a long, proud history. Over the years, they have been lauded and they have been bashed. Currently, the entire agency is under scrutiny because of some ill-advised approaches to the project planning process. The Association of State Floodplain Managers is neither surprised nor dismayed by what has come to light. We have been predicting this outcome for years.

The planning process of the U.S. Army Corps of Engineers was developed for a different era. In reality, it is premised on a rather short-sighted expression of Federal interest, has helped to create an unmanageable backlog of projects, and in spite of well-laid in-

tentions, the process inherently cannot avoid bias and predetermined outcomes.

Reformers of the Army Corps of Engineers have come out with proposals, some of which have merit and some which raise concerns. One such proposal that raises concerns are proposals associated with the independent peer review of Corps projects. This well-intentioned, but misdirected, investment does little more than create another layer of government with questionable added value. In general, the types of problems the Corps faces are either associated with bad practices, bad methods or bad management—none of which can be fixed with an independent review. The Association of State Floodplain Managers does not believe that bad management is an endemic issue. However, where it is found, the Administration and Congress should move swiftly to restore balance to the process. What is more likely driving the process relates to quality control and methods.

We believe that both these problems can be managed through increased emphasis on the execution of quality control plans or through the use of independent scientific panels to evaluate methods. While occasional audit of Corps projects would be a good practice, the Association of State Floodplain Managers believes that this practice can be carried out through GAO. Adding an independent or peer review of the Corps projects again adds an unnecessary step in an already-cumbersome process.

An area of positive reform is the area of cost-sharing. It is important to understand that current Federal policy rewards those communities and States which do the least to prevent and solve their flooding problems. Those rewards come in the form of Federal disaster assistance, Federal flood control projects, and favorable cost-sharing for these actions. What this means is current policy enables communities to do nothing but wait for the Federal bailout or the project. This is bad policy and is a disincentive for communities that have taken responsibility for dealing with their own flooding problems.

The Association of State Floodplain Managers strongly urges the incorporation of a sliding cost-share that rewards those communities and States that actually take responsibility for managing their own flooding problems. This concept is fair and need not be complex. Corps staff has previously developed an implementation strategy for a sliding cost-share, and FEMA has over a decade of experience in a similar measure called the Community Rating System.

The final area of reform which we wish to speak relates to the project justification criteria, most notably the Corps' planning principles and guidelines. Currently, the principles and guidelines tend to be our only measure of Federal interest in a project, and the sum total of that interest is expressed by the national economic development benefits. An economist will tell us that this is a perfectly rational decisionmaking model. However, the reality is this model is too simple to capture real-world realities.

The realities of today's national economic development model is the least-cost solution to a problem, and generally is not the NED alternative. The opportunity cost of Federal investment is an inherently risky area, as opposed to less-hazardous areas, is not consid-

ered. The model does not consider the impact that long-term damages will have on the Federal budget as it is related to disaster payments. NED has a role in the decisionmaking process, but it needs to be balanced with other planning objectives. The complexities of this problem cannot be solved in a limited testimony and should not be crafted on the fly through the legislative process.

What should be done, however, is to direct the Administration to develop revisions to P&G to reflect the current realities, broaden the approach such as the NED as part of the decisionmaking process, and finally, directs the Administration to consider the project formulation and delivery process.

In closing, the Association of State Floodplain Managers urges you to act swiftly and judiciously in modernizing the policies of the U.S. Army Corps of Engineers in the areas of cost-sharing and revising the outdated principles and guidelines.

Thank you, Mr. Chairman.

Senator JEFFORDS. Thank you. Very good work.

Mr. Brescia.

**STATEMENT OF CHRISTOPHER BRESCIA, PRESIDENT,
MARC 2000**

Mr. BRESCIA. Thank you, Chairman Jeffords, members of the committee. My name is Chris Brescia. I am President of MARC 2000. MARC 2000 is composed of leading agricultural, industrial and labor groups in the Midwest, and I am pleased to appear here to address Water Resource Development Act of 2002 proposals.

We have a proposal of our own that we are putting forward that urges Congress to support the authorization and construction of an initial group of seven new 1,200-foot locks—five on the Upper Mississippi, two on the Illinois—guidewall extensions and appropriate mooring cells. That proposal is in more detail in my written text.

However, I want to emphasize that this proposal is limited to the placement of new locks at only 7 out of 37 possible locations at the lower portion of the river system just north of the confluence of the Upper Mississippi and the Illinois Rivers. We are not advocating new locks on the entire 1,202 miles of the basin system.

We also strongly support an enhanced environmental restoration effort for our basin, with a reliable and consistent funding mechanism. Our proposal's third element calls for timely completion of a WRDA 1999-authorized comprehensive plan designed to develop an integrated flood control system in our basin. According to the U.S. Department of Transportation, maritime trade is expected to double in less than 25 years. Freight in the United States is expected to clog the Nation's highways and our rails. Experts project grain trade will increase two-thirds or more by 2020.

The Corps of Engineers has documented an anticipated 60 percent increase in likely tonnage movements on the Upper Mississippi and Illinois Rivers. Our waterway system is a logical means by which we can accommodate growth, reduce incidence of spills, air pollution accidents, and deaths to our population. Water traffic options save more than \$700 million a year to our Nation directly, and another \$900 million in our basin alone.

But today's river system is operating at 75 percent capacity, with antiquated infrastructure. There is no way to meet these future de-

mands if we do not start modernizing our locks immediately. Our Nation relies on this outdated system to move over 60 percent of our export grain crop, Mr. Chairman. Grain exports still account for a trade surplus in our balance of payments—one of the top areas that does so.

However, a report issued by the National Corn Growers Association on the impact of this outdated system is very sobering. The staggering expected loss of \$562 million a year in income to farmers if we do not modernize is significant. The loss of 30,000 jobs nationally and the increase of the Federal deficit by \$1.5 billion a year are sufficient cost-benefit analysis for congressional action. In the words of a noted legislator, we understand enough about this issue to move forward, and these are extraordinary circumstances that demand some action in this basin.

This is a basin that supports over 400,000 jobs on this waterway system, 90,000 in the manufacturing sector. This waterway system is critical to our future competitiveness with the Midwestern agricultural economy. Without efficient waterway transportation, Midwest grain exports will be lost at considerable expense. Second, with continued increased congestion, shippers will have to find alternatives, which means we are going to have to move these goods via other modes, which means that there will be higher environmental costs, social benefits of keeping freight on the waterway will be lost. There will be higher cost structures, lost economic activity, increased air emissions, increased fuel consumption, increased accidents. This is not what we in the basin want and this is not the direction that we believe we should be burdened with.

The indecisiveness of modernizing the Upper Mississippi will continue to embolden our global competitors to increase placing virgin lands into production and work to capture the growing share of the world food market. The environmental benefits of the waterway system, those initially created with the construction of the lock and dam system, are declining. We need to move very deliberately in this area in WRDA 2002 if we are to try to reduce the reduction of lost islands, support important backwaters and other ecosystem elements.

Mr. Chairman, there is strong support in our basin for this. Resolutions have been passed in the five States in our basin overwhelmingly on a bipartisan basis because they recognize that our five States are connected to 17 others in this Nation through this waterway system, and to the world market. Some of the proposals that are on the table to do this through other means than 1,200-foot locks do not meet the test of long-term sustainability. We need to have environmental priorities addressed in this region in connection with the economic needs. We need your help in doing that, and doing that now rather than waiting.

Mr. Chairman, thank you very much for listening.

Senator JEFFORDS. Thank you again. The work you all have put into your statements for us really gives us confidence that we have got some very good things to work with.

Mr. MacDonald.

**STATEMENT OF TONY MacDONALD, EXECUTIVE DIRECTOR,
COASTAL STATES ORGANIZATION**

Mr. MACDONALD. Thank you very much, Senator. Good afternoon.

Thank you for the opportunity to testify today, and a special thanks to the hardy group of New England Senators who were patient enough to sit around and listen to these remarks this afternoon.

Since 1970, the Coastal States Organization has represented the Governors of the Nation's coastal and Great Lakes States, Commonwealth and territories on issues relating to improved management of coastal development and the protection of coastal resources.

As I listened to the testimony today and review my written statement, it really comes down to I think three basic things that we need to do for the Corps Water Resources Programs. One is we need a much clearer national water resources and shoreline policy. Although I do not ever deign to disagree with Dr. Dickey on the details, I think part of the problem with regard to these programs and the failure of support for them and increased funding for them is that it is a bit of a black box. All of the Water Resources Development Act and the cost-benefit analysis, there is no clear identification of what the Nation's water resources commitment is. I think as several of the Senators indicated, it is too important not to have a clear national policy and a clear commitment to these programs for the future. So that is one thing I think you need to do a little work on.

Second, and I think this is more basic, but as important, is we need efficient project review and approval processes so that Mr. Robinson never has to come back and visit you again, except on vacation.

Third, I think we need a commitment to a much more dependable and sustained funding source. I think that is clearly the problem. It seems that we are arguing about priorities among priorities and we are not really stepping back and saying, what is our long-term commitment to the Nation's water resources infrastructure, including all of the Corps traditional missions of flood control, storm water protection, shore protection, hazards protection, as well as navigation and safety.

I also need to state, and I think this builds on something that General Flowers said, that it is very important when you look at these policies, these efficiencies and this commitment to funding, that you transcend what is a current sort of endemic limitation to the Corps' current single-purpose, project-by-project approach to managing the Nation's water resources. Even many of the reform efforts still seem to take a single sort of stovepipe approach to try to reform the various Corps missions.

Do not look to a more comprehensive commitment to maximizing the Nation's both environment and economic benefits from these projects. As I have said often to the Corps folks that I work with, every Corps project is an environmental project. They are fundamentally altering the resources, whether it is for economic or other purposes. We just need to find a way that we serve the eco-

conomic needs of this country and the coastal States, as well as the environmental baseline on which we must rely.

But policy—I think I was very encouraged to hear General Flowers' remarks regarding broader regional and watershed planning. That is something the States strongly support. However, I have to say that the policy must be supported by enhanced partnerships with the States and a greater reliance on the expertise of States and other local project sponsors and coastal, watershed, and basin-wide management. This committee has a lot of experience with those things, I think, and the expertise of other parties, and I think the Corps could benefit from sharing some of its expertise with us, and us with them.

There needs to be in any effort for reform for the Corps must take into account these multi-purpose, multi-stakeholder efforts that get beyond rigid national economic benefits formulae and include the value of economic, cultural and social inputs.

You have already heard a lot today about the significant economic and environmental importance of the Corps water resources mission, as well as the substantial economic return to the Federal treasury that results from Corps projects. That is all true and we strongly support that. As recently observed by a 2001 Federal Reserve Bank of Kansas City report, the United States is a coastal nation. It says, quote, "The coastal concentration of U.S. economic activity reflects a productivity effect of access to navigable waters." That has been true historically. That is true today. I think it will be true for our future as well, so that is why this is important.

However, controversy over port development projects in places like the Delaware River, Charleston, South Carolina, and the Columbia River clearly demonstrate the importance of incorporating more local and regional concerns into the Corps planning processes, along with the consideration of national benefits and the Federal standard of the least-cost environmentally acceptable alternative. As has been mentioned many times, historically Corps projects, some of them, have undermined the integrity and function of natural littoral systems, and the natural flow of sand and other sediment material, resulting in sediment starvation and erosions along the shoreline. Shoreline erosion and sea-level rise and lake-level change will pose increasing challenges for States and the Nation in the years ahead. It is very important that we consider these things now.

Coastal States strongly support continuation of the Federal-State partnership in coastal storm protection and beach nourishment projects. Beaches are magnets for international as well as domestic tourism and provide readily accessible recreation and respite for millions of families from very diverse urban and rural areas that may not have other options. The same beaches serve, as previously alluded to, as natural barriers for flooding, waves, and storm surges and provide cost-efficient and environmentally preferable alternatives for protection of life and property. A recent Corps of Engineers study of six coastal communities in North Carolina show that the communities with shore protection projects suffered significantly less from Hurricane Fran. Shore protection projects can protect lives and save money in the long run.

Very briefly to summarize, three of the specific recommendations that CSO has made in some detail in our written statement, I would say there need to be three changes in the Water Resources Development Act. First, there is a need for improved dredge material management of natural resources. Second, there needs to be increased support for regional sediment management planning. Last, there needs to be support for a national shoreline study and a consistent national policy for managing the Nation's shoreline.

Thank you very much.

Senator JEFFORDS. Thank you, Mr. MacDonald.

Mr. Robinson, please proceed. We have a vote on, as I said. We still have not started the vote, so we will just keep on rolling here. OK, Mr. Robinson, please proceed.

STATEMENT OF JIM ROBINSON, JR., PINHOOK, MO

Mr. ROBINSON. Chairman Jeffords and Senator Bond in his absence, and members of the committee, again for the record my name is Jim Robinson.

I am here on behalf of the people of Pinhook, MO. Pinhook is located in the southeastern corner of Missouri and the Bird's Point/New Madrid Floodway, about halfway between Memphis, Tennessee and St. Louis, MO, just a few miles from the Mississippi River. I have lived there most of my life. The land that I farm was purchased by my father. When we moved from Tennessee, my people were not allowed to own certain lands and live in town. We were only able to purchase the land that the Mississippi River flooded. We cleared the land with our hands and with axes and mules. We built up our own communities, and are proud of what we have done. Pinhook is our home and it is what we want to pass along to my children and grandchildren.

My entire life, I have lived with floods on the Mississippi River, destroying what I have worked for. Where we live, the Mississippi River backs up through a 1,500 foot hole in the levee that was left there when the levee was build in the 1930's. So every few years, the river comes up and backs through that hole and we get flooded. I do not know how many of you have ever been through a flood and know what it is like to have raw sewage in your home, and what it is like when you get out of bed in the morning to have to wade through the mess; to have your children live in it; for them to have to ride in a tractor-drawn open wagon through the waters just to get to the school bus. My people should not have to live that way year after year.

If I go north to St. Louis, I see the fine home surrounded by big levees, or if I go south to Memphis, I see that same thing. Those people have been able to build their levees and protect their homes. I do not want to take away from them. I just want some of the same thing.

There has been a project on the list for years that would close our levee and give us some relief. We thought we were close to ending the problem, but then in 1986 Congress raised the local cost-share and we were told that we had to come up to 35 percent of a multi-million dollar project. We farm. Some of our children work in small factories. We pay taxes, but we cannot afford \$20 million.

Finally, in 1993, through the Enterprise Community Program, we were able to get some help and the local share reduced back down to 5 percent. I thought we were going to get to close that hole, the 1,500-foot hole. The Corps of Engineers went to work and we were on our way. That was 9 years ago and we are still getting flooded.

I have met with people here in Washington and they all seem like they want to help, like they understand what we are up against. But every time we get close, somebody from EPA, Fish and Wildlife Services says the Corps has to go study some more. I am tired of studying the same old mud.

[Laughter.]

Mr. ROBINSON. I have heard what some of you want to do to the Corps of Engineers. All of the technical stuff is for someone else to comment on. I want to talk to you a little about the people that this will affect. I have lived along the Mississippi River my whole life. I helped evacuate homes in the flood of 1937. We worked day and night. Over the years, the Corps has built the levees for the city areas, and has slowly worked down to us. It has taken most of my life for them to finally get to us. Now, after all of that work has been done, you want to say to us that it is no more unless we pay for half of it. You did not say that to the city folks, but after all these years, when we finally are going to get our share you want to cut our piece of the pie in half.

You and I both know that there is no way a farming community in the Mississippi Delta is going to be able to pay for half of any water project. This is not reforming the Corps of Engineers. This is just a nice way of saying you people are not going to get any help. It looks better in the newspaper to say you are reforming something.

I was here in Washington over 2 years ago for a meeting with the EPA, Fish and Wildlife, the Council on Environmental Quality and the Corps. I was told then that the problems that were delaying our project would be fixed. Since then, the only ones that have not dragged their feet have been the Corps. Every time someone comes down to look at the project, they promise me that they are going back and find a solution, and I never see them again. I see someone else who tells me the same thing. But I always see the same faces from the Corps and they come back and tell me that they are ready to build, but they cannot because the other agencies hold them up. From where I sit, it looks like you are trying to reform the wrong group.

[Laughter.]

Mr. JOHNSON. Another point that I understand that is being considered is how the Corps figures its benefits. Some people do not want them to use increased crop production as a benefit. Is there something wrong with trying to make a living farming now? I farmed all last week when the water went down, and if I can increase how many bushels of soybeans I harvest this fall, I think that this is good. It is good for me. It is good for my family and it is good for the country. Farmers grow food and pay taxes, and that has to benefit everybody.

That concludes my prepared remarks. If there are any questions, and sorry for taking too much time. Thank you, Mr. Chairman.

Senator SMITH. Thank you very much, Mr. Robinson. As you can see, the Chairman had to leave to go vote, and he is going to come back and then I will leave. Senator Chafee, do you want to ask a quick question? We apologize to the witnesses for that, but we are trying to keep from inconveniencing you so we can keep things flowing.

Let me just ask a quick question. Mr. Dickey, on the legislative benefits, and we accept your comments in the spirit they were intended and we will try to see if we can improve what we are trying to do as a result of your expertise, but you use the term legislative benefits. Were you referring specifically to us saying that it ought to be 1.5 as opposed to 1.1 return for the dollar? Is that where you were coming from? What specifically were you . . .

Mr. DICKEY. Senator, I have in mind that the supervision, and I do not remember the exact language, but to the effect it says that, you know, you cannot count any benefit that somehow is a private versus a private benefit. As an economist, I have a hard time understanding what that means, since benefits are based on the willingness of individuals to pay. The situation—there is another example, too, of where, say, don't count any benefits if they result from draining or altering a wetland. To me, that says, gee, they have said wetlands are infinitely valuable. They do not care, you know, what the tradeoff is. The essence of good water planning is to have tradeoffs and tradeoffs that are informed on the basis of analysis. So that is why I really want the analysis.

Senator SMITH. I think that is right. I would also say, too, there could be benefits derived from something that are not necessarily monetary. There may be a national security benefit. There may be an environmental benefit. There may be some other benefit. That is not necessarily to say we have to get 1.5 dollars back for every dollar invested. Let me, Mr. Fischer, on the—if I asked you to just give me one location anywhere in the country that would have the lowest economic priority and the greatest negative environmental impact—in other words, someplace we ought to fix, where would that be in all of the waterways that we have?

Mr. FISCHER. The lowest economic priority, if you are talking about a Corps project?

Senator SMITH. Yes. A project out there that does not yield very much economically in return for the dollar, but impacts negatively on the environment.

Mr. FISCHER. I would say the Yazoo Pump Project would be the ones that we have focused on over the years as having probably—if you measure the environmental impact on that, along with the economic cost-benefits, that is one that we have targeted for years as being one that just absolutely is at the top of our list of ones that we would prefer to have just go away.

Senator SMITH. Any others? I did not mean to put you on the spot, but any others?

Mr. FISCHER. There is a whole list of them in the Troubled Waters Report that we did over the recent years, and that American Rivers has come out with as well. I would think that the situation in the Missouri River also, where we are trying to go through with a suggestion of having a better flow regime to more adequately address natural conditions, rather than a more limited situation there

over the years, would provide tremendous impacts. On the positive side, if I can give a positive example, those are the sorts of examples that we look for on both sides of the equation.

Senator SMITH. Mr. Ellis, from a taxpayer's point of view, do you accept the premise that there may be projects out there that would not necessarily yield the dollar-plus return that we should return, but would be acceptable because of perhaps a national security or an environmental gain?

Mr. ELLIS. I do not think you can limit it to just a dollar for dollar return. We have to look at it in the context of the whole project. But I do think that contrary to some comments earlier by your fellow committee members, the benefit-to-cost ratio is an extremely important element of any decisionmaking process, and it informs the decisionmaking process in that even today, you could have a project that has less than a one-to-one B-C and still authorize it. There is nothing that precludes that. That is just a guidance and that is a piece that is there. We need that information. I have not necessarily seen the case yet, but I am willing to agree that it exists and that there may be a case. You mentioned national security, and I think that is absolutely a potential.

Senator SMITH. Ms. Holland, I am going to I think have to recess here. I will not make the vote, and Senator Jeffords will be back in a moment, but I was going to ask you, and maybe you could respond when Senator Jeffords comes back. I would like to keep it so Mr. Robinson does not have to keep coming back here. How might a community such as Mr. Robinson's community best take steps to combat future flooding, given the limited financial resources that they have and live in the area where he lives?

If I have to walk out in the middle of your answer, I apologize.

Ms. HOLLAND. That is OK.

Representing the State and local programs, we are the end-users that try to tie all of the Federal and State programs together to help the Mr. Robinsons of our States. Having flexibility in the program so that we can combine Federal programs to assist with Mr. Robinson's dilemma—more tools in the toolbox. Some of the things we have talked about here today is providing Corps reform or modernization to put more tools in the toolbox; and the flexibility to deal with projects that may not—that may be excluded under the current guidelines; and looking at just having that opportunity to evaluate the environmental impacts, along with the benefits.

Senator SMITH. Thank you.

Senator Jeffords is returning and I will go ahead and go vote. Thank you for your answer.

Ms. HOLLAND. Thank you.

Senator JEFFORDS. We get pretty good at our timing after a while.

[Laughter.]

Senator JEFFORDS. We have heard many recommendations today for what is needed to reform the Corps. In your opinion—this is for all of you—in your opinion, what is the one most important reform that should be undertaken? We will start with Mr. Chase.

Mr. CHASE. Well, sir, respectfully, I think what the Corps needs is more resources, more money. I think the biggest problem the Corps has had is the downsizing in their headquarters, which has

not allowed them to do the internal scrubbing of these projects that they need to do, and to maintain the expertise within their districts, or to potentially reform internally their processes so they can concentrate their expertise. As General Flowers said, right now each district has to have its own capability to handle all these kinds of projects, and then they do their own reviews on the technical adequacy, and then the higher reviews are more policy-level reviews. I think that was largely driven by resource constraints. So I really do not see anything in these reforms. I am happy to talk about some of the problems we see there, but really that will make the process work better.

Senator JEFFORDS. Monty.

Mr. FISCHER. Mr. Chairman, I think that independent project review. Those three words say what many of us have said here today, and that we have heard from other panels and in other comments. There is no question that the opportunity for additional review and looking at the projects that are on the books for consideration by the Corps will not necessarily hold up, delay. But they will in fact, if done properly, may in fact allow for better consideration and ultimately more support of projects that are under consideration by the Corps—so independent project review.

Senator JEFFORDS. OK.

Mr. Ellis.

Mr. ELLIS. I would like to just reiterate what Mr. Fischer said about independent peer review. Rather than just saying exactly that, but put another spin on it as well, and that is that it is not just a simple matter of the Corps having more resources at headquarters to look at these projects. For example, one of your predecessors so to speak, Senator Baucus, also asked the GAO to do a review of the Oregon Inlet Jetties Project, which should be coming out very soon. That project was authorized in 1970 and has been defended by the Corps all this time. I am quite confident that it will come back—I am relatively confident that it will come back looking fairly similar to their criticisms of the Delaware River Deepening Project.

So I do not think that just stacking more review elements in the Corps is the answer. I do think that there needs to be an independent entity to look at these projects on a consistent basis for certain types of projects that are costly or controversial, if we are going to guarantee the taxpayers a return on their investment and also restore some of the integrity to the Corps' planning process.

Senator JEFFORDS. Dr. Dickey.

Mr. DICKEY. Mr. Chairman, from my perspective, there is no substitute for an initial high-quality Corps of Engineers report. I think we have heard today, and these audits have shown, that the Corps is now organized to produce those reports. I think that is the most important thing I would do. Then, I would combine that with allowing the executive branch to do its review process—go through the whole process that culminates in the Secretary transmitting a report to the Congress. Then you have the full benefit of the whole process.

Senator JEFFORDS. Ms. Holland.

Ms. HOLLAND. Modernizing the Corps' planning process, principles and guidelines to enable more flexibility and provide them

more tools and resources that are not necessarily financial, but just options to the local governments and States.

Senator JEFFORDS. Mr. Brescia.

Mr. BRESCIA. Mr. Chairman, we think that many of the concerns that have been articulated over project purpose, benefit-cost analysis, cost-sharing are really reflective of the lack of a national consensus about water resource development priorities. I think the single-most thing that Congress can do and this committee can take leadership in is defining that, clarifying that, to really bring into clarity the Corps' job and what their roles are and what their objectives are. I think that the rest will follow.

Senator JEFFORDS. Mr. MacDonald.

Mr. MACDONALD. I think making the individual purpose projects, put them in the broader context of regional sediment planning and regional management planning. So how does your navigation project fit your use of dredge material and beneficial use and flood control for the watershed? So I think getting beyond the single-purpose projects to broader regional and watershed planning.

Senator JEFFORDS. Mr. Robinson.

Mr. ROBINSON. Mr. Chairman, after being in this thing as long as I have, I think they need to be let to do the things that they have on-line to do all along, not just bypass a certain area like my Pinhook that I speak about, for some unknown reason.

Senator JEFFORDS. Thank you all. We, of course, always leave the record open and allow ourselves time to bludgeon you by more questions through the mail or otherwise. I want to warn you about that, and for other members. But with that, I just want to thank you, for I know all the work that went into preparing your testimony, and I deeply appreciate it.

But I would say right now, we are adjourned.

[Whereupon, at 5:15 p.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow.]

STATEMENT OF HON. TOM DASCHLE, U.S. SENATOR FROM THE
STATE OF SOUTH DAKOTA

Mr. Chairman, thank you for inviting me to testify today at this hearing. I am here to express my strong belief that fundamental reform of the Corps of Engineers is necessary not only to protect the nation's environment, but also to protect the integrity of the process by which Congress authorizes Corps projects and to restore the severely damaged credibility of the Corps itself.

In that regard, I want to commend the Committee for taking up the Water Resources Development Act, and for recognizing that passage of any new authorizing legislation for the Corps of Engineers should be accompanied by meaningful reform legislation. I also want to encourage the Committee to include many of the provisions of S. 1987 in the next Water Resources Development Act. This bill is a thoughtful and justifiable response to the ongoing problems associated with the Corps of Engineers, and I will cosponsor it today.

My one reservation about the bill is the establishment of a benefit-to-cost ratio of 1.5. It has been my experience that some projects with lesser benefit-to-cost ratios are defensible, while some with higher benefit-to-cost ratios may not be justified. I think it is important that Congress establish a more sensitive metric for evaluating projects than simply increasing the minimum benefit-to-cost ratio, and I would like to explore this issue further with the Committee.

Mr. Chairman, I have advocated reform of the Corps of Engineers for years. In fact, in March of 2000, I introduced S. 2309, the Corps of Engineers Civil Works Independent Investigation and Review Act, calling for an independent review of the Corps of Engineers. That bill established an independent commission to take a hard look at the Corps.

At the time, I was extremely concerned by evidence that the Corps was neglecting its responsibilities to comply with the nation's environmental laws and was systematically engaged in producing fraudulent analyses of proposed projects to manufacture economic justifications in cases where factual analyses could not have supported their authorization by Congress.

Two years ago the *Washington Post* published a number of very troubling articles about the operations of the U.S. Army Corps of Engineers. Those stories exposed the existence of independent agendas within the Corps. They suggested cost-benefit analyses rigged to justify billion dollar projects, disregard for environmental laws, and a pattern of catering to special interests.

The actions described in the *Post* articles raise serious questions about the accountability of the Corps and present a compelling case for a thorough review of the agency's operations and management. And it is not only the *Post* articles that cause me to believe this.

The Corps' current effort to update the Missouri River Master Control Manual—the policy document that governs the Corps' management of the river from Montana to Missouri—illustrates not only that the Corps can be indifferent to the environment. It also demonstrates that the close relationship of the Corps to the barge industry often drives the Corps' willingness to manipulate and falsify data and analyses to protect those special interests and justify the work of the Corps in supporting those activities.

On the Missouri River, for example, the Corps has taken pains to protect the \$7 million barge industry at the expense of public recreational opportunities and fish and wildlife. One important factor that motivates the Corps' actions is its ongoing program to maintain the barge channel—a Corps jobs program that costs taxpayers over \$7 million per year—more than the value of the barge industry itself.

This example ought to be a concern to all Americans. It is a deep concern to South Dakotans. The Missouri runs down the center of our state and is a major source of income, recreation and pride for us. More than 40 years ago, the Corps built dams up and down the Missouri River in order to harness hydroelectric power. In return, it was expected to manage the river wisely, and in compliance with the nation's laws.

The Corps has not kept that trust. The Missouri river is dying a slow death. And the Corps continues to bend over backward to ensure that the management changes necessary to meet the requirements of the Endangered Species Act and recover the health of the river are not made.

In recent years, studies have been done to determine how to restore the river to health. An overwhelming amount of scientific and technical data all point to the same conclusion. The flow of the river needs to more closely mimic nature. Flows should be higher in the spring, and lower in the summer—just as they are in nature.

Yet, if and when the Corps ever releases its plan for managing the river—and after 12 years of study, that is still in doubt—observers expect that it will propose to continue doing largely what it has been doing all these years. That is what most expect, despite knowing exactly what the practices have produced now for the last 40-plus years. The agency's refusal to change will further jeopardize endangered species. And, it will continue to erode the natural beauty and recreational value of the river.

The *Washington Post* series suggested that the Corps' handling of the Missouri River Master Manual is not an isolated case. The *Post* articles contained allegations by a Corps whistleblower who says that a study of proposed upper-Mississippi lock expansions was rigged to provide an economic justification for that billion-dollar project. In response to these allegations, the Corps' own Office of Special Counsel concluded that the agency “probably broke laws and engaged in a gross waste of funds.”

In my own dealings with the Corps of Engineers, I, too, have experienced the institutional problems recorded so starkly in the *Post* series. In South Dakota, where the Corps operates four hydroelectric dams, we have fought for more than 40 years to force the agency to meet its responsibilities under the 1958 Fish and Wildlife Coordination Act and mitigate the loss of wildlife habitat resulting from the construction of those dams.

For 40 years, the Corps has failed to meet those responsibilities. That is why I have worked closely with the Governor of my state, Bill Janklow, and with many other South Dakotans, to come up with a plan to transfer Corps lands back to the state of South Dakota and two Indian tribes. Unfortunately, instead of attempting to work with us, the Corps fought us for years—hoping to prevent us from reinforcing the precedent that the Corps is responsible for mitigating the environmental damage caused by its projects.

Just last week, the *Post* described a new General Accounting Office report on a project in Delaware, where once again fraudulent analysis was performed to justify moving forward when it appears an objective analysis would have concluded the opposite. When considered in the context of the litany of problems that have come to light in the *Post*, Congress has no choice but to enact serious reforms prior to providing the agency with any new authority.

In a democracy, institutions of government must be held accountable by representatives of the people. That is the job of Congress—to hold that agency responsible and make sure it follows the nation's laws and provides lawmakers with accurate information upon which million- and billion-dollar decisions are made.

Contempt for environmental laws and self-serving economic analyses simply cannot be tolerated if Congress is to make well-informed decisions regarding the authorization of expensive projects, and if the American taxpayer is to be assured that Federal moneys are being spent wisely.

The Corps of Engineers provides a valuable national service. It constructs and manages needed projects throughout the country. The size and scope of the biannual Water Resources Development Act is clear evidence of the importance of the Corps' civil works mission. Because the Corps' work is so critical, it is essential that steps be taken immediately to determine the extent of the problems within the agency—and to design meaningful and lasting reforms to correct them. Our Nation needs a civil works program we can depend on. We need a Corps of Engineers that conducts credible analysis.

We need a Corps that balances economic development and environmental protection as required by its mandate—not one that ignores environmental laws as it chooses. History does not offer much room for confidence that the Army Corps of Engineers can meet these standards under its current management system.

Consequently, I urge this committee to take a hard and systematic look at the Corps and include reforms in the next Water Resources Development Act to address these obvious problems. In particular, I hope the Committee will look at the Corps' compliance with environmental laws, the quality and objectivity of the agency's scientific and economic analysis, the extent to which the Corps coordinates and cooperates with other state and Federal agencies in designing and implementing projects, and the appropriateness of the agency's size, budget and personnel.

It is my hope that all those who care about the integrity of the Army Corps of Engineers and its mission will support an effort by this committee to identify and implement whatever reforms are necessary to rebuild public support for its work. I look forward to working with all members of the Committee to help craft responsible reform legislation, and I encourage you to look to the provisions of S. 1987 as a basis for needed reform in this year's Water Resources Development Act.

STATEMENT OF HON. RUSSELL D. FEINGOLD, U.S. SENATOR FROM THE
STATE OF WISCONSIN

Mr. Chairman, I am delighted to appear before the Environment and Public Works Committee today. I thank the Chairman for honoring the commitment to a hearing on the Corps' Water Program and the need for reform of the Corps made to me by the former Ranking Member, Senator Baucus, and Senator Smith during floor debate over the Water Resources Development Act of 2000. I am very pleased to be working with Senators Smith and McCain on this issue, and admire their dedication to fiscal responsibility as a driving force in their desire for Corps Reform.

Corps Reform is a work in progress. Reforming the Corps of Engineers will be a difficult task for Congress. It involves restoring credibility and accountability to a Federal agency rocked by scandals, struggling to reform itself over the last year, and constrained by endlessly growing authorizations and a gloomy Federal fiscal picture. But, this is an agency that Wisconsin, and many other states across the country, have come to rely upon. From the Great Lakes to the mighty Mississippi, the Corps is involved in providing aids to navigation, environmental remediation, water control and a variety of other services to my state. My office has strong working relationships with the Detroit, Rock Island, and St. Paul District Offices that service Wisconsin, and, let me be very clear Mr. Chairman, I want the fiscal and management cloud over the Corps to dissipate so that the Corps can continue to contribute to our environment and our economy.

The two reform bills now before the committee grew from my experience in two legislative efforts. First, as the committee knows, I sought to offer an amendment to the Water Resources Development Act of 2000 to create independent review of Army Corps of Engineers' projects. In response to my initiative, the bill's managers adopted an amendment as part of their Manager's Package that should help get this

Committee the additional information it needs to develop and refine legislation on this issue through a study on peer review by the National Academy of Sciences.

Second, I also learned of the need for additional technical input into Corps projects through my efforts working with Senator Bond on the reauthorization of the Environmental Management Program in the Upper Mississippi, which was the only permanent authorization in WRDA 99. Included in the final EMP provisions is a requirement that the Corps create an independent technical advisory committee to review EMP projects, monitoring plans, and habitat and natural resource needs assessments. I have been deeply concerned that this provision has not been fully implemented by the Corps, and I feel that as this Committee has been historically concerned about the need to secure outside technical advice in Corps' habitat restoration programs, like the EMP, it should also be concerned about getting similar input for other Corps construction activities.

Earlier this Congress, I introduced the Corps of Engineers Reform Act of 2001 (S. 646). This year, I joined with Senators Smith and McCain in introducing the Corps of Engineers Modernization and Improvement Act of 2002, S. 1987. S. 1987 includes many provisions that were included in my original bill, and codifies the idea of independent review of the Corps about which Senator Smith and I agreed in the 2000 Water Resources bill. It also provides a mechanism to speed up completion of construction for good Corps projects with large public benefits by deauthorizing low priority and economically wasteful projects. Further, it streamlines the existing WRDA 86 deauthorization process. Under S. 1987, a project authorized for construction, but never started, is deauthorized if it is denied appropriations funds toward completion of construction for five straight years. In addition, a project that has begun construction but denied appropriations funds toward completion for three straight years is also deauthorized.

The bill also preserves congressional prerogatives over setting the Corps' construction priorities by allowing Congress a chance to reauthorize any of these projects before they are automatically deauthorized. This process will be transparent to all interests, because the bill requires the Corps to make an annual list of projects in the construction backlog available to Congress and the public at large via the Internet. The bill also allows a point of order to be raised in the Senate against projects included in legislation for which the Corps has not completed necessary studies determining that a project is economically justified and in the Federal interest.

It is a comprehensive revision of the project review and authorization procedures at the U.S. Army Corps of Engineers. Our joint goal is to cause the Corps to increase transparency and accountability, to ensure fiscal responsibility, and to allow greater stakeholder involvement in their projects. We are committed to that goal, and to seeing Corps Reform enacted as part of this year's Water Resources bill.

I would hope, Mr. Chairman, that as the Committee examines the issue of Corps Reform, it also reviews my original bill, S. 646, which is sponsored in the House of Representatives by my colleague from Wisconsin, Representative Kind. S. 646 includes a number of important concepts that are central to environmental protection and that should be part of Corps Reform.

The Corps is required to mitigate the environmental impacts of its projects in a variety of ways, including by avoiding damaging wetlands in the first place and either holding other lands or constructing wetlands elsewhere when it cannot avoid destroying them. The Corps requires private developers to meet this standard when they construct projects as a condition of receiving a Federal permit, and I think the Federal Government should live up to the same standards. Too often, and others on the second panel can testify to this in greater detail, the Corps does not complete required mitigation and enhances environmental risks. I feel very strongly that mitigation must be completed, that the true costs of mitigation should be accounted for in Corps projects, and that the public should be able to track the progress of mitigation projects. In addition, the concurrent mitigation requirements of S. 646 would actually reduce the total mitigation costs by ensuring the purchase of mitigation lands as soon as possible.

Mr. President, I feel that we need legislation to ensure a reformed Corps of Engineers. The Corps' recently-released lists of projects that it intends to review have been confusing and the review criteria remain unclear. We need a clearly-articulated framework to catch mistakes by Corps planners, deter any potential bad behavior by Corps officials to justify questionable projects, end old unjustified projects, and provide planners desperately needed support against the never ending pressure of project boosters. Those boosters, Mr. Chairman, include congressional interests, which is why I believe that this Committee, which has sought so hard to stick to its criteria in project authorization and has done a better job in holding the line in

Conference, needs to champion reform—to end the perception that Corps projects are all pork and no substance.

I wish it were the case, Mr. Chairman, and I know that Senators Smith and McCain share my view, that I could argue that the changes we are proposing today were not needed, but unfortunately, I see that there is need for Corps Reform legislation. I want to make sure that future Corps projects no longer fail to produce predicted benefits, stop costing the taxpayers more than the Corps estimated, do not have unanticipated environmental impacts, and are built in an environmentally compatible way. This Committee should seek to ensure that the Corps does a better job, which is what the taxpayers and the environment deserve. I thank you for this opportunity to share my views with you today.

STATEMENT OF R.L. BROWNLEE, ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS), DEPARTMENT OF THE ARMY

Mr. Chairman and Members of the Committee. I am Les Brownlee, the Acting Assistant Secretary of the Army for Civil Works. Thank you for inviting me here today. I'm privileged to appear before you on behalf of the Administration to talk with you about the Army Corps of Engineers, our Nation's water resources, and charting a path toward continued modernization of both.

I've learned a lot about the Corps since I assumed more direct management responsibilities for civil works in March. A piece of history that was interesting to me is how the Army got into civil works and water. After the War of 1812, both commercial development and national defense in the country required more reliable transportation arteries. Federal assistance, however, was slow in coming and was a "product of contentious congressional factions" and an Administration that did not want to meddle in the states' affairs. In the 1824 case of *Gibbons vs. Ogden*, however, the Supreme Court ruled that Federal authority covered interstate commerce including riverine navigation. Shortly thereafter, the General Survey Act authorized the President to conduct a survey of nationally important roads and canals from a commercial, military or mail transportation point of view. The President gave that responsibility to the Army Corps of Engineers. About a month later, a second act appropriated \$75,000 for improving navigation along the Ohio and Mississippi Rivers by removing sandbars, snags and other obstacles. The Corps was also tasked with that work, and so began the Corps of Engineers' continuous involvement in civil works and our Nation's water resources.

Since that time, the Corps has always been a dedicated servant of the American people. For 200 years, the Nation has relied on the Corps to help resolve some of our difficult problems. In addition to its water resources responsibilities, the Corps has supported our military forces in time of war. The Corps provided the technical expertise for the Manhattan Project. Army engineers oversaw the building of the Panama Canal. The Kennedy Space Center and the Johnson Manned Spacecraft Center in Houston are products of Corps efforts. When a disaster strikes, Corps personnel in red jackets are there to help. Research work by the Corps resulted in building designs that saved lives in the Pentagon on September 11th. Today, 35,000 Corps employees work around the world to help improve the quality of life for people at home and abroad. We also want to ensure, as I'm sure you do, that this country can continue to rely on the capability, expertise and leadership of the Corps now, and in the future.

The distinguished history of the Army Corps of Engineers is the history of our Nation. As the Nation has changed its priorities and values, the Corps has also changed as it brought these priorities to reality.

It is with this history, tradition and spirit that I address the subject of today's hearing—Corps reform.

This Administration supports the goals of Corps reform and is willing to work with the Committee to eliminate unneeded water projects to pursue only those that are worthy; and to improve the ways in which we formulate projects and fund them. I therefore would propose that we focus our attention on the question that lies perhaps on a higher strategic plane: Where is our national policy regarding water resources heading next? Our continued understanding of this question is critical to setting the future direction of the Corps.

The people of America increasingly understand that our Nation's water resources are finite. The debate over its use classically centers around this question: Where should we give priority to the development of water resources for social and economic benefit and where should we give priority to the restoration of these resources to their natural state. Sometimes we must choose one over the other. Sometimes we struggle to do both. As science and engineering evolve, we can enhance our oppor-

tunity to find more balance between these options and, working together, make the right choices for the Nation.

We all agree that the Corps can and should modernize. But modernization of the Corps needs to be in accordance with the future direction of our national policy.

With your permission, I would like to give you my perspective on the water policy issue. Here are just a few of the facets of the issue.

Our society is growing more complex. We have competing interests and disputes in many watersheds—in the Everglades, along the Missouri River, the Mississippi River, the Columbia River, and many others. These interests and disputes are intensified when we experience drought conditions as severe as we have now over much of the country.

As members of this important committee, you are more aware than most that many Corps navigation projects have extensive maintenance and repair backlogs.

While advances in science and technology can move us toward a new paradigm of more environmentally sustainable projects and integrated water resources management, we must develop more effective public policies built on a new public consensus.

In terms of our Nation's priorities, the war on terrorism is, and should be, our main focus. We must prioritize our resources to ensure that we win this war. We must also ensure that we are looking out for the Nation's long term future and ensure that our country's economy remains strong. At the same time, we also need to protect and sustain our Nation's natural resources. Our financial resources are not unlimited. We therefore must address the following questions: What water resources investments do we most need to make now? To what extent should these be a Federal responsibility? To what extent should the Corps have this responsibility? Which investments should we not undertake until later? What can we do without? Should we continue all ongoing construction projects? Can we afford to build them all simultaneously? Should we continue to operate, maintain, and rehabilitate every investment that we have made in navigation?

This Administration has insisted on much stronger coordination, collaboration, and cooperation among agencies within the executive branch and wants to work more closely with you to collaborate more effectively on the plans and policies we should put in place to address these long-term needs.

I believe that it is important to focus our time and effort on such a debate at the national level. Corps reform is important. General Flowers and I agree that the Corps of Engineers should be changed and transformed to meet and better serve the evolving needs of the Nation, and General Flowers will address this in more detail. However, reform of the Corps will follow in a more natural and logical way if we better define our policies and reach agreement on the right balance on the critical priorities.

The Corps professionals' body of knowledge on water resources is unparalleled, and we must exploit that knowledge and associated skills to ensure that the Federal Government can continue to meet the needs of its citizens.

I appreciate the opportunity you have given me to testify before this distinguished committee, recognizing that your knowledge of these subjects far exceeds what I have been able to learn in these past few months. I believe we have an opportunity, working together, to shape the Nation's future. As you know better than I, these are serious times and it is often hard to concentrate on the long term when the more immediate becomes urgent. I pledge to work with you on these important issues to achieve a national water policy that serves the best interest of all our citizens.

Mr. Chairman, this concludes my statement, and I would be pleased to address any questions that you or the committee may have.

STATEMENT OF LIEUTENANT GENERAL ROBERT B. FLOWERS, CHIEF OF ENGINEERS,
U.S. ARMY CORPS OF ENGINEERS

Mr. Chairman, and Members of the Committee. I am honored to be testifying before your committee today, along with the Acting Assistant Secretary of the Army (Civil Works), the Honorable Les Brownlee, on two things we share a deep concern for the U.S. Army Corps of Engineers and the management of our nation's precious water resources.

I'm willing to state categorically that the Corps must change. Mr. Brownlee has articulated what I believe to be the heart of the issue about changing the Corps. It will be more beneficial for the country in the long run if this transformation is consistent with the changes that have been occurring in the Nation's priorities and

values regarding water resources. The Corps can change, we have before at critical turning points and are certainly at a turning point right now.

There are some basic questions about how the Nation will use and protect water in the future, some of which may have implications for future Corps activities. For instance, in the future, to what extent will water be a mode of transportation? To what extent will it be open for recreation? Will there be enough clean water to drink? Where do we place priority when it comes to water animals, farmers, ecosystems, plants, people? Our future depends on gaining some direction and focus on our priorities. This direction will also profoundly affect the way we do business in the Corps. Together we need to craft the 21st Century Corps of Engineers, an organization based on contemporary values and future needs. The needs that the Corps addresses—water resources and support to the war fighter—are as critical today as at any moment in history.

Today I'd like to talk about what I'm doing to transform into the 21st Century Corps. I'd also like to talk about three particular areas in which we know we need to make some changes: *reducing the backlog of projects, improving our internal processes and working toward watershed approaches*. I'm optimistic that we will see improvement in all three of these areas as we address the national water policy issue. But in the interim, while I'm working on some solutions for these areas, we need to work with you in Congress, as well as the Administration, and our partners, stakeholders and critics to figure out what changes should be made and get them implemented.

Let's talk first about how *we reduce the backlog*. Frankly, we have too many projects on the books, and some do not address solutions in a contemporary way. This has been the center of discussions at previous hearings of this Committee.

We are looking for opportunities to reduce the number of projects that we are authorized to address. For some projects, considerable time elapses between when a problem is studied and the project to fix it is built. During that lapse we may see scientific progress that could better address the problem, and we may see shifts in public policy. We have about \$5 billion worth of inactive projects that technically remain on our books, whose designs won't solve the original problems or for which there is no longer support.

Then there are projects that could solve real problems but are unpopular for any number of reasons. Most were authorized years ago, but haven't been built. They show up on the hit lists of some of our most vocal critics. Sometimes the critics are right. And the challenge is how to ultimately decide whether we even should be trying to solve the problems for which these projects were designed. In many cases, I believe that it would be helpful for an interagency task force composed of all interested Federal agencies to take a fresh look at these projects.

Let me tell you what we are doing to improve our *internal processes*.

During the past year, we have focused on our planning and review capability within the Corps. We have identified the most critical capability deficiencies and are reemphasizing such basics as formulation, environmental science, economics, public involvement, and internal review. We are also looking at how we consolidate our planning and review capability for some high priority, but not high volume activities, so that our best people can be assigned to the most complex projects.

The other part of this is independent review. We're eagerly awaiting the study findings this summer from the National Academy of Sciences. I'm optimistic that the recommendations will provide us with a road ahead on this issue. We are also looking forward to the second phase of the study that will look at the state-of-the-art of Corps planning processes and procedures.

In the interim we are using various new forms of review, from the internal and external standpoints, to improve and validate our studies and projects. We are taking advantage of our value engineering expertise, our cross-district review capability and using outside experts to increase the validity of our recommendations and findings.

As an aside, it is a test of the adage that the pendulum swings both ways that we are looking at our review function within the Corps again. As you probably remember we had an internal review board, called the Board of Engineers for Rivers and Harbors for the majority of the 20th century, just disbanded in 1993. With that step, and reorganizing our internal structure, we streamlined the process but at a cost. I believe its quite possible to improve the process but continue to move the studies and recommendations forward at a fairly quick pace.

In some instances where the independent review has included getting other Federal agencies to the table, we have reaped immense benefits from the increased collaboration and partnership within the Federal family. These partnerships will serve us well as we move *toward a watershed approach*, the last topic I want to address. Here are a few things I've done:

I've restructured the controversial Upper Mississippi Navigation Study to consider a wide range of options from construction of new locks to non-construction alternatives such as system-wide environmental restoration. We also will need to ensure that the economic analysis used in this study is current and beyond reproach.

I have also revitalized the Environmental Advisory Board, a board of independent, external environmental advisers that will help us evaluate our process. They have advised us on our Upper Miss River Navigation study and will also be looking at peer review, cost sharing, breadth of authority and reviewing our work in the Everglades in the upcoming sessions.

To refocus Corps professionals on the long-term sustainable goal, I have established a set of environmental operating principles that reiterates our commitment to approach our work in a more environmentally sustainable manner and challenged our people to make them real.

Quite frankly though, we need to do more and we need the Congress's help if we are truly to take a watershed approach.

Right now, existing laws and policies drive us to single focus, geographically limited projects where we have sponsors sharing in the cost of the study. The current approach narrows our ability to look comprehensively and sets up inter-basin disputes. It also leads to projects that solve one problem, but may inadvertently create others. Frequently we are choosing the economic solution over the environmental, when we can actually have both. I believe the future is to look at watersheds first; then design projects consistent with the more comprehensive approach. We know that will require collaboration early and continuously but we believe it will prevent lawsuits later. So together, we need to develop and agree on 21st Century criteria.

Transformation of the Corps won't be easy, but we stand ready to work with you to address these issues. As our critics continue to chide us, I would ask that they work with us, as well with you in the Congress, the Administration, interest groups, our partners and stakeholders, for the well being of the American people and the environment in which we live.

Thank you Mr. Chairman and members of the committee. This concludes my statement.

STATEMENT OF THOMAS J. CHASE, DIRECTOR OF ENVIRONMENTAL AFFAIRS, AMERICAN ASSOCIATION OF PORT AUTHORITIES

INTRODUCTION

Good morning. I am Thomas J. Chase, Director of Environmental Affairs at the American Association of Port Authorities (AAPA). Founded in 1912, AAPA represents virtually every U.S. public port agency, as well as the major port agencies in Canada, Latin America and the Caribbean. AAPA members are public entities mandated by law to serve public purposes, primarily the facilitation of waterborne commerce and the generation of local and regional economic growth. I am testifying today on behalf of the 86 U.S. public port members of the American Association of Port Authorities.

Mr. Chairman, AAPA commends you for calling this hearing on the Water Resources Development Act of 2002. We appreciate the opportunity to testify on behalf of the U.S. members of AAPA.

The Corps of Engineers, in partnership with the nation's public ports, plays a vital role in ensuring the nation's marine transportation system (MTS) meets the needs of the nation's businesses and consumers. The MTS is a complex, market-driven system that provides many benefits to the Nation. Federal investment in one part of this system—navigation channels—is critically important to the success of the system and produces benefits to the Nation far in excess of the investment.

AAPA and the public port authorities of our country, the agencies on whom the responsibility for the development and operation of our nation's ports rests, urge the Congress to keep these essential arteries of international commerce open in an efficient, cost-effective and environmentally protective manner by providing the Corps of Engineers with the resources and authorities it needs to get the job done. To that end, we urge the Congress to fully fund the Corps of Engineers civil works program, to maintain a biennial cycle in enacting Water Resources Development Acts, to consider carefully any changes to Corps of Engineers project authorities, and to seriously review the impact of any proposed changes to avoid needlessly increasing the cost, or further delay the construction, of needed deep-draft navigation projects.

In my testimony today, I will discuss the following four points:

- Importance of the Corps deep-draft navigation mission;
- The need to enact a Water Resources Development Act of 2002; and,

- The potential impact on the MTS of S. 1987, the Corps of Engineers Modernization and Improvement Act.

IMPORTANCE OF THE CORPS DEEP-DRAFT NAVIGATION MISSION

Our water highways are national assets that serve a broad range of economic and strategic interests. The United States has the most extensive, complex and decentralized marine transportation system in the world; it is an appropriate asset for the world's largest trading country and sole superpower. A large measure of this country's unprecedented economic growth is due to the increased productivity of the American economy and foreign trade. To remain competitive in the global marketplace, U.S. businesses must have an efficient and reliable transportation system.

This section of my testimony discusses the many benefits provided by the nation's system of deep-draft navigation channels. The structure of the broader marine transportation system and its relationship to deep-draft navigation channels is also discussed. Finally, a number of challenges facing the Corps of Engineers and its non-Federal partners on deep-draft navigation projects—the nation's public port authorities—are also highlighted.

Benefits of Deep-Draft Navigation Projects

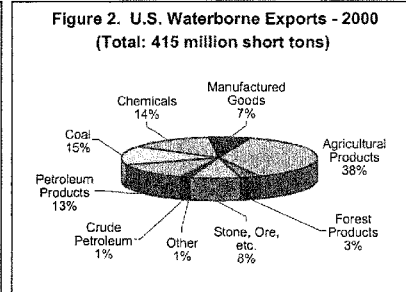
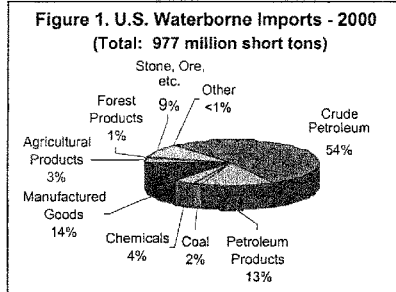
Economic Benefits: Ports' activities link every community in our Nation to the world marketplace, enabling us to create export opportunities and to deliver imported goods more inexpensively to consumers across the Nation. The deep-draft commercial ports of the U.S. handle over 95 percent of the volume and 75 percent of the value of cargo moving in and out of the Nation.

The marine transportation system has helped American exporters from every state develop and maintain markets around the world for a variety of commodities, ranging from paper, forest and agricultural products, to plastics, chemicals and pharmaceuticals; from fruits and vegetables to poultry, beef and cotton; and, from machinery and automobile parts to frozen fish.

The industry has also provided American consumers and businesses with inexpensive access to a vast array of goods from around the world, including more than half of the petroleum used, 75 percent of the apparel and 95 percent of the footwear worn in this country, food products, beverages such as coffee and beer from around the world, flowers, kitchenware, household appliances, furniture and bicycles, marble and tile, automobiles, auto parts and tires, machinery and tools, electronic goods, computer equipment and copiers, manufacturing components and supplies, and thousands of other goods.

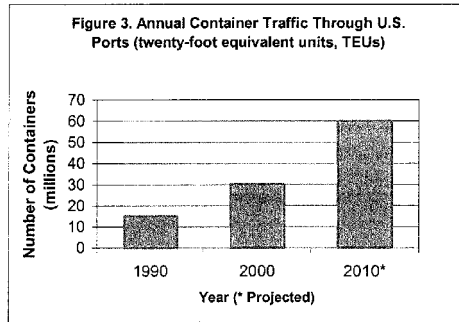
All ports serve multi-state needs. The foreign trade activities of each state are supported by a variety of ports both within and, more often, outside the state. On average, each state relies on between 13 to 15 ports to handle 95 percent of its imports and exports. The goods from 27 states leave the country through the ports in Louisiana alone. Midwestern grain supplies the Pacific rim market through ports in the Pacific Northwest. Imported crude oil refined in New Jersey and Pennsylvania reaches consumers on the entire East Coast, from Maine to Florida. Steel that travels to major Midwestern industrial centers is delivered cheaply and efficiently through Great Lakes ports. Ports on the West Coast handle goods such as cars, computers, and clothing, which are destined for consumers throughout the country.

World trade increased by 3.8 percent annually (on a tonnage basis) between 1993 and 1997 to a total of 5.3 billion metric tons. In that same period, U.S. foreign waterborne trade grew by 4.6 percent per year to 1,071 million metric tons and accounted for about 20 percent of global waterborne trade and almost 30 percent of U.S. Gross Domestic Product.³ By 2020, U.S. foreign maritime trade is expected to more than double over 1996 tonnage levels, with total tonnage projected to grow 3.5 percent annually. Figures 1 and 2 illustrate the range and scope of import and export cargos, respectively, moving through U.S. ports in 2000.



The nation's system of ports and harbors provides the nation's shippers—importers and exporters—with a range of choices that allow them to minimize transportation costs, and, thus, deliver goods to the consumer more cheaply and compete more effectively in international markets. As a result of the proliferation of just-in-time manufacturing practices, time definite delivery, and vendor managed inventory in our manufacturing and retail sectors, an interruption of only four to five business days can have devastating consequences for our global supply chain, as evidenced by the impact of September 11 on our land border crossings.

These global business trends are interrelated to the demand of cargo shippers for increasing reliability, reduced damage, and decreasing cost. All of these demands drive the transportation provider to improve service and find efficiencies at each link in the transportation chain. This is especially true for the ocean carrier who transports large volumes of cargo over relatively long distances. The drive to satisfy cargo shippers in ocean transportation has led to the building of larger ships and to the increasing containerization of cargo. Figure 3 illustrates the trend in the containerized cargo segment of U.S. foreign trade. The number of containers moving through U.S. ports doubled between 1990 and 2000, from 15.3 to 30.4 million 20-foot equivalent units (TEUs) and the volume is expected to double again over the current decade. Relative increases were consistent on the Atlantic, Gulf and Pacific Coasts with volumes in 2000 of 13, 1.7, and 15.7 million TEUs, respectively.



Recent testimony by the World Shipping Council discusses trends in freight rates for containerized cargo moving in U.S. international trade.¹ Table 1 summarizes the changes in average rates for moving containerized cargo in the major U.S. foreign trade routes from 1978 through 1998. Significantly, rates in real terms have declined by between 52 and 72 percent, during this period of rapid expansion in the use of containers for shipping cargo. It has been an unrecognized success that all segments of the maritime transportation system have made the investments necessary to sustain, and in turn foster, the explosive growth in global trade.

According to a semi-annual survey conducted by the U.S. Department of Agriculture, American shippers of containerized agricultural goods have reported that they are able to obtain cost-efficient ocean transportation. Specifically, the USDA's December 2001 report on *Agricultural Ocean Transportation Trends* states that:

¹ Testimony of Christopher Koch, President & CEO of the World Shipping Council Before the House Committee on the Judiciary Hearing on International Liner Shipping Regulatory Policy, June 5, 2002.

The rates for U.S. outbound dry containers, particularly westbound transpacific rates, are approaching historically low levels. Virtually all U.S. agricultural exporters are paying less for transportation than they were in early 2001 when rates were already perceived to be extraordinarily low . . . It is remarkable that commodities are reportedly moving in certain transpacific, westbound trades at \$225 per 40-foot equivalent unit . . . Rates are so uniformly low, they are no longer the primary determining factor for carrier selection. There is a presumption that rates will hit “rock bottom,” so, while agricultural shippers continue to keep an eye on the overall rates (the base rate plus the surcharges), carriers are now primarily selected according to service capabilities.²

Table 1.—Changes In Average Freight Rates In U.S. East-West Trades, 1978–1998

	Current Dollars (In Percent)	Real Terms (In Percent)
Trans-Pacific		
Eastbound	– 32.1	– 72.1
Westbound	– 20.8	– 67.5
Trans-Atlantic		
Eastbound	– 4.6	– 60.9
Westbound	18.2	– 51.5

Besides providing cost savings to the country’s businesses and consumers through more efficient transportation, the U.S. marine transportation system, including the nation’s deep-draft navigation channels, creates substantial economic and trade benefits for the Nation, as well as for the local port community and regional economies. The following statistics highlight how critical ports are in facilitating national economic activity:³

- U.S. Customs duty revenues totaling approximately \$15.6 billion were paid into the general treasury in fiscal year 1996 on cargo moved through ports.
- Our nation’s commercial deep draft ports annually handle in excess of \$600 billion in inter national trade.
- Foreign trade is an increasingly important part of the U.S. economy, currently accounting for almost 30 percent of our Gross Domestic Product. U.S. exports and imports are projected to increase in value from \$454 billion in 1990 to \$1.6 trillion in 2010. The volume of cargo is projected to increase from 875 million to 1.5 billion metric tons in 2010.
- The overall national economic impact of port activities in 1996 generated:
 - 3 million jobs;
 - \$743 billion to the Gross Domestic Product; and
 - \$200 billion in taxes at all levels of government.

National Defense Benefits: We should also not lose sight of the fact that the ports continue to play a very critical role in our nation’s defense. That role has never been more apparent than during the loadouts of military cargo and personnel during Operation Desert Shield/Desert Storm. The huge buildup of U.S. forces in and around the Persian Gulf would have been impossible without the modern facilities and strong support provided by America’s ports. According to the U.S. Military Traffic Management Command (MTMC), between August 1990 and March 1991, MTMC loaded 312 vessels and more than 4.2 million measurement tons of cargo in 18 U.S. ports for delivery to the Persian Gulf in support of Desert Shield/Desert Storm. More than 50 ports have agreements with the Federal Government to provide ready access for national emergency purposes.

Environmental Benefits: Several navigation projects that have substantial environmental features, including the creation of thousands of acres of wildlife habitat using dredged material, would not proceed under the proposed funding levels. For example, the Port of Oakland is currently building a project to expand its container handling capability that will redevelop a former military facility, create 120 acres of shallow-water habitat, restore 3200 acres of wetlands, provide 30 acres of new public parkland, and reduce vehicle emissions by 40 tons per year. In addition, the larger, more efficient ships that will be able to call at the port will result in reduced volumes of ballast water discharged and air pollutants emitted. Similar multi-objec-

²Agricultural Marketing Service, “Agricultural Ocean Transportation Trends,” December 2001, at www.ams.usda.gov/tmd/AgOTT/December%202001/Dec2001—content.htm.

³Source: U.S. Maritime Administration.

tive projects are the hallmark of local public port development projects throughout the country.

Structure of the MTS

The U.S. Marine Transportation System (MTS) consists of ports and their inland connections, vessels, and navigation channels. Each component is a complex system within itself and is closely linked with the other components. The first two components are primarily an aggregation of State, local, or privately owned facilities and private companies; navigation channels are primarily Federal assets. As with the U.S. economy as a whole, decisionmaking and investment are primarily driven by the marketplace. In addition, Federal, state, and local governments participate in the management, financing, operation and regulation of the MTS.

The MTS is subject to an almost infinite variety of economic, political and market conditions and forces which affect the need for and types of investment in MTS facilities and services (i.e., ports, vessels, and navigation channels). These factors include:

- Demand for MTS services has been, and is expected to continue, growing at a rate significantly greater than the rest of the economy, and prediction of the exact need for and locations of new MTS facilities is extremely complex;
- Short term demand for MTS services can be highly variable and is related to, among other things, global economic conditions, evolving trading patterns, changing consumer preferences, and seasonal fluctuations.
- Investments in MTS facilities are capital intensive and—
 - take long lead times to bring into the market,
 - must be sufficient to meet peak demand,
 - are not easily transformed to meet changes in demand because of large fixed costs and the need to maintain minimal levels of service,
 - can only be delivered in “lumps” or relatively large units of capacity and,
 - have a relatively long lifetime (often on the order of 25 years).

Because of these factors, the addition of new MTS facilities cannot be precisely coordinated with increase in demand. Also, in the presence of the vigorous competition inherent in the port and ocean carrier segments of the MTS, there is a potential for some excess capacity to exist at any given point in time. However, quantifying the level or cost of excess capacity is extremely complex and may not be relevant in investment decisionmaking. In addition to providing an ability to handle peak demand, excess capacity also ensures competition among the various ports and vessels to the advantage of the nation’s business and consumers.

Another important benefit of excess capacity is demonstrated when there are interruptions in certain segments of the MTS. For example, following the September 11 attacks on the World Trade Center, the Port of New York and New Jersey was closed to all vessels for several days. Cruise ships were rerouted to the ports in Baltimore, Boston, and Philadelphia; cargo ships were also diverted to other ports. In 1997, problems with rail service in the Southwest U.S. caused cargo diversions to ports in the North west. A westward shift in manufacturing patterns in Asia has resulted in more consumer goods from that region being delivered to the U.S. through East Coast ports, via the Suez Canal. The excess capacity also serves the country well during times of crisis when the military needs to quickly move troops and materiel.

Ports: The majority of port terminals, 87 percent on the inland waterways and 66 percent in deep-draft harbors, are privately owned.⁴ Public port authorities are creations of state governments and are generally set up as semi-autonomous authorities with their own elected or appointed governing boards. Local, state-wide or regional ports are responsible for investment, development and operation of public marine terminal facilities. Ports and other marine terminals, both public and private, are responsible for dredging of berthing areas and access channels connecting the port facilities to Federal navigation channels. The U.S. Maritime Administration reports that in 2000 alone, the cumulative local investment in public port facilities was nearly \$1.1 billion.⁵

Table 2 provides a break down of capital expenditures by type of facility as well as a projection of capital spending for the 5-year period 2001 to 2005. Each of the five cargo type categories includes expenditures for pier or wharf structures, storage

⁴An Assessment of the U.S. Marine Transportation System—A Report to Congress. U.S. Department of Transportation, Washington, DC 104 pp., September 1999 (www.dot.gov/mts/report/).

⁵United States Port Development Expenditure Report, December 2001, U.S. Department of Transportation Maritime Administration, Office of Ports and Domestic Shipping, Washington, DC.

facilities, and handling equipment. Infrastructure expenditures cover improvements, such as roadways, rail, and utilities that are located on or off terminal property. Dredging consists of local port expenditures associated with the dredging deepening and/or maintenance of Federal and non-Federal channels and berths as well as the local costs for land, easements, rights-of-way, and disposal areas. The “other” category includes those structures and fixtures not directly related to the movement of cargo, such as maintenance and administrative facilities.

Table 2.—Comparison of Annual Capital Expenditures by Type of Facility for 1992–2000 and Projected Capital Expenditures for 2001–2005

Year	General Cargo (In Per- cent)	Special- ized Cargo (In Per- cent)	Dry Bulk (In Per- cent)	Liquid Bulk (In Per- cent)	Passenger (In Per- cent)	Other (In Per- cent)	On Ter- minal (In Per- cent)	Off Ter- minal (In Per- cent)	Dredging (In Per- cent)	Total Ex- penditure (millions of dollars)
2001– 2005	9.8	44.4	1.5	0.6	4.3	8.0	8.5	6.3	16.6	\$9,434
2000 ...	22.8	31.2	3.5	0.8	5.7	8.2	8.0	8.7	11.1	1,058
1999 ...	11.5	39.2	5.2	1.4	6.4	9.0	8.8	8.6	9.9	1,116
1998 ...	10.9	35.8	8.3	0.2	1.9	8.5	7.1	11.2	10.8	1,414
1997 ...	14.8	35.5	8.3	0.1	3.8	8.5	14.0	6.7	8.3	1,542
1996 ...	14.7	41.0	5.9	0.5	2.7	4.8	10.7	8.8	10.9	1,301
1995 ...	22.2	28.8	3.0	0.9	4.7	8.2	18.0	3.1	11.1	1,203
1994 ...	22.8	34.8	5.6	0.3	4.7	7.3	15.1	6.0	3.4	687
1993 ...	24.5	27.6	4.5	1.7	5.6	11.9	11.6	3.6	9.0	654
1992 ...	23.9	31.8	4.8	0.2	7.5	9.5	9.0	3.8	9.5	680

Table 3 presents information on the methods used by the U.S. public port authorities to finance their capital expenditure programs. The table identifies six funding categories to classify the financing sources: port revenues, general obligation bonds (GO bonds), revenue bonds, loans, grants, and other. The “other” funding category includes all financing sources that were not described above, such as state transportation trust funds, state and local appropriations, taxes (property, sales), and lease revenue. As the table illustrates, public ports are relying on either direct revenue or revenue-backed bonds for a greater percentage of the financing needs, and this trend is expected to continue with revenue-based financing expected to reach almost 78 percent of capital financing needs in 2001–2005. (Note: Total financing and total expenditure levels from Table 2 may not agree because of incomplete survey responses.)

Table 3.—Comparison of Annual Capital Financing by Method for 1996–2000 and Projected Capital Financing for 2001–2005

Method	1996 (In Per- cent)	1997 (In Per- cent)	1998 (In Per- cent)	1999 (In Per- cent)	2000 (In Per- cent)	2001–2005 (In Percent)
Port Revenues	31.7	30.4	33.8	44.4	48.1	46.5
GO Bonds	9.4	10.0	6.6	7.8	9.1	7.1
Revenue Bonds	42.6	47.1	40.9	21.4	10.9	31.1
Loans	1.1	0.5	1.1	6.6	3.8	2.9
Grants	2.5	8.1	10.4	14.0	16.0	7.8
Other	12.7	3.9	7.2	5.8	12.1	4.6
Total (millions)	\$1,240	\$1,478	\$1,355	\$1,066	\$898	\$7,457

Vessels: The world’s ocean cargo vessels enter the market offering a wide variety of shipping services and trade routes from a variety of ownership patterns representing large global integrated logistics companies to national entities to niche carriers. Because the majority of ocean carriers are non-U.S. owned, some critics of Federal investment in navigation channels have charged that the benefits of such investments only accrue to “foreigners” and, therefore, such investments are somehow defective. There are several reasons why this is otherwise.

First, the ocean carrier industry is highly competitive. There are no barriers to entry in international shipping as there are in other industries, such as international commercial aviation. In the liner industry, which is often the focus of this criticism, the shipping public has a wide array of carriers and variety of shipping services from which to choose. For example, as illustrated in Table 4, only one car-

rier has a market share above 10 percent, and the top ten carriers combined account for only 57.5 percent of the total containerized cargo carried (exports and imports combined) in U.S. trades.

Second, as discussed above, freight rates for the shipment of containers in the liner industry have declined substantially over the last 15 years due to, among other reasons, the increased efficiencies resulting from larger vessels and deeper navigation channels.

Table 4.—Market Share In U.S. Liner Trade in the First Quarter 2002 (Source: JoC/PIERS)

Lines	TEUs Carried	Jan.-March 2002 Market Share (In Percent)	Combined Market Share (In Percent)
1. Maersk-Sealand	572,106	13.2	13.2
2. Evergreen	307,382	7.1	20.3
3. APL	280,932	6.5	26.8
4. Hanjin	264,420	6.1	32.9
5. Cosco	217,990	5.0	37.9
6. P&O Nedlloyd	186,405	4.3	42.2
7. Hyundai	171,274	3.9	46.1
8. OOCL	166,379	3.8	49.9
9. Yang Ming	164,828	3.8	53.7
10. MSC	164,382	3.8	57.5
All Lines (over 100)	4,340,611	100	100

Third, vessel owners have made huge investments in new equipment, information technology, and larger vessels to achieve economies of scale, developed alliances with other vessel owners to take advantage of these economies of scale and scope that made possible significant cost savings. To keep pace with the expected doubling of trade by 2020, the liner industry expects that it will need to invest an estimated \$100 billion in new vessels and containers alone. Those efficiency gains and cost reductions resulting from these investments are passed on to shippers in lower rates and improved service.

Some critics have pointed out that the liner industry enjoys anti-trust immunity as proof that these foreign companies enjoy a benefit that is detrimental to U.S. businesses, consumers and, in the case of Federal investments in navigation channels, to the American taxpayer. Again, a closer examination of this issue demonstrates that this is not the case.

The anti-trust immunity provided to the liner industry is limited and highly regulated. The protection to the industry was established by the U.S. Congress, not some foreign, unaccountable entity. In fact, Congress most recently reviewed and reauthorized this protection in 1998 with passage of the Ocean Shipping Reform Act of 1998. Carriers may operate under agreements filed with and overseen by the Federal Maritime Commission that promote and enable operational cooperation and efficiencies. Under this system, carriers, among other things:

- May not operate under an agreement that unreasonably increases rates or decreases service;
- May not engage in unjust or unfair or predatory practices;
- May not retaliate against any shipper;
- May not drive competitors out of a trade; and,
- May not impose any unreasonable prejudice or disadvantage with respect to any port.

Given the highly competitive marketplace for transporting U.S. foreign trade evidenced by the large number of companies engaged in this business and the dramatic reduction in rates that have occurred over the last 15 years, it is clear that there is no monolithic “foreigner” dictating the terms of the trade to U.S. businesses and consumers. Instead, these companies are continually making investments in their operations to reduce costs and provide better service to users of the nation’s marine transportation system U.S. businesses and consumers.

Navigation Channels: Since its beginning, the U.S. Congress has authorized and funded activities to ensure free and open access of the nation’s waterways to navigation. The General Survey Act of 1824 established the U.S. Army Corps of Engineers (USACE) as the agency responsible for the nation’s navigation system.¹ Since that time, the Federal Government has consistently exercised its power to develop and maintain a navigation system for the benefit of the whole nation. Today, there are

approximately 1,000 Federal navigation channel projects spanning over 25,000 miles of inland, intracoastal, and coastal waterways.⁶

Prior to the Water Resources Development Act of 1986, the Federal Government paid 100 percent of “general navigation features” (GNFs) of harbor projects that consisted primarily of harbor dredging.⁷ Lands, easements, rights of way and relocations (LERRs), and dredging for berthing areas were a local or private responsibility, as were all landside improvements including terminals and equipment. All maintenance dredging was federally funded out of general revenue. With the passage of WRDA 1986, cost-sharing for general navigation features changed to include a local or non-Federal share as shown in Table 5. Maintenance dredging remained 100 percent federally funded; however, today Federal costs may be recovered 100 percent from deposits of the Harbor Maintenance Tax to the Harbor Maintenance Trust Fund.

Table 5.—Navigation Cost-Sharing Formula From WRDA 1986

Channel Depth	Federal Share (In Percent)	Non-Federal Share (In Percent)
20 feet or less	80	20
20 to 45 feet	65	35
Over 45 feet	40	60

Note: Non Federal shares include 10 percent cash contribution requirement for all depths. The 10 percent cash contribution may be offset by a credit for lands, easements, rights of way and relocations, which are still a non-Federal responsibility. To the extent not offset, this 10 percent can be repaid over period not to exceed 30 years.

Figure 4 illustrates the volume of material dredged and the cost of dredging for new work and maintenance dredging from Federal navigation channels between 1965 and 1999.⁸ Annual construction costs have averaged about \$125 million for the period between 1977–1996 and average annual maintenance costs have averaged about \$450 million. Average Federal investment in new channels increased since 1996 to a level \$271.4 million in fiscal year 2002. Maintenance dredging volumes range annually between 250 and 300 million cubic yards.

Individual navigation channel improvements must be demonstrated to be in the Federal interest before becoming eligible for Federal funding. Congress established that the Federal interests in water resources projects are as follows:

It is the intent of Congress that the objectives of enhancing regional economic development, the quality of the total environment, including its protection and improvement, the well-being of the people of the United States, and the national economic development are the objectives to be included in federally financed water resource projects (including shore protection projects such as projects for beach nourishment, including the replacement of sand), and in the evaluation of benefits and cost attributable thereto, giving due consideration to the most feasible alternative means of accomplishing these objectives.(42USC§ 1962–2)

Congress also authorized the establishment of a Water Resources Council composed of the Secretaries of the Interior, Agriculture, Army, Commerce, Housing and Urban Development, and Transportation and the Administrator of EPA. In 1983, the Council adopted The Federal Principles and Guidelines for Water and Related Land Resources Implementation Studies, which continues today as the benchmark against which Federal water resources projects are measured. The P&G, as the policy document is informally called, applies to all water and land-related resources projects undertaken by the Federal Government, including projects by the Corps of Engineers, the Bureau of Reclamation, and the Department of Agriculture. Despite Congress’ intent that Federal water resources should also take into account regional economic development benefits, the P&G sets the maximization of national economic development (NED) benefits as the definitive threshold for Federal involvement in such projects.⁹ This policy continues even after non-Federal interests became re-

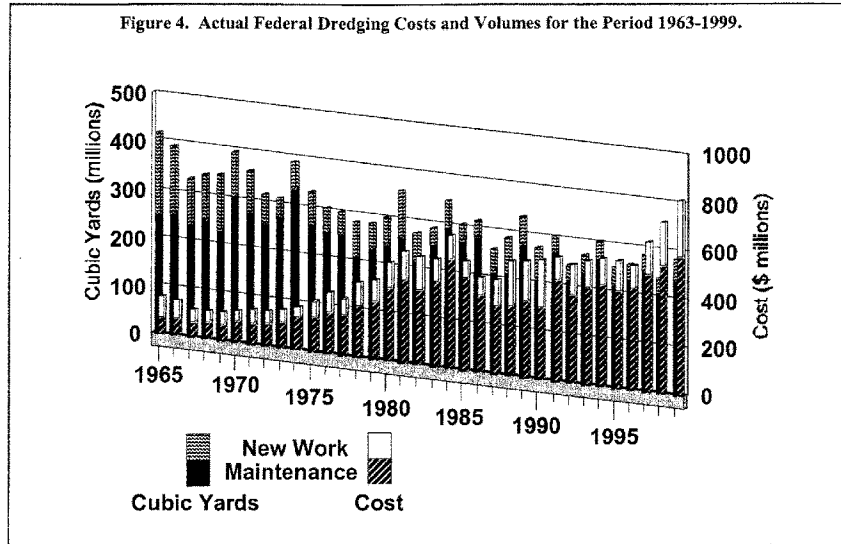
⁶ Civil Works Program—1998. U.S. Army Corps of Engineers, Washington, DC, 54 pp., 1998.

⁷ Cost sharing requirements are contained in Section 101 of the Water Resources Development Act of 1986, Public Law 99–662, November 17, 1986, 33 U.S.C. 2211.

⁸ Actual Dredging Cost Data for 1963–1999, Long-Term Continuing Cost Analysis data. U.S. Army Corps of Engineers Dredging Program. Navigation Data Center, U.S. Army Corps of Engineers, Fort Belvoir, VA (www.wrsc.usace.army.mil/nde/ddhisbth.htm).

⁹ Principles and Guidelines for Water and Related Land Resources Implementation Studies. U.S. Army Corps of Engineers, Washington, DC, 1983. (www.wrsc.usace.army.mil/iwr/pdf/p&g.pdf)

responsible for cost-sharing projects. Thus, non-Federal interests are required to share up to 60 percent of the cost of Federal navigation projects, but any regional benefits derived from these projects may not be included in justifying the project.



The Corps of Engineers project planning process is divided into two stages, a reconnaissance study and feasibility study, which together require an average of 5.6 years to complete. Corps reconnaissance studies, which are conducted by the Corps' district offices, are today required to be completed within 12 months. There is then often a lag between the end of reconnaissance and the start of feasibility. Between 1985 and 1996, the average length of this gap was roughly 1 year. Feasibility studies during the same period averaged 3.6 years.¹⁰

The basic economic benefits from navigation plans are the reduction in the value of resources required to transport commodities and the increase in the value of output for goods and services. Specific transportation savings may result from the use of larger vessels, more efficient use of large vessels, more efficient use of existing vessels, reductions in transit time, lower cargo handling and tug assistance costs, reduced interest and storage costs such as from an extended navigation season, and the use of water transportation rather than an alternative land mode.

Corps of Engineers' navigation improvement studies examine the transportation costs of an identified set of commodity flows both with and without the proposed project over the planning period, usually 50 years. Elements of analysis of current tonnage include: size and type of vessel, annual volume of movements, frequency of movements, volume of individual shipments, adequacy of existing harbor and transportation facilities, rail and truck connections, and service considerations. Generally this prospective traffic is the aggregate of a large number of movements (origin-destination pairs) of many commodities; the benefit from the navigation project is the savings on the aggregate of these prospective movements.

Next, the analysis evaluates the vessel fleet composition and cost. Key components in the study are the size and characteristics of the current and future fleet that would use the harbor both with and without the proposed improvement. Vessel characteristics are often dependent on trade route, type of commodity, volume of traffic, waterway restrictions, foreign port depths, and lengths of haul. Vessel costs include the full origin-to-destination cost, including necessary handling, transfer, storage, and other accessory charges. The without-project condition is based on costs and conditions prevailing at the time of the study. Transportation costs with a plan reflect any efficiencies that can be reasonably expected, such as use of larger vessels, increased loads, reduction in transit time and delays (tides), etc. In evaluating these cargo flow assessments, the Corps conducts a systematic determination of alternative routing possibilities, regional port analyses, and intermodal networks.

¹⁰New Directions in Water Resources Planning for the U.S. Army Corps of Engineers. National Academy of Sciences, Washington, DC, 120 pp., 1999.

Benefits may not be claimed for cargo that may be diverted from another port because of a Federal navigation project.

Challenges

There are a variety of challenges that threaten the ability of the MTS to meet the growing demands of the nation's businesses and consumers for transportation services. These challenges include:

- *Growing Levels of Demand.*—As discussed above, the volume of trade is expected to double over the next 20 years and the movement of cargo in containers is expected to double in the next 10 years. The business environment in which American companies must operate has become more competitive. They must be lean and capable of effectively serving larger, more demanding markets. Ports and other MTS service providers must meet increasingly stringent requirements to successfully meet the needs of American business and consumers. Everything must be accomplished faster and less expensively, while maintaining dependable, secure, and safe movement of goods. Consequently, the need to provide investment in improved MTS facilities and services is great.

- *Increasing National Security Needs.*—The attacks of September 11 have dramatically heightened everyone's awareness of the threat to the U.S. from rogue states and terrorists. Ports and other MTS service providers are, and will continue, spending substantial resources to improve the security at their facilities. These resources, however, are being diverted from other investments that would have been made in improving the efficiency of the system.

- *Minimizing conflicts among land uses along the waterfront and intermodal connections.*—Many of our nation's port cities are trying to revitalize their communities through waterfront re development that has focused on residential, commercial, and tourist-related uses, leaving less land available for port development. Intermodal connections at ports, such as roads and railroads, also experience land constraints because of zoning and environmental regulations that restrict expansion, particularly in densely populated areas. Proposals for port expansion, largely for projects handling cargo that will move far outside the local port area, are facing increasing public opposition due to concerns about local environmental impact. Many port communities are reluctant to bear the environmental and social costs for projects that largely benefit people outside of their region.

- *Ensuring Adequate Navigation Channels.*—Larger vessels are increasingly carrying the cargos of U.S. international trade because they provide the cost efficiency and level of service that U.S. businesses and consumers are demanding. These larger vessels require deeper waterways. The nation's public port authorities are working closely with the Corps of Engineers and the Congress to ensure that appropriate investment in the nation's system of navigation channels is made. In addition to the need for adequate Federal funding of studies and construction of navigation improvement projects, we have also identified several areas in the partnership between the Federal Government and non-Federal sponsors of navigation projects that should be improved so we can improve the timeliness and cost effective delivery of these projects. A summary of these recommended improvements are discussed in the next section.

NEED TO ENACT WRDA 2002

Regular and dependable enactment of Water Resources Development Acts and Federal investment in navigation is of critical importance to the nation's economy. The local non-Federal project sponsor must be able to rely on a dependable biennial WRDA authorization, as well as annual appropriations. Delays in authorizing vital navigation and water resource projects result in increased costs and reduced benefits from substantial Federal, local and private investment in port facilities and navigation channels. AAPA urges Congress to enact a Water Resources Development Act of 2002 that authorizes needed deep-draft improvement projects and refines several provisions of WRDA' 86 relating to the Federal-local partnership to make project formulation more efficient and cost effective as discussed below.

In enacting the Water Resources Development Act of 1986 (WRDA 1986), after 200 years of solely Federal responsibility, Congress for the first time imposed mandatory cost-sharing of navigation projects (aside from previous ad hoc requirements for local contribution of lands, easements and rights of way) under which non-Federal interests acting as local sponsors were required to contribute to the cost of planning, constructing and maintaining navigation projects on a sliding scale based upon project depth. The elements of what, at that time, was portrayed as the "quid pro quo" in consideration of mandatory cost sharing were: (1) greater local latitude in partnering in project construction; (2) environmental and planning streamlining to

reduce project planning and construction time and cost; and, (3) local user fee authority to recover local expenditures for project construction.

Port authorities have greatly increased their ability to plan, design, and resolve complex environmental, social and economic conflicts since WRDA 1986 was enacted. After more than 15 years of experience in working as non-Federal sponsors under the framework provided in WRDA 1986, the nation's public ports have identified a number of policy and legal changes that are needed to improve the collaborative partnership envisioned in 1986.

AAPA established a special Task Force in 2000 to review the existing authorities for project partnership and to make recommendations on policy changes that should be included in a WRDA 2002 authorization. Each member of the Task Force has been intimately involved in the navigation project partnership process, with most members having experience spanning over 20 years involving projects with total values in the hundreds of millions, if not billions, of dollars.

The Task Force identified changes in seven policy areas that would significantly improve the partnership between non-Federal sponsors and the Federal Government and would improve the ability of local sponsors to participate in Federal navigation projects. These proposals include the following subjects:

- Improvements to the Local-Federal Partnership in Navigation Projects
 - Project Cooperation Agreements
 - Indemnification
 - Relocations

Other Improvements to Help Local Sponsors Participate in Navigation Projects

- Credit for In-Kind Services During Construction
- Deep-Draft Cost Sharing
- Port and Harbor Dues
- Non-Federal Sponsor Led Projects

Further detail on these proposals, including a discussion of the purpose and need for the proposal and specific legislative language for each proposal, is included below.

Improvements to the Local-Federal Partnership in Navigation Projects

Project Cooperation Agreements: As part of the cost-sharing provisions included in WRDA 1986, Congress directed that non-Federal sponsors and the Secretary of the Army enter into a cooperative agreement before initiating construction of the project (Section 101(e)). The law directs that such agreements shall be in accordance with the Flood Control Act of 1970.

Many ports are frustrated by the rigid approach the Corps of Engineers takes in negotiating project cooperation agreements (PCA). While there was an assumption in 1986 that a Federal-local sponsor partnership would be formed, ports believe the current approach does not represent a true partnership between the Federal Government and non-Federal sponsors. PCA negotiations often take 6 months or more to complete. Delays often result from the need to accommodate special local circumstances which were not envisioned in the model agreements developed promulgated by the Corps of Engineers.

For all the discussion by both Congress and the Corps of Engineers concerning the need for "partnering" during and since enactment of WRDA 1986, there is no legislative embodiment of such a policy nor, unfortunately, any great incentive for the Corps to follow such a policy. In fact, by expressly incorporating the requirement for a cooperative agreement between the U.S. Government and a non-Federal interest under Section 221 of the Flood Control Act of 1970 and concurrently enacting Section 912 of WRDA 1986 to impose substantial civil penalties upon a non-Federal interest for non-compliance and conferring jurisdiction upon U.S. District Courts for that purpose, Congress arguably did precisely the opposite by substituting a "contract of adhesion" one-sided, one-size-fits-all arrangement for a cooperative agreement. The negative connotation attributable to civil penalties, reinforced through the mandatory attorney's certificate (required by the Corps, not by statute) as to the ability of the local sponsor to respond in damages, is the antithesis of the nature of a cooperative agreement.

AAPA believes there is a better model for conducting cooperative agreements within the existing body of Federal law. The Federal Grants and Cooperative Agreements Act was enacted in 1986 and defines and distinguishes cooperative agreements from grants and contracts as a procurement device. This law provides the means to better define the relationship that should exist between the Government and the Local Sponsor.

Section 6305 of Title 31, United States Code prescribes the use of such cooperative agreements as follows:

An executive agency shall use a cooperative agreement as the legal instrument reflecting a relationship between the U.S. Government and a State, a local government, or other recipient when

- (1) the principal purpose of the relationship is to transfer a thing of value to the State, local government or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring (by purchase, lease, or barter) property or services for the direct benefit or use of the United States Government; and
- (2) substantial involvement is expected between the executive agency and the State, local government, or other recipient when carrying out the activity contemplated in the agreement.

A cooperative agreement entered into pursuant to the Federal Grants and Cooperative Agreements Act carries certain advantages not realized by the current WRDA. A true cooperative agreement is the nearest thing to a private sector partnership agreement that exists under Federal law. It reflects the fact that two independent sovereign entities come together on an equal footing to accomplish a common purpose in which each brings competence, expertise and a commitment of resources to that end. While the Corps of Engineers may have led the way back in the days of Section 221 Agreements under the Flood Control Act of 1970, since then more than 30 agencies—including the Department of Defense routinely use true cooperative agreements for everything from cooperative research, to sharing law enforcement responsibilities, to infrastructure improvements.

AAPA requests that the Committee consider language such as the following:

SEC.—. COOPERATIVE AGREEMENTS

(a) Section 2211(e) of Title 33, United States Code is amended by inserting after the words “cooperative agreement” the words “under Section 6305 of Title 31, United States Code and incorporating the alternative dispute resolution procedures under Section 575 of Title 5, United States Code and”

(b) Section 1962–5b of Title 42, United States Code is amended in subsection (b) by striking the words “pay damages” and insert in lieu thereof the words “collect any amounts due in the event of a payment default and subject to the march in rights of the Chief of Engineers under subsection (f) of this section in the event of a performance default”

(c) Section 912(b) of Public Law 99–662 (42 U.S.C. 1962–5b Footnote; 100 Stat. 4190) is amended as follows:

- (1) In subsection (b) by striking paragraph (2) in its entirety and redesignating paragraphs (3), (4), and (5) as paragraphs (2), (3) and (4) accordingly; and
- (2) In redesignated paragraph (3) by striking the words “to collect a civil penalty imposed under this section,”.

Indemnification: Section 101(e) of WRDA 1986 refers to Section 221 of the Flood Control Act of 1970 and in paragraph (e)(2) requires that a Project Cooperation Agreement provide that the local sponsor hold and save the United States free from damages due to the construction or operation and maintenance of the project, except for damages due to the fault or negligence of the United States or its contractors. As a matter of policy, the Corps has expanded this requirement and has demanded in its “model” agreement that the local sponsor also hold and save the Government free from damages due to the construction, operation and maintenance of local service facilities and berths adjacent to local service facilities as well as betterments, even though these provisions are not specifically required by statute.

Many local sponsors find that they have a legal impediment to agreeing to the indemnification that is now required by statute and demanded by the Corps. The “hold and save” provision creates an open-ended liability that may not be supported by an appropriation, thus creating a problem under a many state constitutions. Essentially, many state agencies have a legal problem not unlike the one claimed by the Corps under the Anti-Deficiency Act. The normal reaction of most local sponsors when confronted with this provision is to insist on a cross-indemnification. The Corps takes the position that it cannot provide the local sponsor with a cross-indemnification providing similar protection because of the Anti-Deficiency Act. Essentially, it demands to be indemnified but will provide no indemnification to a local sponsor, notwithstanding the fact that the design and implementation of the project is controlled by the Corps.

AAPA believes a possible remedy to the problem is to authorize the Corps to require its contractors to carry insurance that protects both the contractor, the non-Federal sponsor and the Federal Government. The cost of such insurance should be included in the total project cost and shared accordingly between the Federal Government and the non-Federal sponsor. This, we believe, not only addresses the indemnity problem but provides protection to the public.

AAPA requests that the Committee consider language such as the following:

SEC.—. INDEMNIFICATION

Section 101 of the Water Resources Development Act of 1986, as amended, is modified as follows:

- (1) Paragraph (e)(2) is deleted;
- (2) Paragraph (e)(3) is renamed "(e)(2);" and,
- (3) The following new section is appended at the end of the section:

“(f) Indemnification Costs of insuring the Federal Government and non-Federal sponsor against damages due to the construction or operation and maintenance of the project shall be shared in the same proportion as the sharing provisions applicable to the project.”

Relocations: Section 101 of WRDA 86 requires the non-Federal sponsor to provide the lands, easements, rights-of-way, relocations (other than utility relocations) necessary for the Federal project. The non-Federal sponsor also is to perform or assure the performance of all relocations of utilities necessary to carry out the project. Under Section 101 of WRDA 86, the value of lands, easements, rights-of-way, relocations and the costs of utility relocations borne by the sponsor shall be credited to the non-Federal sponsor's share of project costs.

In practice, non-Federal sponsors do not have sufficient authority to compel owners of property needing to be relocated from within a navigation channel to remove their property. In most cases, such property was placed under the navigation channel pursuant to a Section 10 permit issued by the Corps of Engineers under the Rivers and Harbors Act of 1899. This has resulted in numerous lawsuits and counter-suits as non-Federal sponsors seek to compel relocations by private entities, and private entities seek to have the non-Federal sponsors pay the cost of the relocations.

AAPA believes it is appropriate for the Federal Government, acting through the Corps of Engineers, to compel property owners to remove or relocate all obstructions to navigation improvement projects which are located within the navigable waters of the United States. In fact, Section 10 permits, which authorized the placement of the property in navigable waters originally, contain conditions requiring such removals when directed by the Corps. The utilities were installed with the assumption that they would be subject to those conditions. Property owners have argued that the WRDA 1986 language supersedes the permit condition, and the Corps has been reluctant to enforce the permits until the non-Federal sponsor has exhausted all efforts to compel the removal or relocation.

The ability of the Corps to permit the placement of property in navigable waters and to compel its removal stems from the concept of "navigation servitude." The navigation servitude stems from the Commerce Clause of the U.S. Constitution. The case law is very solid that against the U.S., there is no right to compensation when a Federal project requires use of submerged lands. In *U.S. v. 597.75 acres of land*, U.S. District Court, Western District of Louisiana in 1965, the court stated, "There is nothing novel or unconstitutional in the requirement that the defendants relocate pipelines they constructed in and across the bed of a navigable river. The right of free unobstructed navigation is of paramount interest to the welfare of the citizens of the United States." 241 F. Supp. 798, at 799.

This should not be confused as exercising a right for a non-Federal sponsor. These are still Federal projects, authorized by Congress. In fact, it is the U.S. who determines what interests need to be acquired to meet the requirements of the Fifth Amendment. If the Federal Government already has a power, it does not need to and should not ask the non-Federal sponsor to provide the for the removal or relocation.

AAPA's proposal would ensure the transfer of all costs for removals and relocations in navigable waters from the public sector to the owners (private sector), who in fact installed their utilities assuming that they would have that responsibility. These costs are estimated to be millions of dollars per year for Corps projects. It would relieve some pressure on the Federal budget and allow these dollars to be redirected to other urgent infrastructure needs. This change will also reduce delays in projects caused by litigation.

AAPA requests that the Committee consider language such as the following:

SEC.—. RELOCATIONS AND REMOVALS IN NAVIGABLE WATERS

Section 101 of the Water Resources Development Act of 1986, as amended, is modified as follows:

(1) Paragraph (a)(2) following the word “relocation” is modified by inserting the phrase “(except for those relocations located within navigable waters of the United States)”.

(2) Paragraph(a)(4) is modified as follows:

“(4) UTILITY RELOCATIONS. The non-Federal interests for a project to which paragraph (1) applies shall perform or assure the performance of all relocation of utilities necessary to carry out the project, except that the cost of each such relocation within navigable waters of the United States shall be borne by the owner of the facility utility being relocated.”

Other Improvements to Help Local Sponsors Participate in Navigation Projects

Credit For In-Kind Services During Construction: While WRDA 1986 allows local sponsors to receive credit for in-kind services during feasibility studies, current law does not allow for such credit during preliminary engineering and design or construction. AAPA is seeking authorization to allow credit for in-kind services during design and construction of specifically authorized harbor projects. This authorization should also allow local sponsors to be given credit for design and construction work carried out before a cooperation agreement is signed between the local sponsor and the Corps of Engineers if the work done is integral to the project. This proposal would not increase Federal costs. This proposal provides an opportunity to better use the capabilities of local sponsors in collaborative ways that will promote a more efficient and timely project implementation process while maintaining a strong Corps engineering, design and construction management role.

AAPA requests that the Committee consider language such as the following:

SEC.—. CREDIT FOR IN-KIND SERVICES

Section 101(d) of Public Law 99–662 (33 U.S.C. 2211(d)) is amended to read as follows:

“(d) Non-Federal Payments of amounts incurred under Pre-construction engineering and design and during construction-The amount of any non-Federal share of the cost of any navigation project for a harbor or inland harbor incurred under pre-construction engineering and design and during construction shall be paid to the Secretary on an annual basis during the period of construction beginning not later than 1 year after construction is initiated. [Larry: Can we add a sentence saying non-feds can accelerate payment if they choose to?] The non-Federal interest may accelerate payment of the non-Federal share, advance funds subject to credit or reimbursement, or make in kind contributions at any time after a Pre-Construction Engineering and Design Agreement for the project is executed. The non-Federal share of the costs of the project incurred under pre-construction engineering and design and during construction may be provided in cash or in the form of in-kind services or materials. [Larry: I suggest adding the following sentence to make clear credit can be made for non-fed work before PCA is signed: The Secretary shall allow credit toward the non-Federal share the cost of design and construction work carried out by the non-Federal interest before the date of execution of a project cooperation agreement]”. The Secretary shall allow credit toward the non-Federal share of project cost: (1) before, during, and after construction for planning, engineering, and design and construction management work that is performed by the non-Federal interest and that the Secretary determines is necessary to implement the project; and (2) during and after construction for the costs of construction that the non-Federal interest carry out on behalf of the Secretary and that the Secretary determines is necessary to implement the project.

Deep-Draft Cost Sharing: A 1998 report prepared by the U.S. Maritime Administration documents the status and trends of general cargo ship design and its impact on transportation infrastructure¹¹. The report finds that the rate of growth in containerized cargo in the U.S. is at 6 percent per year, and predicts that by 2010 nearly 90 percent of general cargo will be shipped in containers and that nearly 33 percent of those containers will be transported on vessels carrying more than 4,000 20-foot equivalent container units (TEUs). Such vessels, commonly referred to as “megaships,” are a key element in the strategies of the world’s leading steamship carriers as they seek to meet growing trade requirements and optimize operations through global alliances. These large vessels obviously pose major challenges to

¹¹*The Impacts of Changes in Ship Design on Transportation Infrastructure and Operations*, U.S. Maritime Administration, February 1998.

ports because of their size and the potentially large number of containers they could discharge or load during any one port call. Key requirements will include suitable terminal facilities, container yards, rail and highway access, as well as deeper channels and berths. Simply put, the standards have changed and what was once the exception has become the norm.

Prior to 1986, a channel depth of 45 feet would accommodate almost all of the container ships in the world's fleets. The Clarkson *Containership Register* indicates that most of the container ships in 1986 had maximum capacities of less than 3,000 TEUs of containerized cargo with average drafts of about 38 feet. There were only a few larger container vessels with capacities over 3,000 TEUs which were built to the maximum size that could be handled by the Panama Canal. Most of these panamax vessels had drafts of 41.6 feet or greater. Vessels with these drafts cannot use a 45-foot deep channel when fully loaded.

In the years since 1986, the containership fleet has undergone a major evolution. The world's major ocean carriers have greatly increased the size of the ships and the number of large ships they use. Today there are over 200 ships classified in the panamax sector of the fleet. These are vessels that carry between 3,000 and 4,500 TEUs and are built to the maximum size of the Panama Canal. As stated above, most panamax vessels cannot use a 45-foot deep channel when fully loaded.

Furthermore, in 1996, a new class of post-panamax ship was introduced into the world's container shipping fleet. Today there are over 150 of these large ships in service. There are currently 68 post-panamax ships, with a capacity of in excess of 6,000 TEUs, in service with an additional 59 being built or on order. These vessels are generally wider than can be handled in the Panama Canal. They also have deeper drafts. The average draft of the current post-panamax ships is 42.9 feet. The largest ships have drafts of about 45.5 feet, which require channels that are at least 50 feet deep. An analysis contained in the Maritime Administration report cited earlier suggests naval architecture constraints on ships as large as 15,000 TEUs would not result in drafts much greater than 46 feet. Thus, with allowances for under-keel clearance, vertical ship movement (squat), and uncertainty in predictions of future ship design, AAPA believes the norm for general cargo navigation channels will be as great as 55 feet.

As I described earlier, in WRDA 1986, Congress created a cost-sharing formula for navigation improvement projects based on the needs of the general cargo fleet at that time. Specifically, a cost-sharing transition was set at 45 feet, above which (i.e., shallower) local sponsors would pay a 35 percent (25 percent plus 10 percent over 30 years) cost-share and below which (i.e., deeper) would be cost shared at 60 percent (50 percent plus 10 percent over 30 years) local. According to the legislative history for WRDA 1986, the rationale for setting 45 feet as the transition to significantly greater local participation was that,

The Committee has surveyed the manner of financing navigation projects in most developed countries. Based upon this survey the committee found that most of the national Governments in those countries financed general navigation improvements, including main and entrance channels to a depth of *45 feet to accommodate general cargo vessels* (emphasis added). This assistance is normally justified on the basis of national and regional economic development. At the same time, most of these countries require local contribution to the cost of construction and maintenance of navigation projects in excess of that depth to accommodate larger, specialized vessels increasingly operating in liquid and dry bulk trades.

The bill, as reported, applies this experience by reconciling national investment policy toward future port development with prevailing international practice. This is accomplished through the establishment of 45 feet as the maximum standard depth for ports not designed to accommodate deep draft vessels, and the declaration of channel depths in excess of 45 feet as "deep draft ports." A graduated scale for the local contribution to the cost of project construction depending upon depth culminates in a 50:50 Federal/local cost-sharing formula for deep-draft navigation projects.

While Congress intended for non-Federal sponsors to pay a greater share for projects used by "specialized vessels increasingly operating in liquid and dry bulk trades," it intended for more moderate cost-sharing for ports handling generalized cargo. As discussed above, because of the country's explosion in international trade, greater numbers of general cargo vessels are large containerships requiring depths greater than 45 feet. In addition, many of the benefits of the cargo moving through these ports are accrued outside of the port area, while a greater share of the cost of building these facilities are borne within the port area. The justification for setting a punitive cost-sharing rate for projects greater than 45 feet is no longer justi-

fied. For these reasons, AAPA believes Congress should revise the definition of deep-draft harbor and the cost-sharing formula to reflect the changes that have occurred in the general cargo fleet. AAPA requests that the Committee consider language such as the following:

SEC. ——. DEEP DRAFT COST SHARING

(a) Section 101 of Public Law 99-662 [100 Stat. 4082-4084] and is amended by striking "45" wherever it appears in that section and inserting "55" in lieu thereof.

(b) Section 214(1) of Public Law 99-662 [100 Stat. 4108] is amended by striking "45" and inserting "55" in lieu thereof.

Port And Harbor Dues: As a means of cost recovery of the required non-Federal share of a navigation project, WRDA 1986 included a provision that authorized a non-Federal interest to levy port or harbor dues in the form of tonnage duties or fees to help finance the local share of project construction cost. During the course of the legislative process, conditions, criteria and limitations were added that effectively impeded their use by non-Federal interests. The conditions imposed so limited the use of the provision that over the past 15 years, ports have found it to be virtually unusable.

The statutory authorization to collect port dues or fees was considered to be in addition to any legal authority already held by ports. There are relatively few reported cases on the subject, but the existence of limited legal authority for the establishment of harbor user fees is well settled law.

The key case describing existing authority is *Clyde Mallory Lines v. State of Alabama State Docks Commission*, 296 U.S. 261 (1935) in which the U.S. Supreme Court reaffirmed the authority of a State created port authority authorized to "conduct the operation of . . . harbors and seaports within the State" and "to adopt rules . . . for the purpose of regulating, controlling, and conducting the said operation: and with power "to fix from time to time reasonable rates or charges for all services and for the use of all improvements and facilities provided under the authority" as sufficient authority to levy a "harbor fee" for the privilege of mooring a vessel in a harbor separate from wharfage or fees for other services. Implicit recognition of the improved harbor itself as a facility underlies the Court's reasoning. The charge was upheld as a valid charge incident to the exercise of the police power to ensure the safety and facility of movement of vessels in the harbor.

Clyde Mallory is the most recent embodiment of a long line of U.S. Supreme Court pronouncements upholding the authority of a State, or a political subdivision of a State, under its regulatory authority to levy a toll or fee as compensation for navigation improvements or other services. This should be distinguished from (a) a duty of tonnage based exclusively on navigation, or entry upon State waters, subject to constitutional challenges as violative of the interstate commerce clause of 3 of Section 8, or tonnage duties clause 3 of Section 10 of Article 1 of the United States Constitution, or (b) a fee for specific services rendered such as wharfage or dockage.

The legislative history of Section 208 appears to reflect an intent of Congress to supplement common law authority emphasizing the existence of both direct and indirect benefits to be exercised by ports in the case of a navigation project in particular. The section by section analysis of the predecessor bill, the Port Development and Navigation Improvement Act of 1981 (incorporated into WRDA 1986 substantially without legislative change) explained that it was the intention of the drafter that a mechanism be provided to permit the local share to be borne in whole or in part, on a self-sustaining basis by public ports, agencies or municipalities. Originally, the mechanism was an extension of the consent of Congress to local agencies to levy an appropriate duty of tonnage on U.S. and foreign flag vessels, and the import and export cargo loaded or discharged by those vessels.

The need for legislation to implement the original concept to expand common law authority was required because of Article I, Section 10, Clause 3 of the United States Constitution, which provides that a state may not impose a "duty of tonnage" upon ships without the consent of Congress. The clear legislative intent was to supplement the aforementioned Clyde Mallory decision that distinguished and permitted a state to impose a harbor fee used for harbor policing under a theory that it represented a fee for services to and enjoyed by the vessel and not a "duty of tonnage." This concept that the payments must be related to the benefits received to avoid being a duty of tonnage was incorporated in the harbor dues safe harbor provision of WRDA 1986 based upon the District of Columbia 1985 Circuit decision in the National Cable Television Association case.

Ironically, while legislation was considered necessary because the fees levied might ultimately extend beyond common law authority, i.e., those related to benefits received, the final legislation became overly restricted by conditions ostensibly relat-

ing to benefits but more intended to provide redundant protection to classes of vessel owners at ports' expense. In the process, the final legislation lost sight of the principal purpose of the legislation to finance navigation project construction while expanding the role of local ports as non-Federal interests in planning, financing, and constructing those improvements through being given delegated Federal authority to do so. Thus, the legislation did little to expand already existing authority. Significantly, only one AAPA member port has successfully invoked Section 208 authority since enactment of WRDA 1986.

Section 208 (a)(1) imposes restrictions on the purposes for which dues may be levied. They may be levied only in conjunction with a harbor navigation project, or separable element, *whose construction is complete*. The dues must be used to finance the non-Federal share of construction and O&M (up to 100 percent of project cost). There are also limitations on the type of vessel that may be subject to a levy. Port or harbor dues may not be levied in conjunction with a deepening feature of a navigation improvement project on any vessel if that vessel, based on its design draft, could have utilized the project at mean low water before construction. Section 208 (a)(4) dealing with the formulation of Port or Harbor Dues requires that they be levied only "on a fair and equitable basis" without clarifying what is fair and equitable. At first glance, this may be perceived as fertile ground for statutory challenge, although Federal courts (including the U.S. Supreme Court) have had little difficulty in upholding Federal user fees established by agencies in a different context.

The levy of dues only when a project is complete may make it difficult to generate a revenue stream to support funding when the local sponsor must pay for the project through the use of revenue bonds. Local shares typically are paid for out of the proceeds from the sale of state or local bonds supported by the taxpayers rather than port revenues or port dues. The limitation imposed on the type of vessels that may be subjected to harbor dues may leave a pool of available vessels so small that recovery of a non-Federal interest's share of project costs would result in exceedingly high rates that would drive those ships away to another port. Port diversion is a concern that would trouble any port authority but should be a concern to be dealt with locally rather than have options taken from it.

While the Act provides a theoretical tool for ports to use to recover their huge contributions to the cost of port navigation projects, the imposition of conditions, restrictions and criteria on the right of a port to levy dues has resulted in the use of the right to be difficult if not impossible. AAPA believes a revision to Section 208 can make it more usable to a greater number of ports, while protecting shallow draft vessels from being subject to any port and harbor fees established under this section. At a minimum, restrictions and conditions on the use of Port and Harbor dues should be eliminated and local sponsors given the greatest flexibility possible to recover the huge investment they must now make to preserve our nation's ports. The AAPA hopes to present a separate specific proposal relating to that funding.

AAPA proposes the following recommended bill text:

SEC.—. PORT OR HARBOR DUES

Port-Led Projects: In WRDA 1986, Congress included several provisions that attempted to fashion a fast-track mechanism for the planning and construction of navigation projects. These provisions were intended to provide flexibility to non-Federal sponsors where the traditional Corps of Engineers-led planning and construction processes were not adequate to deliver a needed navigation improvement in a timely manner or for other reasons.

Section 203 authorized non-Federal sponsors to conduct feasibility studies of potential navigation improvement projects. Section 204 authorized non-Federal sponsors to construct navigation projects and provided for the reimbursement to the non-Federal sponsors of the Federal share of the project and for the assumption of maintenance responsibility of the project by the Federal Government under specified conditions. Section 205 established procedures for a non-Federal sponsor to seek the streamlined processing of Federal permits for the construction of navigation improvement projects solely under the planning, construction and funding of the non-Federal sponsor, under a permit regime prior to project authorization.

While Section 203 has been used by several ports to accelerate the development of navigation projects, Sections 204 and 205 have not been as widely used. In most instances, a non-Federal sponsor seeking reimbursement and Federal maintenance under Section 204 will enter into a reimbursement agreement analogous to a project cooperation agreement, but based upon experience may not be given credit for certain expenditures or obligations incurred either prior to authorization or date of agreement (although in some instances for certain projects exceptions have been made both administratively and legislatively).

In other instances, a non-Federal sponsor may undertake a project exclusively under Section 205 in order to initiate the project in the most expeditious manner using port-generated funds. However, Section 205 does not authorize reimbursement of the Federal share or assumption of maintenance under this provision.

Under current law in order for a non-Federal Sponsor to take full advantage of Sections 204 and 205 as enacted, the Sponsor must execute a Reimbursement Agreement before undertaking any work—including work done under permit with Corps approval. Based upon experience, if the Corps approves a project applying the trilogy of requirements—economically viable, engineeringly feasible and environmentally acceptable even if additional mitigation measures are subsequently required, there is no reason why a project may not be approved as-built and a favorable Chief of Engineer's report being the vehicle for subsequent congressional authorization for reimbursement subject to availability of appropriations and future Federal maintenance.

For these reasons, Sections 204 and 205 should be revised and updated in light of project experience and increased local sponsor capabilities that were largely non-existent in 1986. More options can be created to effect a seamless transition toward project authorization with proper credit given for prior work by the project sponsor, as well as to address under the project definitional umbrella elements that are becoming increasingly commonplace today such as the need to consider all available dredged material disposal options including confined upland disposal early in project planning.

AAPA requests that the Committee consider language such as the following:

SEC.— CONSTRUCTION OF PROJECTS BY NON-FEDERAL INTERESTS

Section 2232 of Title 33, United States Code is amended as follows:

(a) In subsection (a) by inserting adding after the words “subject to” the words “entering into to a cooperative agreement with the Secretary under subsection (e) of this Section or under Section 2233 subject to”;

(b) Paragraph (e)(1) is amended:

(1) By inserting after the word “Acts” the words for the liquidation of contract authority,”

(2) By amending subparagraph (A) to read as follows:

“(A) Before authorization of the project—

(i) The Secretary approves the plans of construction of the project by the non-Federal interest or approves the project, or separable element, as built; and

(ii) The Secretary finds before approval of the plans of construction of the project that the project, or separable element, is economically justified and environmentally acceptable, or as built that the project, or separable element is complete and substantially in compliance with appropriate engineering and design standards and applicable environmental standards; and”;

(3) By amending subparagraph (B) to read as follows”

“(B) The non-Federal interest and the Secretary enter into a cooperative agreement under this Section and obligate themselves to pay their respective shares of the cost of construction and maintenance of the project under this chapter.”

(c) Paragraph (e)(1) is amended by striking the word “construction” and inserting the words “undertaking any operation and maintenance.”

SEC.— COORDINATION AND SCHEDULING OF FEDERAL, STATE AND LOCAL ACTIONS

Section 2233 of Title 33, United States Code is amended:

(a) In subsection (a) by inserting a comma after the word “project” followed by the words “or separable element (including a project constructed under Section 107 of the River and Harbor Act of 1960 ((33 U.S.C. 577)),” and

(b) By redesignating subsection (g) as subsection (h) and inserting the following new material in redesignated subsection (g), and by redesignating subsections (h) and (i) as (i) and (j) accordingly as follows:

“(g) Reimbursement—Subject to the enactment of Appropriations Acts for the liquidation of contract authority, the Secretary may reimburse any non-Federal interest an amount equal to the estimate of Federal share, without interest, of the cost of construction of any authorized harbor or inland project, or separable element thereof, or separable element (including a project constructed under Section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577),” constructed under this section in the same manner and under the same terms and conditions as under Section 2232 of this chapter.”

AAPA does not have a formal position on S. 1987, the Corps of Engineers Modernization and Improvement Act. Corps of Engineers projects focus on diverse social, economic development and environmental protection needs of the Nation. This bill as crafted, however, could have a significant impact on the marine transportation system in the U.S., and the ability of the Corps of Engineers to undertake vital water resources projects. Therefore, AAPA strongly encourages the Committee to carefully consider all negative ramifications of this proposal.

Issues to consider when reviewing this legislation include:

- Directly and indirectly increasing the cost of projects;
- Directly and indirectly constraining the benefits attributable to projects;
- Directly and indirectly extending the time to complete projects; and,
- Setting stricter economic performance criteria and deadlines by which projects are automatically deauthorized, which may impact some current projects.

At the same time, the bill would impose substantial restudying of authorized projects, the promulgation of numerous new regulations, and the generation and reporting of vast amounts of project data that would involve a significant diversion of Corps resources. Many of the provisions do not recognize existing project formulation policies and processes by requiring activities that duplicate existing Corps practices or misstating the nature of existing policies.

Virtually no other Federal public works program is subject to this level of regulation from Washington. The national highway programs, the airport improvement programs, drinking water and waste water treatment programs are all highly decentralized and decisions about the formulation and selection projects are done at the state and local levels following broad guidelines related to the ability to receive Federal funding. In addition, the Corps of Engineers programs are rare among other Federal public works program in using benefit-cost evaluations in formulating projects.

Like most major development projects, both public and private, the Corps of Engineers' water resources projects often generate significant public controversy about the appropriate use of public resources and the potential adverse effects of the project. The Corps of Engineers process for formulating water resources has developed over the last 35 years and includes numerous requirements for detailed alternative evaluations, multi-objective planning, impact assessment, public involvement, and regulatory compliance. Sometimes, in the successful cases, this process leads to timely, cost effective and socially beneficial projects. In too many cases, this process leads to protracted conflict, lost social opportunities, and wasted resources.

While the congressionally crafted process vests in the Corps of Engineers the central role of balancing all of the competing demands and interests related to water resource projects, the agency by no means has the final say in selecting projects. Several Federal agencies must approve aspects of the process and the Administration and Congress have numerous opportunities to review, approve and fund individual projects. S. 1987 would remove this broad discretion from the Corps of Engineers in conducting the balancing needed to formulate successful public projects and would replace it with narrowly focused, stricter project standards and "independent review" of the agency's decisionmaking that would strip away any agency discretion afforded in judicial proceedings.

Under the current system, it often takes between five and 10 years or more to move a project from problem identification to the start of construction. S. 1987 would create a process that is even less efficient than the current system. In the Water Resources Development Act of 2000, the Congress directed the National Academy of Sciences to study the need for improvements to several areas of the Corps of Engineers process. Congress should not undertake any significant changes to the process for formulating and authorizing Corps of Engineers projects until it thoroughly reviews the existing process, clearly identifies the sources of problems with the process, and fully understands the likely consequence of its intended solutions. We urge the Congress to defer action on attempts to fundamentally alter the process for formulating and authorizing Corps of Engineers projects until the NAS' studies are completed and Congress has had an opportunity to gather sufficient information about the issues through hearings or other appropriate means.

CONCLUSION

Thank you for the opportunity to testify today. As I hope we have made clear in this testimony, the Corps of Engineers plays a vital role in ensuring the nation's marine transportation system (MTS) meets the needs of the nation's businesses and consumers. The MTS is a complex, market-driven system that provides many benefits to the Nation. Federal investment in one part of this system navigation chan-

nels is critically important to the success of the system and produces benefits to the Nation far in excess of the investment.

AAPA and the public port authorities of our country, the agencies on whom the responsibility for the development and operation of our nation's ports rests, will continue to work with the Corps and Congress to keep these essential arteries of international commerce open in an efficient, cost effective and environmentally protective manner. To ensure our nation's continued international competitiveness, it is now more important than ever for Congress to continue to invest in an improved and efficient water transportation system.

RESPONSES BY THOMAS J. CHASE TO ADDITIONAL QUESTIONS
FROM SENATOR JEFFORDS

Question 1. What is your association's position on regional port analysis?

Response. A number of questions must be clearly thought through related to the issue of regional port analysis, including who does the analysis (e.g., Federal, regional, state, local), what is the size of the region, what factors are analyzed, what are the goals of the analysis, and how is the analysis used in decisionmaking about improvements to the port system.

There is no doubt that the structure of the nation's ports system has transformed over the last 50 years from being a collection of discrete ports primarily serving local markets and discrete hinterlands. More recently, in addition to serving local markets, a greater number of ports now have the ability to expand, and are expanding, their hinterlands to include much of the nation. This blending of hinterlands has been driven by improvements in the nation's surface transportation system, the integration and expansion of the nation's railroad system, and deregulation of transportation services in these two modes.

This transformation of the port system has occurred at the same time as the Nation has seen an explosive growth in its demand for maritime transportation services and as technological changes have transformed the way goods are transported around the world. The flexibility inherent in the current governance structure of the nation's port system has allowed port communities to develop facilities and services to meet these market-driven demands. The evidence is quite clear that the nation's port communities, in partnership with the Federal and state governments and the private sector, have adapted to these unprecedented demands by expanding the nation's capacity to transport its foreign trade efficiently, cost-effectively, and with due care for the environment. The challenge before us now is whether we will continue to meet growing demand in the future.

Throughout this period, though, concerns have been raised about, among other things, whether public resources are being allocated efficiently in port development; whether we have too many ports; and, whether these ports are focused on the right activities. In 1976, the National Academy of Sciences published a report concerning these issues.¹ The report provides a comprehensive assessment of the issues related to port development. The committee directly examined the port development decisionmaking structure and concluded:

A basic conclusion of the Panel on Future Port Requirements of the United States is that centralization of planning for U.S. ports is neither desirable nor practicable. It appears not feasible to determine in a centralized approach, either for the short-run or for the long-term, the optimum amount or character of port development that will be required for the Nation as a whole, for individual coastal ranges, or for local areas. (p.126)

In addition, the NAS report endorsed the multi-objective planning approach adopted by the Water Resources Council (in the then existent "Principles and Standards"), which sought to quantify the benefits and costs of development alternatives in monetary terms. The report also recommended that "the Corps of Engineers should conduct regional as well as specific cost-benefit analyses to be certain that benefits are not overestimated when evaluating port improvement projects (p. 149)."

While we do not believe the current set of "Principles and Guidelines" (P&G), which was adopted by the Water Resources Council in 1983, is perfect, it does provide for the Corps of Engineers to assess the impact of a specific port project on other ports through a procedure called "multi-port analysis." According to the P&G, multiport analysis is "a systematic determination of alternative routing possibilities, regional port analyses, and intermodal networks that may require the use of com-

¹*Port Development in the United States*, Panel on Future Port Requirements of the United States, Marine Transportation Research Board, National Research Council, National Academy of Science, Washington, DC, 1976.

puter modeling techniques. The data needed for such a determination are often difficult to obtain; therefore, interviews with knowledgeable experts will often have to be relied upon. (p. 65)"

In practice, because of the complexity of conducting these studies, the Corps of Engineers often limits the types of potential benefits it considers for a navigation project to only those which are unlikely to induce cargo diversions from other ports in order to avoid the need for a comprehensive multiport analysis. Provided these benefits are sufficient to justify a project, most local sponsors agree to this approach to avoid the expense and delays resulting from such a study, even though it may seriously understate the actual benefits of the project.

With regard to the specific proposal for regional port analysis contained in S. 1987 (Section 5(b)), AAPA has a number of concerns. This section establishes a requirement for the "detailed and thorough consideration" of three highly complex assessments of potential regional effects of individual navigation improvement projects. Because of their complexity, these assessments will almost always be expensive to undertake and contain substantial uncertainty. Ultimately, these assessments are unlikely to provide additional value to the decisionmaking process, will likely increase the cost and time to formulate projects, and do little to reduce the level of controversy around projects because of the additional complicated and uncertain studies that will be produced.

We also have the following concerns with each of the three assessments called for in S. 1987. First, the requirement for an assessment of the economic impacts of a project on other ports within a region appears to be unnecessary in light of the current requirement for multiport analysis under the P&G. Second, we are unclear about what would be required for a "detailed and thorough consideration of cumulative environmental impacts of a project within the region." Given the expansive definition of a region within this section, would a port in Florida, for example, be required to consider the environmental effects of its project in addition to the effects of all activities on the entire U.S. Atlantic seaboard.

Finally, we are concerned with the requirement for an assessment of the cumulative impacts of the project on overcapacity in the region. The NAS report reviewed the issue of over capacity, and found:

The panel has concluded that it cannot quantitatively determine the existence of redundancy. Redundancy implies excess capacity, and it is impossible to provide an adequate measure for the capacity of a port. There are many reasons for this measurement problem: One is that the nature of cargo ships and productivity of facilities will vary greatly through time. Cargoes are not uniform. Peaking—the concentration of demand during limited periods of time—occurs in port operations as in all other aspects of transportation. It is economical [sic] and, in some instances, physically impossible to provide for the maximum peaks. At the same time, it is undesirable that undue waiting time, leading to costly delays to vessels and cargo, occur because of failure to provide for periodic peaks. Such delays, in common, would result in traffic being diverted to competing ports or, in some instances, not moving at all.

Excess capacity, in one sense, does not exist even though a port or terminal may have 100 per cent utilization of its capacity for only short periods of time, if ever. Consideration of peak activities, other than for very infrequent occasions, is an important element of port planning. Capacity must be supplied in order to provide adequate service to the shipping public as well as to anticipate possible national emergencies, when even the largest ports may be crowded.

Another important reason, in the judgment of the panel, for providing capacity in excess of normal demand is to create competition among various ports and port services to the advantage of the shipping public. That is, the public can be reasonably assured not only of continued availability of port services in the event of accidents or other closures or reductions but also of competitive rates and services. Thus, the shipper receives a series of options that would not be available unless interport competition continued (p. 128).

We believe that assessments of overcapacity are unlikely to provide additional value to the decisionmaking process for navigation projects, will likely increase the cost and time to formulate projects, and do little to reduce the level of controversy around projects because of the additional complicated and uncertain studies that will be produced.

Question 2. Do you believe that such analyses could significantly improve the planning of navigation in the United States port system and result in more economic and financial efficiencies in port development for the country?

Response. For the reasons stated in response to Question 1., above, we are concerned that the complexity and uncertainty inherent in such analyses are unlikely to provide additional value to the decisionmaking process for navigation projects,

will likely increase the cost and time to formulate projects, and do little to reduce the level of controversy around projects because of the additional complicated and uncertain studies that will be produced.

AAPA again agrees with the observation made in the NAS report that “the future port requirements of the United States are subject to an almost infinite variety of conditions and forces, many of which are nonquantifiable and unpredictable” (p. 125). We believe the current decentralized, market-driven approach to port development has, and can continue, to serve the country well.

RESPONSES BY THOMAS J. CHASE TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. I recognize the importance of our nation’s ports, both to national security and international commerce. My concern though is this “race to the bottom” that we see occurring. In your written testimony, you ask this committee to consider a provision to ease the non-Federal cost-share for deepening projects, yet in my mind, this will serve only to encourage more ports to pursue deeper drafts than they will ever realistically be able to attract. In light of this problem and the reality of limited Federal resources, would you be supportive of a regional port planning mechanism?

Response. With regard to whether AAPA would be supportive of a regional port planning mechanism, please see our response to the questions of Chairman Jeffords.

I would also like to respond to your concern about a “race to the bottom” and the potential that changes in the cost-sharing formula for deep-draft harbors will “serve only to encourage more ports to pursue deeper drafts than they will ever realistically be able to attract.”

First, nothing in our proposal would alter the requirements for the Corps of Engineers to justify each navigation project in accordance with the “Principles and Guidelines,” as discussed in my response to Chairman Jeffords’ question on regional port analysis. These procedures ensure that speculative development of navigation channels is not undertaken.

Second, the reason AAPA is recommending this change is to re-balance the Federal-local partnership in port and harbor development that was established in 1986, after over 200 years of the Federal Government paying the full cost of harbor dredging. Local ports are investing billions of dollars each year, without Federal assistance, to build the landside facilities that handle the nation’s waterborne trade. It is the unbridled growth in this trade that has driven vessels to get much larger, requiring deeper navigation channels. In setting the cost sharing formula in 1986, Congress established a threshold to much higher local cost-sharing at the maximum depth needed for general cargo vessels (see AAPA’s testimony for a summary of the legislative history). Today, the maximum depth needed for general cargo vessels is much greater. We believe this change is needed so local port authorities can devote a greater proportion of their limited resources to constructing landside facilities rather than paying a high cost-share for Federal navigation channels.

Finally, we are uncertain about the source of the perception that there is a “race to the bottom” for navigation projects. We are aware of a total of 14 ports that are studying channels deeper than 45 feet or have authorized projects deeper than 45 feet that contain unconstructed features (a list of these projects is appended to the end of these comments). Of the 300 Corps of Engineers deep-draft harbor projects in the U.S., this is a very small number seeking projects deeper than 45 feet.

Question 2. In your opinion, what steps can be taken to ensure that navigation projects maximize both economic and environmental benefits?

There is not currently a requirement that navigation projects maximize both economic and environmental benefits. The Congressional objective for such projects is “enhancing regional economic development, the quality of the total environment, including its protection and improvement, the well being of the people of the United States, and the national economic development (42 USC Section 1962–2).” In establishing the “Principles and Guidelines,” the Water Resources Council identified the maximization of national economic development benefits as the primary Federal objective.

Consequently, local sponsors of navigation projects are sharing the cost of projects that only maximize national economic development benefits. Because the Corps analysis does not consider regional economic development benefits, local sponsors have a difficult time explaining to their communities why they should pay for projects that only have national benefits. Indeed, this controversy has become especially acute in some areas where local communities perceive that they are carrying all of the negative effects, such as traffic congestion and pollution, for projects that only benefit the nation.

Under existing Corps authorities, features can be added to projects that provide environmental benefits. These project features are cost-shared separately from the navigation feature, and are common on many navigation projects. We believe the Corps has sufficient authority to continue formulating projects with environmentally beneficial features. Significant obstacles to this approach are finding cost-sharing partners for the environmentally beneficial features and ensuring the Corps receive adequate funding.

We do not believe it would be appropriate for the Congress or the Administration to change the existing policy to require all navigation projects to maximize both economic and environmental benefits. Local sponsors of navigation projects are cost sharing the navigation benefits. Local sponsors are also sharing the cost to ensure that these projects mitigate their impact on the environment. We are not opposed to the formulation of multi-objective projects that include navigation and environmental enhancement features, but we believe the environmental enhancement features should continue to be cost shared separately.

Authorized Projects Deeper Than 45-Foot With Unconstructed Features

Port	Notes
New York Harbor Channels	Authorized in WRDA 2000. No Contracts Have Been Awarded to date.
Norfolk, VA	WRDA 86 authorized a 50-foot project; to date, the out-bound lane has been constructed.
Mobile, AL	WRDA 86 authorized a 55-foot project; to date, a portion of the project has been deepened to 45-feet.
Mississippi River, LA	WRDA 86 authorized a 55-foot project; to date, the project has been deepened to 45-feet.
Savannah, GA	Authorized in WRDA 1999. No Contracts Have Been Awarded to date.
Los Angeles, CA	Authorized in WRDA 2000. No Contracts Awarded to Date.
Oakland, CA	Authorized in WRDA 1999. First Contract Awarded: ???

On-Going Studies Deeper Than 45-Foot

Port	Notes
New York Harbor Anchorages	Feasibility Study (Auth 2004?)
Charleston, SC	Reconnaissance Study (Auth 2010?)
Corpus Christi, TX	Feasibility Study (Auth 2002)
Port Everglades, FL	Feasibility Study (Auth 2002)
Miami, FL	General Reevaluation Report (Auth 2002)
Freeport, TX	Reconnaissance Study (Auth 2012?)
Sabine—Neches Waterway, TX	Feasibility Study (Auth 2006?)

STATEMENT OF MONTGOMERY FISCHER, POLICY DIRECTOR FOR WATER RESOURCES,
NATIONAL WILDLIFE FEDERATION

On behalf of the National Wildlife Federation (NWF), I would like to thank the Chairman, Ranking Member and the members of the Committee for the opportunity to present the Federation’s views on issues pertaining to water resources development programs of the U.S. Army Corps of Engineers.

I am Montgomery Fischer, Policy Director for Water Resources at the National Wildlife Federation. We are the nation’s largest not-for-profit conservation, education, and advocacy organization with more than four million members and supporters and nine natural resource centers throughout the United States. The National Wildlife Federation’s family also includes forty-six state and territorial affiliate conservation organizations. Founded in 1936, the National Wildlife Federation works for the protection of wildlife species and their habitat, and for the conservation of our natural resources. With a graduate degree in Soil and Water Science from the University of New Hampshire in Durham, my personal work with water resources protection spans three decades, including working as a commercial fisherman as well as in the government, academic, and non-profit sectors.

The National Wildlife Federation and our affiliates have a long history of interest and involvement with the development of our nation’s water resources, particularly as it relates to projects and programs of the U.S. Army Corps of Engineers.

Much of our nation's wildlife is dependent on critical aquatic habitat, which includes rivers, streams, bays, estuaries, wetlands and coastlines. But, our wildlife resources are hurting. Artificially altering waterways—along with water pollution and introduction of foreign species—have been identified by the scientific community as the principal causes of the shocking state of decline of aquatic ecosystems and wildlife that has been experienced in many regions across the country. Through its Civil Works and regulatory programs, the U.S. Army Corps of Engineers has a profound impact on the health of aquatic ecosystems. While much of the Corps' work in the 20th Century has had devastating impacts on the natural environment, NWF believes that with the right direction from Congress, the 21st Century Corps can become the premier Federal agency for restoring and protecting our nation's aquatic ecosystems and the species that depend on them. The Corps' efforts to restore the Florida Everglades is a prime example of the type of restoration work the Corps should focus on during this Century.

As this Committee considers proposals for a Water Resources Development Act (WRDA), a fundamental goal must be to address the serious and growing crisis in confidence that much of the American public has about the Corps of Engineers. A series of recent reports and investigations over the past several years by policy experts and scientists have found that the Corps' planning process for major water resource projects is failing in fundamental ways to address contemporary needs of communities and regions in an environmentally sound and cost effective manner. A Water Resources Development Act presents Congress with a critical opportunity to provide the Corps greater oversight and clearer direction to meet the nation's water resource needs and to restore confidence in this agency.

NWF congratulates the Ranking Member of this Committee and other Senators who have sponsored legislation that would make critical, common sense reforms in Corps programs—particularly, S. 1987, the Corps of Engineers Modernization and Improvement Act of 2002, and S. 646, the Corps of Engineers Reform Act of 2001.

WRDA SHOULD NOT MOVE FORWARD WITHOUT CORPS REFORM

The National Wildlife Federation strongly supports both S. 1987 and S. 646 because these bills contain critically needed reforms to improve and modernize the way the Corps responds to the nation's water resources development needs and to ensure every project the Corps undertakes represents a sound, environmentally sustainable investment. The bills improve the Corps' accountability, modernize its principles and practices, improve mitigation of wetlands, pull the plug on projects that no longer make sense, keep Federal costs down, and stop the "race to the bottom" among ports and harbors.

Improve Accountability. S. 1987 and S. 646 would make the Corps more accountable to help restore the public's confidence in this agency by:

- requiring independent peer review for costly projects and controversial projects;
- enhancing the public's ability to participate in the Corps' planning process; and
- increasing the public's access to information.

Modernize the Corps. S. 1987 and S. 646 would modernize the Corps' basic approach to developing and planning water resources projects by:

- directing that the Principles & Guidelines be revised and updated to define environmental protection and restoration as a co-equal goal with economic development, and to incorporate other changes that ensure this goal is carried out; and
- modernizing the basic criteria used by the Corps to justify moving forward with a project.

Wetlands Mitigation Improvement.

- S. 646 would improve the way the Corps mitigates for wetlands impacted by Corps projects; and

- both S. 646 and S. 1987 would exclude from economic justification analyses benefits derived from draining wetlands.

Pull the Plug on Outdated Projects. S. 1987 would help prioritize the Corps' efforts by:

- expediting the automatic deauthorization process to reduce the Corps' burgeoning backlog; and
- updating the Corps' benefit-to-cost ratios to ensure taxpayers get a better return on their investment.

Keep Federal Costs Down. S. 1987 would reduce the Federal Government's burden for sand pumping projects.

Stop the Race to the Bottom. S. 1987 would improve the way the Corps plans to deepen ports and harbors by requiring regional port planning.

Given the record of problems that has amassed over the past several years, the Corps should not be allowed to continue with business as usual. The problems are

so grave, a WRDA should not move forward without these reforms. I will now spend a few minutes discussing some of the problems that have plagued the Corps and that the bills seek to address.

CORPS CRISIS IN PUBLIC CONFIDENCE

There Is No Effective, Independent Technical and Policy Review of Corps Projects

Mr. Chairman, among the most critical issues that must be addressed in any potential WRDA is the establishment of an effective, independent system of technical and policy review by outside experts for Corps of Engineers projects. For years, the public, other Federal and state agencies, academicians and scientists, government auditors, and many Members of Congress have questioned the accuracy of Corps planning documents, and, in some cases, whether under the present system, the Corps is capable of being truly objective in planning its projects. In the 1980's, the General Accounting Office identified numerous serious issues in this regard. A critical means to help ensure objectivity in the planning process is to formally engage outside experts to conduct public reviews of Corps plans and their underlying studies and assumptions.

In recent years, the number of major concerns regarding the quality and accuracy of Corps plans has increased in both seriousness and number, and the need for independent review has become increasingly clear. During the 1990's, several factors converged to bring about this situation.

Changes in the Review Process

Since the early 1990's, the level of effective project review has dramatically decreased within the Corps. In part, this is in response to continuing calls for "streamlining" the planning process and changes in the general focus of the Corps to operate more as a service agent, particularly to local project sponsors.

Over the past decade, the Corps has instituted substantial changes that have greatly weakened what was already a weak and inadequate review process. Up to the early 1990's, the primary mechanism for independent review was the congressionally established Board of Engineers for Rivers and Harbors. This Board, consisting primarily of Division Engineers, and supported by a staff of 30 to 40 professional project reviewers, was independent of Corps Headquarters management, and had the job of top-to-bottom review of all new Corps project proposals. In WRDA 1992, however, in an effort to cut expenses and improve efficiency, the Board was abolished, and the professional staff was reorganized into a Washington Level Review Center, still organizationally outside the Headquarters Division of Civil Works. In 1995, in another reorganization, the Review Center became a Review Branch within the Headquarters Division of Civil Works. The staff was cut from 35 to about 24, and their responsibilities were substantially expanded to include other duties.

In a series of steps, the responsibility for project technical reviews was devolved to the Corps Districts themselves, and the Washington level review became focused on policy compliance only. The District-level technical reviews are generally conducted by peer staff or are focused on reviewing the work of Corps contractors. Two years ago, in yet another reorganization, the Project Review Branch became the Policy Compliance Support Branch and the Washington level review staff was cut back to a dozen.

Timeframes for review have been cut to a minimum with final reviews by other Federal agencies and states running concurrently with that of Corps headquarters. In recent years, many Corps Districts rush to complete project plans in order to seek "contingent authorization" in even-years for inclusion in WRDA bills, which puts immense and inordinate pressure on the Corps to approve projects while deferring many studies and often deferring serious unresolved issues until after construction authorization.

The result of all this reorganization has been a substantial reduction in resources and emphasis on critical review of projects within the Corps. The devolution of much oversight to the local District level—where the greatest pressures exist to justify the projects sought by local sponsors and promoters—often comes at a far greater ultimate cost to the taxpayers and the environment than it should.

Lessons From the Upper Mississippi River

The case of the potential \$1.2 billion Upper Mississippi River Navigation Expansion project illustrates the strong need for a system of truly independent review, outside of the agency. The \$56 million study to expand a system of locks and dams on the Upper Mississippi River was among the most expensive in Corps history. It became the subject of an Army Inspector General investigation after a Corps economist alleged that the books had been cooked in order to justify the project. In addition, the Department of Defense requested that the National Academy of Sciences

(NAS) review the economic analysis in the Corps' feasibility report. The Army Inspector General and the NAS found evidence of bias in the planning process, utter failure by the Corps to evaluate alternatives to large-scale construction that would be less expensive and less environmentally damaging, such as scheduling and tolls, and flawed economic analysis.

The Army Inspector General's November 2000 investigation found: "Nearly all the economists expressed a view that the Corps (or individuals within the Corps) held an inherent preference for large scale construction." The Inspector General made clear that problems were not limited to a single project, but in fact, agency-wide: "Although this investigation focused on one study, the testimony and evidence presented strong indications that institutional bias might extend throughout the Corps. Advocacy, growth, the customer service model, and the Corps reliance on external funding combined to create an atmosphere where objectivity in its analyses was placed in jeopardy." In addition, the report concluded, "The overall impression conveyed by testimony of Corps employees was that some of them had no confidence in the integrity of the Corps study process."

In the followup February 2001 report of the National Academy of Sciences, Inland Navigation System Planning: The Upper Mississippi River—Illinois Waterway, the NAS recommended: "The feasibility study would benefit from a second opinion from an independent, expert, and interdisciplinary body from outside the Corps of Engineers and Department of Defense. Congress should thus direct the Corps to have the waterway system management and lock extension feasibility study reviewed by an interdisciplinary group of experts—including environmental and social scientists—from outside the Corps of Engineers."

The Corps has attempted to diffuse the significance of the Inspector General and NAS findings in the Upper Mississippi River Navigation Expansion case by stating that the feasibility study was in draft form. This argument may have carried some credibility if there were a strong independent review process in place. But as just explained, that process has been weakened severely—without the Inspector General or the NAS, there is no guarantee that anyone would have checked the Corps' math. Since then, the Corps has rescoped the Upper Mississippi Navigation study and is now engaged in a collaborative process with other state and Federal resource agencies and stakeholders to identify a comprehensive range of issues and potential solutions that address navigation and the environment. NWF would strongly oppose any attempts to prematurely authorize construction of the expansion project before the Corps submits a completed report to Congress. A comprehensive approach must not focus solely on the transportation issues without addressing the very serious environmental impacts associated with the project. An authorization request at this time is nothing more than an attempt to once again short-circuit the planning process.

GAO Report on Delaware River Main Channel Deepening

Mr. Chairman, the findings of the General Accounting Office's (GAO) report, Delaware River Deepening Project—Comprehensive Reanalysis Needed, (GAO-02-604, June 2002), released last week, demonstrate a fundamental breakdown of the Corps' internal project review process. In the case of this \$420 million navigation dredging proposal, the GAO concluded that Corps review was "ineffective" and "does not provide a reliable basis for deciding whether to proceed with the project." In March of 2000, the National Wildlife Federation and Taxpayers for Common Sense identified this project as the No. 2 worst Corps project in our report, Troubled Waters, because of extremely questionable economic justification and potential environmental threats to the Delaware Bay region, yet the Corps continued to claim the project was completely and properly justified.

The GAO found that despite the Corps' claims of \$40.1 million in annual benefits from the project (largely from transportation savings to shippers), only \$13.3 million in annual benefits had "credible support." The Corps' economic justification was fraught with "miscalculations, invalid assumptions, and the use of significantly outdated information." The Corps greatly overstated benefits based upon improperly double-counted time savings for shippers in both the Delaware Bay and in foreign ports, "miscalculated trade route distances," blamed certain unjustified benefits on "computer error", hugely overestimated crude oil and scrap metal traffic projections, and utterly failed to make the required adjustments in benefit projections during the 1990's to reflect shipping realities, among many other fundamental errors.

No stronger case could be made for the need for basic reform of the project review process.

Other Examples of Projects Under Investigation

As documented by the Inspector General, NAS and GAO reports, problems within the Corps' planning process are not limited to a single project study. Other examples

of where the Corps' planning process has failed or is currently under serious investigation include:

- The Oregon Inlet Jetties Project in North Carolina is also the subject of a General Accounting Office investigation. There, the Corps has continually refused to consider alternatives to constructing stone jetties on environmentally significant public lands on North Carolina's Outer Banks, despite more than two decades of objections from other responsible Federal agencies and independent economists, who believe the Corps economic justification is false. This project is also subject to a referral to the President's Council on Environmental Quality.

- Savannah Harbor Expansion Project in Georgia received contingent authorization for \$230 million of construction in 1999. The Chief of Engineers approved the project despite numerous basic environmental and economic issues that were left unresolved over the objections of other Federal and state agencies and the State of South Carolina to post-construction authorization. The project is now a subject of litigation and the Corps is undertaking a major new planning study.

- Dallas Floodway Extension Project in Texas is yet another example of where the Corps has refused to give serious consideration to a less costly and more environmentally friendly alternative, involving buy-outs and voluntary relocations being sought by a lower income community in south Dallas. Last year, the Office of Management and Budget concluded that the Corps had failed to follow its own planning guidelines and rules in designing the \$140 million (2001 dollars) project by not identifying the most cost-effective alternative consistent with protecting the environment. This spring, a U.S. District Court ruled that the Corps' environmental analysis failed to comply with the National Environmental Policy Act because the Corps did not analyze the cumulative effects of the project with other activities planned in the area. The Administration has refused to budget this project and the Court ordered the Corps to cease work until it has completed evaluating the cumulative environmental impacts.

- Projects in the Lower Mississippi River Basin, such as the Yazoo Pumps and the Big Sunflower River Dredging Project in the State of Mississippi would cost more than \$200 million and threaten to destroy hundreds of thousands of wetlands acres, even though less costly and more environmentally sound options exist to reduce flood damage risks in the region. An independent economic analysis of the Corps' Yazoo Backwater pumping plant in Mississippi, revealed that the Corps overestimated just the agricultural benefits of that project by \$144 million, and that even if all of the remaining benefit calculations were correct, it could not justify construction of the project. For the Big Sunflower Project, the U.S. Fish and Wildlife Service found that the Corps significantly overestimated the costs of purchasing easements, which could achieve the project objectives without dredging.

- Columbia River Deepening Project was recently the subject of a 6-month investigation by a Portland newspaper, which found that the Corps had overestimated project benefits by 140 percent, and that the benefits only amount to 88 cents on the dollar. The proposed dredging of 103 miles of the lower Columbia has also raised huge questions about the Corps' proposed mitigation for water quality and wetlands impacts, and impacts to salmon and other sport and commercial fisheries habitats. After the newspaper stories ran the Corps agreed to review its economic analysis.

Independent Project Review Would Strengthen the Corps' Program

At a minimum, Congress should require that studies of all Corps projects representing a significant investment of taxpayer dollars, and studies of all projects that generate controversy because of threats posed to the environment be reviewed by a panel of qualified and independent experts in various fields, such as economics, engineering, biology, geology and hydrology. This type of review can take place without delaying the overall planning process for justified projects, and would help to restore confidence in the process. Perhaps most importantly, a system of independent project review would provide the Corps' own study preparers with a strong incentive to resist pressures to "cook the books." It would help to ensure that the Corps projects that do proceed to construction are the best they can be. NWF strongly supports implementing a system of independent project review, which is a critical element in each of the Corps reform bills, S. 646 and S. 1987.

Corps' Approach to Planning and Developing Water Resource Projects Gives Short Shift to the Environment

Among the key findings of recent National Academy of Sciences reports are the need for the Corps' planning process to be updated to reflect current economic and environmental procedures and approaches to water resources development and management. The 1999 report, *New Directions in Water Resources Planning* for the U.S. Army Corps of Engineers, points out that the 1983 Principles and Guidelines for

Water and Related Land Resources Implementation Studies (“P&G”) have been frozen in time for almost 20 years. At the same time, economic and environmental sciences have increasingly evolved sophisticated methodologies to evaluate benefits and costs of structural and nonstructural approaches in response to changing public needs and attitudes toward the environment and natural resources.

The need to amend the P&G to require that national economic development and environmental protection and restoration be afforded co-equal status in the formulation of Corps of Engineers projects is even more relevant today than it was when the NAS made the recommendation 3 years ago. This is a fundamental change that is needed in the Corps’ project planning that must be included in any future Water Resources Development Act.

Update the P&G to Reflect 21st Century Principles and Practices

The NAS 1999 New Directions report recommended updating the P&G, including these specific examples:

(1) Movement away from consideration of the National Economic Development (NED) account as the most important concern in order to encourage consideration of innovative and nonstructural approaches to water resource planning, which can often better address ecological and social concerns.

(2) Many aspects of the Corps’ environmental programs are not reflected in the P&G requirements because they were enacted after the P&G was approved in 1983. The P&G needs to be updated to reflect these new and important Corps programs.

(3) The P&G should be updated to reflect new advances and techniques for risk and uncertainty analysis.

(4) The P&G should be updated to eliminate biases or disincentives that work against nonstructural approaches, and to ensure that the benefits of flood damages avoided by nonstructural projects are consistently and uniformly considered.

The P&G were written by the Water Resources Council (WRC), which was created in the 1960’s to coordinate the formulation and execution of Federal water policies. The WRC is dormant today because of lack of funding. The lack of procedural clarity for how to update the P&G should be eliminated by identifying a clear mechanism for review.

The Corps’ customer-service model, aimed at providing services to local communities that are sharing the cost of a project, is undermining the Corps’ responsibility to promote the national interest in its water planning activities. To promote efficient plans and projects across the nation’s river basin systems, the Corps should use the watershed or river basin, estuarial region, and coastal unit as the basic spatial units in water project planning, when and where it is appropriate and circumstances allow. The use of such hydrologic units for planning can help account for downstream effects of flood damage reduction projects, for example, or provide a system to account for cumulative effects of Corps projects. Most of the nation’s large river basins cross state lines, which requires Federal involvement to store and manage data, model hydrology and analyze system-wide impacts.

The 1999 New Directions report strongly recommends modernizing and revising the P&G, and requiring that ecosystem protection and restoration be established as co-equal goals with economic development. The report also recommends that Corps planning be more oriented to watershed and regional perspectives, particularly where projects have significant upstream and downstream impacts, or for functions that serve or impact regions, such as ports and harbors. Advances in scientific knowledge, ecological sciences, and economic analytic techniques should be further incorporated in Corps planning procedures. A growing cry of support for these changes is coming from states and professional societies as among the greatest failings of Corps water resources development programs.

Several of these key elements are included in S. 646 and S. 1987, and we strongly urge that these provisions be incorporated into WRDA legislation.

Corps Projects Continue to Threaten Enormous Amounts of the Nation’s Critical Wetland Resources and the Corps Fails to Mitigate Losses

The National Wildlife Federation is very concerned about the Corps’ growing backlog of mitigation for Civil Works projects. Although the Corps is required to mitigate for wetlands lost as a result of a Civil Works project, the existence of a growing mitigation backlog means that the mitigation is not being done and the environment is suffering.

Despite requirements that mitigation occur concurrently with Civil Works projects, the Corps has failed to follow through on significant amounts of acres of mitigation required for projects that are well underway, or for all practical purposes, completed. For example, in the Lower Mississippi River Valley, the Corps has been authorized to purchase tens of thousands of acres of mitigation land that have not

been purchased. The mitigation backlog in the Vicksburg District alone currently exceeds 28,000 acres. The time lag in completing mitigation for water resources projects is resulting in an enormous temporal loss of wetland functions and values in many valuable and vulnerable watersheds.

Ironically, the Corps reports that permits issued under the entire Section 404 dredge and fill permit program of the Clean Water Act account for 24,000 acres of direct wetlands loss per year. The U.S. Fish and Wildlife Service estimates that on average just under 30,000 acres of wetlands were lost each year between 1987 and 1997 from urban and rural development. Yet the Corps Civil Works program currently threatens 300,000 acres of critical bottomland hardwood losses from just a handful of projects that are among the most controversial in the Nation to reduce flooding in what are often low-lying areas in 2-year floodplains to promote marginal soy bean production. We urge the Committee to help redirect the Corps away from such activities that are environmentally damaging to wetlands and toward programs that would help rural economies benefit from restoring wetland resources and develop sound, sustainable economies that benefit from these special resources.

Improvements in Wetlands Mitigation

NWF strongly supports the wetland mitigation provisions of S. 646, which would clarify the definition of concurrent mitigation and improve the standards for mitigation, including improving the probability of cost-effectively and successfully mitigating habitat losses. In addition, S. 646 would address the mitigation backlog by requiring the Corps to establish a tracking system to identify the status of mitigation.

We further recommend that the Corps prepare a Mitigation Backlog Management Plan that is updated each year and will enable the Corps to eliminate its backlog of mitigation by seeking to have lands in place by fiscal year 2005, and future schedules for initiating and completing mitigation activities in a timely fashion. Further, as proposed in S. 646, new requirements should be placed upon mitigation for Corps Civil Works projects to ensure that at least 50 percent of mitigation is completed in advance of the start of construction, with mitigation to be completed by the time construction is complete. All mitigation should be, in addition, initiated and completed at least within 2 years of a resource impact due to a Civil Works project. NWF also supports proposals in S. 646 and S. 1987 that would disallow benefits for increased private property and service values derived from draining wetlands. Corps projects that would destroy hundreds of thousands of wetland acres should not be authorized because the extent of environmental destruction could never be fully mitigated.

Last month, the GAO issued a report assessing the Corps' fish and wildlife mitigation guidance, U.S. Army Corps of Engineers: Scientific Panel's Assessment of Fish and Wildlife Mitigation Guidance (GAO-02-574, May 15, 2002). The GAO found that in a majority of the projects authorized since WRDA 1986 that required a fish and wildlife mitigation plan and that received construction appropriations, the Corps completed less than 50 percent of the required mitigation before project construction started. According to the GAO, the Corps has completed at least 50 percent of the mitigation before project construction in just a few cases. This report documents that while it is feasible for the Corps to complete half of the mitigation before starting project construction, the Corps' mitigation work has been shoddy and inconsistent.

Additionally, NWF objects to the Corps' reliance upon preservation or enhancement of existing lands or wetlands as the sole mitigation for destruction of natural habitats. When mitigation is limited to protecting or enhancing existing habitats, a net loss of habitat occurs. The Corps has further entrenched this concept in its Regulatory Guidance Letter [RGL 01-01] on wetlands compensatory mitigation, allowing unlimited use of preservation of existing wetlands, and even upland areas as mitigation for the loss of natural wetlands. NWF calls on the Committee to substantially elevate mitigation requirements, evaluation and monitoring for Civil Works projects, using the recommendations of the National Academy of Sciences report on Compensating for Wetlands Losses Under the Clean Water Act (National Research Council, 2001) to ensure that no net loss of ecosystem functions or values occur in the construction of Civil Works projects, as required by the 1990 WRDA "no net loss of wetlands" policy.

Corps' Construction Backlog Is Out of Control

Mr. Chairman, the Corps has a huge construction backlog with some estimates as high as \$52 billion dollars worth of projects. This enormous stockpile of uncompleted projects serves no one well. With hundreds of projects in various stages of construction and hundreds more having passed through the authorization proc-

ess, the backlog can only be expected to increase. It prevents the Corps from completing a smaller number of projects sooner, which in turn adds to the ultimate cost of all projects. Congress authorizes new projects faster than the Corps can reasonably complete them. Unfortunately, this means that many new projects that would address contemporary needs, including critical environmental restoration projects, cannot be completed efficiently. The Corps continues to assume an optimal construction schedule in its cost-benefit analysis, even though the optimal schedule is not at all realistic because of the project backlog, which has the effect of artificially understating project costs and overstating project benefits.

Expedite Deauthorization for Outdated, Unconstructed Projects and Prioritize

Throwing more money at the Corps' construction backlog without prioritizing and focusing the Corps' work only perpetuates the problem. In order to effectively address the ever-mounting project backlog, we urge the Committee to adopt a mechanism that identifies the projects that no longer make economic or environmental sense in light of current circumstances, and to impose some discipline on the new projects that are authorized. NWF urges the Committee to include provisions from S. 1987 that would expedite the current deauthorization process.

In addition, Congress could insure that high priority projects are completed in a timely manner by deauthorizing those projects that are no longer economically beneficial or that are proven to be environmentally destructive. Wasteful Corps projects can be replaced with positive developments by submitting them to rigorous economic analyses and environmental impact reviews. S. 1987 proposes updating the current 1.0 to 1.0 benefit-to-cost ratio, which was originally established in the 1930's, with a more modern 1.5 to 1.0 ratio. We urge the Committee to include such a provision in a WRDA to help prioritize among the nation's water resource investments. Finally, NWF strongly supports President Bush's policy decision in the fiscal year 2003 budget to focus the Corps on its traditional mission areas of flood damage reduction, navigation and environmental protection.

Beach Sand Pumping Projects Are Exploding

Funding for beach sand pumping projects is consuming increasingly larger portions of the Corps' budget. Currently, the Federal Government pays 65 percent of the cost of construction and periodic renourishment of beach projects authorized before 2000. Beginning in 2003, the Federal portion will be 65 percent for construction and 50 percent for renourishment of new beach projects authorized after 2000. For currently authorized beach projects, it could easily cost Federal taxpayers more than \$10 billion in the next several decades to continue to put sand on beaches that is literally washed away to sea. In many cases, these projects tend to promote high-risk development along coastlines. The Corps is currently pumping sand onto the beaches of 18 of America's 200 richest towns listed in *Worth Magazine*, including Gulf Stream, Florida, where the typical home sells for \$1.5 million.

While sand pumping activities have existed in certain locations for decades, America's coastlines have never been subject to the magnitude of sand pumping activity that would be represented if Congress stays on the present course of authorizing large numbers of new projects in each WRDA bill. For instance, virtually the entire Atlantic shoreline in New Jersey and half of North Carolina's shoreline is authorized for beach sand pumping. NWF is extremely concerned about the long-term ecological effects that are likely to accompany such massive and expensive shoreline dredging and pumping activities. Sand pumping projects, which generally involve dredging sand from one location and dumping it on another, put aquatic wildlife and their habitat at great risk. Among the most immediate effects of beach projects is the burial of habitats and organisms living in these zones. Sand pumping projects also pose a problem to the nesting patterns of both sea turtles and bird species. Nesting turtles and birds can be easily deterred by the pipelines, lights and noise that accompany beach projects. In addition, the success of hatching eggs is affected by changes in the incubating environment, such as density, color, moisture content, compaction, and gas exchange of the beach sands. The dredged material used for the beaches often contains a different composite than the natural sands.

If sea levels rise as predicted—the predictions range from two feet per century for the next few hundred years to as much as 15 feet by the year 2200¹—erosion pressures will accelerate and the current response is unsustainable. We urge over-

¹See Working Group 1, Intergovernmental Panel on Climate Change, *Climate Change 1995: The Science of Climate Change*, at 6 (estimating that IPCC's best estimate is that global sea level will rise 49 cm from 1990–2100). See also James G. Titus & Vijay K. Narayanan, U.S. Environmental Protection Agency, *The Probability of Sea Level Rise* iii, 145–46 (1995) (explaining that along much of the U.S. coast sea level is likely to rise about 10 cm more than the global average).

sight and a much more thoughtful, scientifically based response than we have seen to date to help guide a rational approach to erosion.

Reduce the Federal Government's Burden for Sand Pumping Projects

While there are instances where sand pumping may be either economically justified or can serve as temporary measures to allow communities that face erosion problems to make permanent adjustments, such as relocating at-risk buildings, a fundamental concern is that many believe this should not be largely a Federal responsibility, given the range of demands on the Federal budget. NWF strongly urges the Committee to seriously consider supporting a substantial reduction in the Federal cost-share for beach nourishment activities, such as proposed by S. 1987 and the President's fiscal year 2002 budget recommendation. In addition, we urge the Committee to resist attempts to allow more of these types of projects that are primarily for recreation rather than storm damage prevention. Until a much clearer picture can be gained of the ecological impacts that may be represented by expanding Federal beach nourishment activities, the Committee should resist new authorizations.

A Race To The Bottom Among Ports and Harbors Is Bad for Taxpayers and the Environment

Our nation's ports and harbors are critically valuable resources for our economy and our environment and they must be managed in a manner that continues to support both. NWF has previously expressed our severe concern to the Committee that a number of ports and harbors are engaged in a race to deepen their channels in order to accommodate many of the largest and deepest draft ships operating on the trans-oceanic routes. At the same time, port authorities have sought to increase Federal subsidies for deep draft harbor dredging by modifying current cost-share formulas to treat ports from 45 to 55 feet in depth the same as 45-foot depth or less general cargo ports. This would amount to a 25 percent increase in Federal costs for deep draft dredging. The Corps is not currently dredging any commercial U.S. port deeper than 55 feet.

We also caution the Committee about relying on generalized future growth in trade predictions as a rationale for an across the board effort to deepen our ports. For instance, just 2 years ago at the time predictions were made that trade would double over the next 20 years, eastbound trans-Pacific trade grew at very high rates of 12 percent to 14 percent per year. Since then, trade traffic has seen far less significant growth. According to recent reports in the Journal of Commerce, cargo volumes in the eastbound Pacific increased by only 2 percent last year, and despite the nation's recovering economy, volumes are expected to grow by single digit rates through next year. See, e.g., Bill Mongelluzzo, *The Dire TransPacific*, Journal of Commerce, March 18, 2002. The uncertainties associated with port and harbor needs argue even more strongly for the development of regional port planning to integrate the Corps program with national transportation policy.

The Corps Should Strive to Focus Deep Draft Port Dredging Activities to the Most Efficient, Environmentally Sound Ports

We must invest in our ports wisely. Growth tends to be concentrated in a few major U.S. ports. More than half is concentrated in 20 ports and more than a quarter is handled by just five ports. In 1997, 25 ports handled 98 percent of the foreign container cargo, and the leading 10 ports accounted for 80 percent with the Los-Angeles-Long Beach port complex responsible for one-third of all container traffic. The 50 leading U.S. ports handle nearly 90 percent of all waterborne commerce. (NAS, *Applying Information Systems to Ports and Waterways Management*, 1999).

NWF supports provisions from S. 1987 that would require the Corps to conduct comprehensive coordinated planning to look regionally at shipping needs and the economic and environmental cumulative impacts of deepening ports and harbors. In WRDA 1986, Congress wisely established a cost sharing formula requiring that the very deepest ports—those with channels dredged deeper than 45 feet—pay a higher share of the costs for dredging than those below 45 feet. We believe any decision to increase the Federal subsidy, such as the proposal sought by the port authorities to increase the subsidy by 25 percent, would unnecessarily fuel major expansions of capacity at too many locations that would have dire long-term environmental consequences. There is no reason to believe that the current formula will not allow the necessary capacity to meet the nation's transportation needs where the business exists. We strongly oppose this cost-sharing change because it will undoubtedly fuel the race to the bottom, thereby unnecessarily wasting taxpayer resources and threatening further harm to the nation's bays, rivers and estuaries. Instead, we urge the Committee to require regional port planning as an element of helping to

guide the Federal interest in ensuring U.S. ports can meet national transportation needs, consistent with protecting the environment.

21ST CENTURY VISION FOR THE CORPS: THE PREMIER ECOSYSTEM RESTORATION AND PROTECTION AGENCY

The National Wildlife Federation is greatly encouraged by the substantial efforts made by the Committee and Congress in past WRDAs to authorize environmental programs, such as Section 1135 Project Modifications for Improvement of the Environment, Section 206 Aquatic Ecosystem Restoration, Floodplain Management Services, the Comprehensive Everglades Restoration Plan, the Upper Mississippi River Environmental Management Program, and numerous others. We remain concerned, however, that without a focused and highly disciplined Corps program, there will be, in fact, insufficient resources available for the Corps' environmental programs to make the critical contributions that the public seeks. We support adjustments to Corps flood damage reduction cost-sharing requirements that would increase the level of responsibility taken by local and state governments in managing flood risk. Among the ideas that have significant merit is to establish a sliding cost-share formula that gives communities incentives to reduce and manage their flood risk.

We are also especially concerned, for instance, that the Corps has received no funding to date for the landmark Challenge 21 program, which provides the Corps with substantial opportunities to add nonstructural approaches to its flood damage reduction programs. These are areas where the need for priority-setting becomes of paramount importance.

CONCLUSION

In sum, the Corps of Engineers has a vital role to play in managing the nation's water resources. Continuing business as usual, however, is not acceptable. Several new reports by the National Academy of Sciences and others, the results of extensive audits and investigations, as well as much thoughtful legislation, have provided critically important recommendations for long-needed reforms. We applaud the Corps of Engineers for taking a first step in signaling its commitment to a sustainable environment by formalizing a set of "Environmental Operating Principles" applicable to its decisionmaking and programs. These principles were recently articulated by the Chief of Engineers, Lt. General Flowers, at the dedication of the Davis Pond Fresh Water Diversion Project in Louisiana. We urge the Environment and Public Works Committee to directly address the Corps' crisis in confidence by including important legislative reforms in the next WRDA. These reforms would provide critical direction for all Corps programs, including direction for what may be among the Corps' most important functions in the twenty-first century—ecosystem restoration and protection.

Chairman Jeffords and Ranking Member Smith, once again, thank you for the opportunity to present our views. We look forward to working with you and the other members of the Committee to help bring the Corps into the 21st Century by incorporating critically needed reforms in the next WRDA legislation. I am happy to respond to any questions the Committee Members may have.

APPENDIX

THE STATE OF THE NATION'S AQUATIC RESOURCES

The U.S. leads the world in species number for many freshwater organisms including insects, snails, salamanders, turtles, and mussels. It also ranks high for subterranean invertebrates and freshwater fishes. This vast array of diversity is primarily the result of the unparalleled system of watersheds that filter through the country. It is no coincidence that the greatest species loss has occurred in the precise regions where large water projects have rearranged the natural landscape. The impacts of water development affect 30 percent of the listed endangered species, ranking behind only agriculture and commercial development. According to the Association for Biodiversity Information, "Species that depend on freshwater ecosystems are, as a whole, faring the worst of any group of U.S. organisms." The deteriorating conditions are undeniable with the list of extinct/imperiled species growing every year. Modern science has concluded that the three leading threats to aquatic species are agricultural non-point pollution, alien species, and altered hydraulic regimes due to dams and impoundments. Many Corps projects and programs are directly involved in exacerbating these threats.

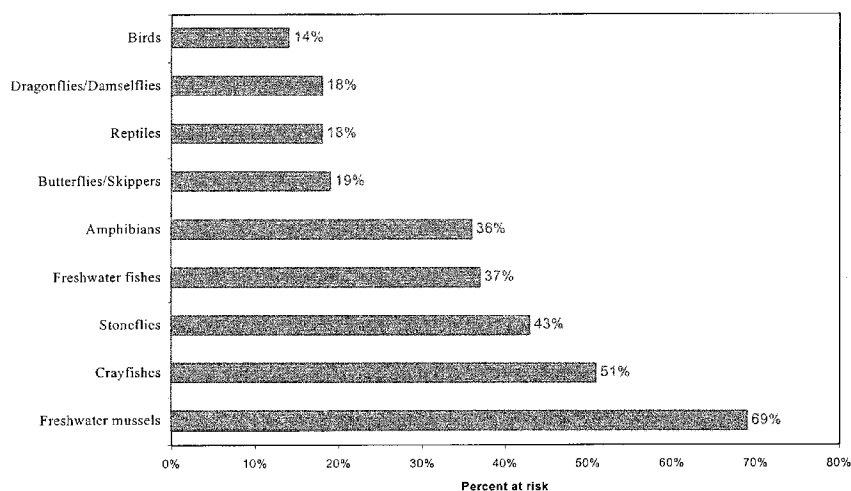
Global Significance of Select U.S. Plant and Animal Groups/Species:

		[In percent of Total]
Mammal	416 in U.S. out of 4600 globally	9
Bird	768 in U.S. out of 9700 globally	8
Reptile	283 in U.S. out of 6600 globally	4
Freshwater Fish	799 in U.S. out of 8400 globally	10
Amphibian	231 in U.S. out of 4400 globally	5
Salamander	140 in U.S. out of 350 globally	40
Freshwater Mussel	292 in U.S. out of 1,000 globally	29
Freshwater Snails	661 in U.S. out of 4,000 globally	7
Crayfishes	322 in U.S. out of 525 globally	61
Freshwater insects:		
Caddisfly	1400 in U.S. out of 10769 globally	13
Mayfly	590 in U.S. out of 1967 globally	30
Stonely	610 in U.S. out of 1525 globally	40

All information in this Appendix is from Precious Heritage: The Status of Biodiversity in the United States. The Nature Conservancy & Association for Biodiversity Information. Oxford University Press (2000).

Disappearance of U.S. Aquatic Species

Proportion of species at risk



Sources of Harm For at Risk Species

	Overall (n=1207)	Vertebrates (n=329)	Invertebrate (n=155)	Bird (n=91)	Reptile (n=39)	Amphibian (n=16)	Fish (n=116)	Insect (n=39)	Mussel (n=69)	Mollusk (n=23)
Agriculture	38	40	57	42	33	63	45	56	64	35
Commercial Development	35	30	42	33	56	44	16	67	29	13
Water Development	30	47	66	22	28	63	91	21	99	48
Outdoor Recreation	27	16	19	15	31	25	9	41	4	26
Livestock Grazing	22	17	10	20	8	19	16	15	1	9
Pollutants	20	27	66	10	21	25	55	26	97	48
Infrastructure Development	17	16	12	8	28	38	17	23	6	9

Percentage of Federal endangered, threatened, and proposed species harmed by types of habitat destruction and degradation.

June 12, 2002.

Hon. JAMES CONNAUGHTON,
Chair, Council on Environmental Quality
Washington, DC.

Hon. MITCHELL E. DANIELS, Jr.,
Director, Office of Management and Budget,
Washington, DC.

Subject: U.S. Army Corps of Engineers

DEAR MESSRS. CONNAUGHTON AND DANIELS: We are writing to urge the Administration to work with Members of Congress and with our conservation, taxpayer, and professional organizations to support legislation that will reform the way the Corps of Engineers (Corps) plans, evaluates, and implements water resources projects. The Corps' failure to address the contemporary needs of communities in an environmentally sound and cost-efficient manner is taking a tremendous toll on the nation's natural and financial resources. Your leadership in this effort is critical.

The Corps' implementation of its much touted nationwide project "pause" starkly underscores the need for the Bush Administration and Congress to act now to reform the Corps. We had hoped that the project "pause" was a genuine sign of the Corps' interest in ensuring that its water resource projects were economically and environmentally sound. Unfortunately, the review appears to have been little more than a charade, and the Corps has made it abundantly clear that it is either unwilling or unable to reform itself.

First, less than 3 weeks after announcing the "pause," the Corps announced that it had reviewed 172 projects and cleared 118 to move forward. Only eight projects were flagged for additional review as a result of this process (with the remainder already undergoing reevaluation due to previously identified problems). That timeline made it abundantly clear that General Griffin's direction to conduct a new economic analysis for projects approved prior to fiscal year 99 was not followed.

Second, just a few days later, the Corps released a "corrected" list that deviated in significant ways from the first list. The second list identifies only 164 projects as having been reviewed, clearing 80 to proceed (with the remainder already undergoing reevaluation due to previously identified problems). Again, only eight projects were said to require additional review as a result of the project pause directive.

With no explanation, the Corps completely removed from the second list some of the worst projects that were identified on the original list with the nomenclature "review complete." These projects include the Grand Prairie Irrigation Demonstration Project in Arkansas, the Yazoo Pumps Project in Mississippi, St. John's Bayou Project in Missouri and the Inner Harbor Navigation Canal (Industrial Canal) Project in Louisiana. In addition to being costly, these projects are highly controversial and would destroy some of America's most valuable wetlands and aquatic habitat. Because the Corps has left the public completely in the dark on the process used in its review, the only conclusion we can reach is that although the Corps originally announced to Congress and the public that these projects had in fact been reviewed, the reviews never occurred. If the Corps' review and reevaluation process is to have any credibility, these projects must be fully and openly re-evaluated.

Third, in addition to the Corps' apparent inability to be able to accurately identify projects that were reviewed, the list contains glaring omissions of projects that most certainly should have been reevaluated. For example, the list does not include the Dallas Floodway Extension project in Texas an authorized project for which construction has not begun. Not only did the Office of Management and Budget inform the Corps that they had failed to comply with their own planning guidance for this project, but a U.S. District Court also ordered the Corps to reevaluate the project's cumulative environmental impacts.

Finally, the project reevaluation was conducted behind closed doors with no involvement from the public, other Federal and state agencies, or apparently the Administration. The Corps has not identified or described the information reviewed, the results of each review, or the documentation supporting its conclusions. The fact that the Corps originally cleared more than 100 projects in less than 3 weeks including some of the most highly questionable and controversial Corps projects and then substantially revised the list of projects reviewed and their status (once again all behind closed doors), gives the public no confidence that the "cleared" projects represent a sound and environmentally sustainable investment.

Instead, the Corps' actions have increased the public's lack of confidence in the Corps' ability to plan water resource projects in an objective and reliable manner. Now more than ever, Congress must enact meaningful Corps reforms to improve the broken process and help restore faith in this scandal-plagued agency. The Corps reform bills introduced in the Senate and House (S. 1987, S. 646, H.R. 1310 and H.R.

2353) contain crucial reforms that cannot be postponed. We urge the Administration to actively support these legislative proposals as Congress considers authorizing even more water resource projects during debate over the Water Resource Development Act.

We very much appreciate the leadership of the Bush Administration in proposing a more environmentally responsible budget for the Corps of Engineers for fiscal year 03, and hope that you will fight to keep this year's budget from growing as it moves through Congress. We also hope that the Administration will work to make the Corps' entire program more environmentally and fiscally responsible by actively supporting the important legislative proposals directed at reforming the Corps of Engineers.

Sincerely,

Bradford T. McLane, Executive Director, Alabama Rivers Alliance; Kathy Andria, President, American Bottom Conservancy; S. Elizabeth Birnbaum, Director of Government Affairs, American Rivers; David McLain, Executive Director, Apalachicola Bay and Riverkeeper; David Gowdey, Executive Director, Arizona Wildlife Federation; Daniel DeVun, Vice President, Arkansas Nature Alliance; Jim Wood, Representative, Arkansas Wildlife Federation; Rob Fisher, Conservation Director, Audubon Arkansas; Sidney Maddock, Environmental Analyst, Biodiversity Legal Foundation; John Koefel, Founding Board Member, Citizens Against Widening the Industrial Canal; Jamie Matera, Outreach Coordinator, Coast Alliance; Peter Huhtala, Executive Director, Columbia Deepening Opposition Group; Matthew Van Ess, Director, Columbia River Estuary Study Taskforce; Patricia A. Pendergrast, President, Connecticut Ornithological Association; Karen Blue, Executive Director, Conservation Council for Hawaii; Michael E. Riska, Executive Director, Delaware Nature Society; Maya K. van Rossum, Delaware Riverkeeper, Delaware Riverkeeper Network; Val Washington, Executive Director, Environmental Advocates of New York; Mona Shoup, Chair, Friends of Clear Creek; Erich Pica, Director, Green Scissors Campaign, Friends of the Earth; Manley K. Fuller III, President, Florida Wildlife Federation; Jim Blackburn, Chair, Galveston Bay Conservation and Preservation Association; Jerry L. McCollum, President and CEO, Georgia Wildlife Federation; Margaret Wooster, Executive Director, Great Lakes United; Cyn Sarthou, Executive Director, Gulf Restoration Network; Marilyn Blackwell, President, Help Save The Apalachicola River Group; Pamela Dashiell, President, Holy Cross Neighborhood Association; Steven G. Sorensen, Past President, Kansas Wildlife Federation; Tom Fitzgerald, Director, Kentucky Resources Council, Inc.; Judy Petersen, Executive Director, Kentucky Waterways Alliance, Inc.; Cam Davis, Executive Director, Lake Michigan Federation; Larry Mitchell, President, League of Ohio Sportsmen; Mark F. Ten Eyck, Advocacy Director, Minnesota Center for Environmental Advocacy; Kenneth Hiemenz, President, Minnesota Conservation Federation; Tim Sullivan, Executive Director, Mississippi River Basin Alliance; Bea Covington, Executive Director, Missouri Coalition for the Environment; Perry Plumart, Director of Government Relations, National Audubon Society; Jamie Rappaport Clark, Senior Vice President, National Wildlife Federation; Marian Maas, Ph.D., Conservation Programs Chair, Nebraska Wildlife Federation; Jim Stephenson, Program Analyst, North Carolina Coastal Federation; Chuck Rice, Executive Director, North Carolina Wildlife Federation; Nina Bell, J.D., Executive Director, Northwest Environmental Advocates; Vicki Deisner, Executive Director, Ohio Environmental Council; Ella F. Filippone, Executive Administrator, Passaic River Coalition; Jim Stevens, President, People to Save the Sheyenne; Gerald H. Meral, Ph.D., Executive Director, Planning and Conservation League; Clark Bullard, Member of the Board, Prairie Rivers Network; Magi Shapiro, Member of the Board, Public Employees for Environmental Responsibility; Todd Ambs, Executive Director, River Alliance of Wisconsin; Mike Fremont, President, Rivers Unlimited; Angela Viney, Executive Director, South Carolina Wildlife Federation; Chris Hesla, Executive Director, South Dakota Wildlife Federation; Gwen Griffith, DVM, MS, Program Director, Tennessee Environmental Council; Michael Utt, President, The Ohio Smallmouth Alliance; Melanie Winter, Director, The River Project; Wilfred Cwikiel, Water Resource Pro-

gram Director, Tip of the Mitt Watershed Council; Kelly D. Lowry, Esq., General Counsel and Water Program Director, Vermont Natural Resources Council; Larry Baesler, Executive Director, Wyoming Wildlife Federation

RESPONSES BY MONTGOMERY FISCHER TO ADDITIONAL QUESTIONS FROM BOB SMITH

Question 1. Can you give some specific examples of how the Corps project planning process needs to be modernized?

Responses. The National Academy of Sciences' 1999 report, *New Directions in Water Resources Planning for the U.S. Army Corps of Engineers*, documents several examples of how the planning process needs to be brought up to date to reflect 21st Century water management principles and practices. As explained in the National Wildlife Federation's written testimony and the *New Directions* report, the Corps' planning process is based upon the Principles and Guidelines for Water and Related Land Resources Implementation Studies ("Principles and Guidelines"), which were set in 1983 (when the preceding Principles and Standards were revised) and these guidelines have remained unchanged since then. The Principles and Guidelines direct water resources to be developed to promote national economic development, but assumes that all projects are to be developed for economic reasons. Since 1983, the Corps has been given important authorities to develop environmental protection and restoration projects, yet the Principles and Guidelines provide no guidance for developing such projects.

One of the most basic reforms identified by the NAS *New Directions* report that would help modernize Corps procedures is to modify the statement of objectives to make clear that environmental protection and restoration is as equally important as national economic development in order to encourage more innovative and creative approaches that benefit not only the economy, but also the environment. This recommendation is reflected in both reform bills, S. 1987 and S. 646.

Chapter 5 of the *New Directions* report discusses how the Principles and Guidelines lack guidance for environmental protection and restoration projects. While the Principles and Guidelines direct the Corps to evaluate environmental impacts of water resource development projects, it lacks guidance on evaluating the outcomes of environmental restoration projects. Presently, only conceptual models and general principles guide ecological system planning. There is a lack of instruction for assigning project benefits and costs for ecosystem restoration projects, which is emerging as an important mission area for the Corps.

In addition, the *New Directions* report explains that since 1983 substantial advances have been made in economic and environmental sciences in developing procedures for evaluating consequences of water resource projects, and for assessing risk and uncertainty. As a result, the Corps is either using or refraining from using such analytical tools without the benefit of policy review by the nation's water resources planning community.

The 1999 NAS report also documents how the Corps' customer-service model is undermining the Corps' responsibility to promote the national interest in water resources planning. The Army Inspector General (IG) supported this conclusion when the IG investigated allegations of economic manipulation for the Upper Mississippi Navigation Expansion project. The IG found: "The Corps' employment of the customer service model also created a conflict with the Corps' role as honest broker. Because of the taxes it paid into the Inland Waterway Trust Fund, the barge industry was viewed as a partner during the study. This view led the Corps leadership to involve the industry to a far greater extent than other interest groups." The planning process needs to be revised to move away from a strictly customer service approach and to be more inclusive of a variety of stakeholders.

Finally, the Corps' planning process needs to be updated to be more oriented to watershed and broader regional perspectives. Even the Corps acknowledges that sometimes projects developed to address one problem in a watershed, create new problems for others downstream or elsewhere. The Corps' guidance should direct that the watershed or river basin, estuarial region, coastal unit or key ecosystem components be used as the basic spatial units in water project planning, when and where it is appropriate. The January 2002 National Academy of Sciences report, *The Missouri River Ecosystem: Exploring the Prospects for Recovery*, documents the devastating impact the Corps has had on the Missouri River by planning water development projects without consideration of the watershed-wide effects.

Question 2. In his testimony, the Chief of Engineers pointed to the use of "value engineering" to lend credibility to the Corps review process. Can you comment on

whether you think this is an effective means of review that will have a meaningful impact on how the Corps conducts its studies and reviews?

Response. The National Wildlife Federation understands “value engineering” to mean a methodology for analyzing systems down to the subsystems and component levels of a design or product, and consequently to its value. Rather than reviewing existing documents to check for safety, accuracy and workability of the design, value engineering can occur at various stages of project planning. Value engineering seeks to determine whether true value has been attained through the design and can generate alternatives that will achieve the desired results at the lowest possible cost.

While this is a valuable tool, it cannot substitute for appropriate policy guidance, and a vigorous quality control system. The benefit of establishing a system independent project review, for instance, extends beyond checking the justification of particular project elements. It provides greater support for the public and the Congress to trust Corps studies that have been reviewed. A system for independent project review also provides the Corps strong incentives to get the studies right the first time. At present, there is no indication that an internal review process would provide that type of incentive to the districts.

Question 3. What steps can be taken to improve the credibility of Corps studies?

The most important step that would improve the credibility and reliability of Corps studies is implementing a system of independent project review. As explained in detail in NWF’s written testimony (pp. 3–4), in recent years there has been major erosion in the extent, scope, quality and staffing of project reviews within the Corps. The failure to establish a truly independent system of review has been a significant hindrance to ensuring that the Corps will consistently develop high quality projects. As evidenced by cases like the Delaware River Main Channel Deepening Project, the Upper Mississippi River Expansion Project, and numerous others highlighted in the Federation’s written testimony, the current process is producing studies with questionable economic justifications and unresolved or completely ignored environmental issues.

Question 4. Are there additional reforms, *not* included in either my legislation or other legislative proposals out there (e.g. S. 646), that you would like to see enacted?

Response. There are several additional potential areas for reform that we urge the Committee to consider that are not included in either S. 1987 or S. 646.

First, the National Wildlife Federation is concerned about impediments that continue to hamper the Corps’ ability to develop and implement nonstructural approaches to reduce flood damages. In Section 219(a) of WRDA 1999, Congress directed changes in the way economic benefits are calculated for nonstructural flood damage reduction projects in response to reports documenting impediments, including the 1994 *Sharing the Challenge* report of the Interagency Floodplain Management Review Committee, the Corps’ 1995 Floodplain Management Assessment report on the Upper Mississippi Floods, the National Academy of Sciences’ 1999 *New Directions* report, and a series of studies and reports by the Corps’ Institute for Water Resources (IWR). Due to ambiguities in the final version of the bill, however, critical impediments to nonstructural approaches have not been eliminated.

On January 22, 2002, the Corps issued guidance implementing Section 219. In essence, while the language allows Corps to consider benefits for nonstructural projects, the process is extremely cumbersome and impractical. The guidance ignores the findings of the IWR economists that clarified the need for a simple declaration that primary flood damages avoided should be counted as benefits of evacuation-type projects without requiring expensive econometric studies. Thus, we believe the Corps guidance fails to capture the spirit of the Conference agreement. We urge the Committee to include in the 2002 WRDA, the original 1999 Senate-passed language as a replacement for the current Section 219(a). The Senate version directly addressed these findings and greatly simplified the calculation of benefits consistent with current economic science. Such a change would help remove a significant and unjustified impediment to nonstructural flood damage reduction projects.

The National Wildlife Federation also believes that there is considerable merit to the idea of establishing a sliding cost-share formula for flood damage reduction projects. Such an approach would reward local communities and states that take increased responsibility for managing and reducing flood risk. In 1998, the Federation released a report, *Higher Ground*, which documented the rising cost of flood damages that has accompanied increasing investments made in strategies dominated by structural projects, rather than wise floodplain management. We note that the testimony of the Association of State Floodplain Managers identifies a significant concern that the current static cost-sharing policy often rewards communities that do the least to manage flood risks. It also fails to give communities an incentive to use their own authorities to manage and reduce their flood risks. We would strongly

support including measures in WRDA that would use thoughtfully crafted cost-sharing incentives to reward communities that engage in wise floodplain management.

Next, the Federation urges the Committee to continue to support current Corps programs that encourage environmental protection and restoration and wise floodplain management. Specifically, we urge the Committee to consider increasing the authorization ceilings for the Section 1135 and Section 206 programs, as well as the Corps' Floodplain Management Services and Planning Assistance to States programs. The Committee should consider ways to encourage more activity under these programs through modifying local cost-sharing requirements to allow a broader range of potential funding sources. This is particularly relevant to restoration projects where, because the benefits are often non-monetary and tend to be more widely distributed over larger geographic regions and over longer periods of time, it has been difficult to find local cost-sharing partners that are capable of financing the non-Federal share alone.

Finally, despite requirements that mitigation occur concurrently with Civil Works projects, the Corps has failed to follow through on significant amounts of mitigation required for projects that are well underway. In order to reduce the backlog of mitigation, in addition to the mitigation provisions contained in S. 646, we recommend requiring the Corps to prepare a Mitigation Backlog Management Plan that is updated each year and seeks by fiscal year 2005 to have the necessary lands purchased to eliminate the current backlog, as well as schedules for initiating and completing mitigation activities in a timely fashion. We also urge the Committee to adopt recommendations from the National Academy of Sciences' 2001 report, *Compensating for Wetland Losses Under the Clean Water Act* to substantially elevate mitigation requirements in order to ensure that no net loss of ecosystem functions or values occur in the construction of Civil Works projects, as required by the 1990 WRDA "no net loss of wetlands" policy.

We would be happy to discuss further details regarding these recommendations, if you are interested in any or all of these ideas and concepts.

Question 5. What step can be taken to ensure that Corps projects maximize both economic and environmental benefits?

Response. As discussed above, in order to ensure that Corps projects maximize both economic and environmental benefits, the Principles and Guidelines should be revised to establish environmental protection and restoration as co-equal goals with economic development. In addition, the Corps should be directed to include all environmental costs and benefits of a project in the benefit-cost analyses. Because environmental costs and benefits can be difficult to quantify, it is important that the Principles and Guidelines be revised and updated to provide guidance on how to capture those values in a meaningful way. The Principles and Guidelines should, in fact, be revised periodically to reflect modern economic and scientific understanding.

STATEMENT OF STEVE ELLIS, SENIOR DIRECTOR OF WATER RESOURCES, TAXPAYERS

Good afternoon, Chairman Jeffords, Senator Smith and other distinguished members of this Committee. I'm Steve Ellis, the Senior Director of Water Resources at Taxpayers for Common Sense, a national, non-partisan budget watchdog group. I'd like to thank you for inviting me to testify on behalf of two of the nation's leading taxpayer advocacy groups—Taxpayers for Common Sense and the Council for Citizens Against Government Waste—at this hearing on the Water Resources Development Act of 2002 and reforming the Army Corps of Engineers. The National Taxpayers Union (NTU) is also concerned with the Army Corps of Engineers and advocates reform of the agency. I would like to submit for the record a statement from the NTU.

The last time there was significant reform of the Corps of Engineers and the United State's approach to water resources development was in 1986 with the approval of cost sharing reforms championed by President Reagan.

Virtually overnight we have gone from budget surpluses to deficits. We are engaged in a costly and lengthy war against terrorism. In this context, fiscal restraint is more important now more than ever to get to a balanced budget.

Wasteful spending through the Army Corps is symbolic of everything that is wrong with Inside the Beltway politics, where Members of Congress abandon their duty to promote the best interests of the Nation in order to help a handful of special interests.

In this election year, the temptation will be great to focus on just bringing more projects home to please special interests. But enacting true, meaningful reform of

the Corps of Engineers this year will be an indication of whether Congress has the will to make the hard decisions necessary to achieve fiscal responsibility.

Undoubtedly, the Corps of Engineers has faced some of the sharpest criticism in its history over the last two and half years. However, concern over the Corps and the way it conducts business is not new. For example, more than 150 years ago in 1836 the House Ways and Means Committee chastised the agency for bungling 25 projects that were over-budget, behind schedule, and not performing as planned.

Similarly, the criticism in recent years is the result of revelations that the Corps manipulated or committed serious mistakes in project evaluation studies that could waste billions of taxpayer dollars.

This series of scandals has severely eroded public trust in the Corps. To restore the agency's credibility, it is critical that the 2002 Water Resources Development Act address the problems that led to these scandals. The Corps needs to be reformed, and it needs it now. It is vital that we define what exactly is meant by Corps reform? Real reform will achieve these four fundamental goals:

- Make the Corps more accountable;
- Set clear priorities;
- Modernize the project planning process; and
- Ensure that everyone pays a fair share

In March, Senators Bob Smith, Russ Feingold, and John McCain introduced S. 1987, the Corps of Engineers Modernization and Improvement Act. This comprehensive reform proposal addresses each of the four key reform areas in a serious and effective manner. We urge the Committee to adopt S. 1987 as the basis for reform in the Water Resources Development Act.

I would like to outline each of these tenets of reform and provide a few examples of why reform is essential.

ACCOUNTABILITY

The need for more accountability in the Corps becomes more apparent by the month, as a growing list of project studies have been found to have been manipulated or contain egregious errors:

- In December 2000, the Army Inspector General reprimanded three senior Corps officials—including the second-ranking general in the agency—for manipulating studies of a billion dollar expansion of seven locks on the Upper Mississippi and Illinois River.

- In January 2001, the Corps suspended all work on the \$90 million Chesapeake and Delaware Canal deepening project after four Eastern Maryland retirees demonstrated basic math errors and fundamentally flawed assumptions that erroneously showed the project to be justified.

- In March 2002, the Portland Oregonian concluded an extensive investigation that found the Corps had overstated the benefits of a \$190 million deepening project for the Columbia River by more than 125 percent, and that in fact there was no economic justification for proceeding with the project.

- A few days later a National Academy of Sciences panel harshly criticized a Corps of Engineers model of the carrying capacity of the Florida Keys to accommodate future development: "Incomplete and outdated information, coupled with inaccurate assumptions, makes the model—as it stands now—inappropriate for drawing conclusions about the impact of future development."

- Also in March, a U.S. District Court judge in Ft. Worth, Texas issued an injunction against proceeding with the \$127 million Dallas Floodway Extension project. The judge ruled the Corps had failed to consider smaller-scale alternatives—such as a simple levee raise—to re-engineering the whole Trinity River. Most of the benefits of the re-engineering project could be achieved through the smaller project at less than one-third of the cost.

- And just last week, the General Accounting Office issued a scathing report on the lack of economic justification for the \$420 million Delaware River deepening project. The report found that the Corps had made an appalling series of "material errors" citing "miscalculations, invalid assumptions, and reliance upon outdated information" that led the Corps to overestimate benefits by more than 200 percent.

Dozens of other examples of problematic and controversial projects could also be cited that together account for billions more dollars in wasteful spending.

A key way to restore some credibility to the Corps' project planning process is to implement a system of independent peer review for costly and controversial projects. A workable and faithful independent peer review process should include the following elements:

- True independence from the Corps we suggest locating the Director of Independent Review in the Office of the Army Inspector General.

- Integration into the existing public comment period so as not to unnecessarily delay completion of project studies.
- Capped review costs at \$250,000 or no more than half of 1 percent of total project costs for more expensive projects.

The need for independent review has now been endorsed by the National Academy of Sciences, the General Accounting Office, President Bush and many Members of Congress, and dozens of public interest groups across the Nation.

RESTORING INTEGRITY TO THE AUTHORIZATION PROCESS

There are growing external pressures placed on the Corps to green-light projects lacking true economic justification. Congress will “contingently authorize” a project based upon a favorable finding by the Corps prior to the necessary feasibility studies being completed. There is a correlation between contingent authorizations and later findings that a project study had been poorly conducted on an unjustified project. For example, two of the projects listed earlier in this testimony, the Columbia River deepening project and C&D Canal deepening project in Eastern Maryland, were both contingent authorizations.

The Smith-Feingold-McCain reform bill would address this problem by allowing Senators to raise a point of order when controversial projects are included in authorizing legislation without the Corps first completing the mandatory feasibility studies and approval from the Chief of Engineers. S. 1987 would take significant steps toward restoring integrity to the authorization process.

We are also very concerned that there are efforts underway to seek a contingent authorization of the billion-dollar Upper Mississippi and Illinois Rivers lock expansion project in the hopes of beginning Pre-construction, Engineering, and Design. The Corps has only prepared an Interim Report introducing various scenarios, but has still not done any in-depth re-evaluation of alternatives that would lead to a recommendation to Congress.

One of the best arguments for not proceeding with authorization of any Upper Mississippi navigation project in this WRDA comes from the Inland Waterways Users Board themselves, an industry advisory committee for the Army Corps of Engineers. A construction schedule for inland waterways projects posted on its website lists the Upper Mississippi lock expansion as not being able to start construction until 2020—and this is the optimistic scenario. A limiting factor is that despite a current surplus in the Inland Waterways Trust Fund, so many waterways expansion projects are being sought by the navigation industry that the pace of construction will be limited by the availability of money from this fund, which is generated from a tax on diesel fuel used for barges.

NEED FOR CLEAR PRIORITIES

Contingent authorizations have contributed to a ballooning construction backlog that is now \$52 billion. Even with increased construction budgets, it will still take the Corps more than 25 years to build all of these projects.

Each year when the President’s budget is introduced, Senators inevitably complain that projects in their state did not receive “full” funding and consequently benefits are delayed and project completion costs increase. This is a result of too many projects competing for a limited amount of resources. Under the current funding process, bad projects are just as likely to receive funding as good projects.

This enormous backlog is partly due to the Corps having provided bad information to Congress upon which it authorized a project, as well as Members of Congress seeking authorization despite Corps data pointing out serious problems with the project.

Recently, Taxpayers for Common Sense conducted an analysis of the backlog that has made available to the public. Detailed information is easily accessible to the public on the 285 projects, for which the President has requested funding and submitted a Budget Justification Statement to Congress. This amounts to only \$28 billion worth of the construction backlog. We urge Congress in this year’s WRDA to require the Corps to make the full backlog available to the public, accompanied by, at a minimum, the same detailed information included in Budget Justification Statements.

TCS’ analysis found that the median project was only 24 percent constructed. In fact, 25 projects authorized in 1986 are still less than half-complete. These alone account for \$2.4 billion of the backlog. An additional 39 projects representing \$4.3 billion of the backlog have benefit-to-cost ratios of less than 1.5, and are less than half-complete.

The backlog slows down the construction of all projects, whether they are good or bad. Just as the Base Realignment and Closure (BRAC) process was a tough pill

to swallow but nonetheless one that will improve the health of our nation's military forces, Congress needs to institute a project-blind process for deauthorizing outdated, marginal, and unnecessary projects that have yet to be constructed. Deauthorizing these low-priority projects will enable funds to be focused on legitimate projects that provide large benefits to the public at a low relative cost.

The Smith-Feingold-McCain bill proposes two simple improvements to an existing automatic deauthorization process that would significantly help break the backlog. First, S. 1987 would shorten the amount of time in which a project must receive funds for construction in order to continue to be authorized. Currently, a project must receive funds at least once every nine and a half years. S. 1987 would reduce the timeline to 5 years for newly authorized projects and 3 years to projects that have already received some construction funds.

Second, S. 1987 would require that construction funds actually be used on physical construction to re-set the clock, as opposed to planning, design, or re-evaluation studies. There are dozens of projects that have been kept on life support while tens of millions of taxpayer dollars are wasted having the Corps perform repetitive studies in a futile attempt to resolve major controversies.

In the case of the \$108 million Oregon Inlet Jetties proposed for the Outer Banks, the Corps has been continuously "studying" the viability of the project for more than 30 years. Yet through all those years, a half dozen separate independent reviews by notable economists and scientists have determined the Corps is incapable of finding a way to design a cost-effective and scientifically sound project. In the coming months, we believe a forthcoming General Accounting Office report will add to the already overwhelming evidence supporting the case that the Oregon Inlet Jetties are an immense boondoggle.

These two simple reforms would put more pressure on Congress to weed out bad projects and speed up construction of good projects. In fact, President Bush's proposed FY03 budget request follows this same logic by focusing much of the Corps construction budget on completing 30 major projects. While certainly not a perfect budget, the Bush Administration has recognized the need for priorities and reining in the Corps much more seriously to date than Congress.

MISSION CREEP

A more recent, but growing, pressure on the backlog is "mission creep" within the Corps of Engineers. The Corps has three congressionally mandated primary missions: navigation, flood damage reduction, and environmental protection. Other activities such as hydropower, recreation management, and water supply are permitted when associated with a multi-purpose project. However, the Corps has sought and Congress has authorized to extend its tentacles into irrigation, municipal water supply, wastewater treatment, and even construction of public schools. Each of these areas has traditionally been carried out by the private sector or through other government programs.

The Corps does not have extensive experience in cross-basin water transfer projects, for example, but is seeking to build more than a billion dollars worth of pump and distribution infrastructure in Eastern Arkansas to assist rice irrigation. A lack of experience led the Corps to only look at structural solutions to long-term groundwater depletion concerns. After the release of the Corps' initial design for the \$319 million Grand Prairie Area demonstration plan, hundreds of farmers—the very people the Corps was trying to help withheld support for the project because they prefer cheaper and more effective non-structural conservation alternatives that would minimize water taxes slated to be assessed on them to pay for the project.

In the case of municipal water supply and wastewater treatment, or what has also been called "environmental infrastructure", Corps involvement in these projects is a redundant—and wasteful—substitute for the Environmental Protection Agency's Drinking Water and Clean Water State Revolving Funds. The only difference is that projects obtained through the Corps effectively receive grants as opposed to loans, and the allocation of funds to projects under the Corps budget is driven almost exclusively by politics.

In Los Angeles and Washington, DC, the Corps has entered into billion dollar and hundred million dollar contracts, respectively, to build and renovate public schools. But they have done a poor job at that too, while at the same time crowding out construction management firms in the private sector that could have performed the work faster and at less cost.

President Bush has sought to limit mission creep by not requesting funds for these types of projects. His fiscal 2003 budget request outlines the impacts of "mission creep":

Congress periodically directs the Corps to work in other areas that duplicate existing Federal programs or are activities that should be carried out by non-Federal interests. This “mission creep” diverts the Corps from its primary business lines, slows down completion of higher priority construction projects, and postpones the benefits that completing these projects would bring.

The reform to check mission creep is simple: deauthorize all of the unconstructed irrigation, municipal water supply and wastewater projects, and stop the Corps from entering into contracts with local school districts to build schools.

OUTDATED PROJECTS

The Corps of Engineers’ recently announced that it would pause more than 150 authorized projects in order to “resolve questions” over the “accuracy and currency of economic analyses, the validity of plan formulation decisions, and the rigor of the review process.” This was a significant acknowledgement that the agency too often relies upon outdated economic information, as well as other problems with the project planning process.

For example, the Delaware River deepening project was justified in 1992 primarily upon projections of increased oil imports and scrap metal exports. However, we now have the benefit of 10 years of actual data, which reveals that the Corps predictions were overly optimistic. None of the area refineries have significantly increased their oil imports, mostly because they have not, nor plan to, make any expansion of plant capacity in order to avoid having to install expensive pollution control technology if they did expand. By 2000, scrap metal was no longer being exported from the Port of Philadelphia because the former Soviet states replaced the U.S. as the main provider of scrap to Turkey.

Both of these trends were apparent during the early and mid-1990’s, but the Corps never updated its project studies to reflect these real world market changes, even though they did revise cost estimates downward during that time. In fact, the Corps continually denied the economic reality of the project and continually sought construction funds for this project despite knowing its benefits analysis was woefully out of date. Only after the General Accounting Office examined the project has the Corps acknowledged these errors and sought to update their feasibility report.

Although we hoped the Corps “pause” represented a real effort to change the way the agency did business, the Corps did not follow through with an honest evaluation of the 150 projects. In fact, only eight projects will be subjected to further analysis. Although the Corps cited that dozens of projects were already undergoing further re-evaluation before the launch of the nationwide review, the Corps failed to correct its studies on dozens of other boondoggle projects like the Dallas Floodway and Grand Prairie irrigation projects.

The Corps’ review fiasco is yet another indication the agency is incapable of reforming itself and that real reform must be passed into law this year by Congress.

MODERNIZING THE PROJECT PLANNING PROCESS

The Smith-Feingold-McCain bill would also require the Corps to work with the National Academy of Sciences in modernizing the planning guidelines. For example, the guidelines should be updated to ensure full accounting of costs of projects—including adverse economic impacts to other interests—incorporating new techniques in risk and uncertainty analysis, eliminating biases and disincentives for non-structural flood damage reduction projects, incorporate new analytical techniques, and ensuring projects are justified upon benefits to the public interest rather than a few private firms or individuals.

A full revision of the Corps planning guidelines was recommended by the National Academy of Sciences itself in a 1999 report on the Corps’ project planning process. The Principles and Guidelines, the Corps planning documents, was last updated in 1983, and with the exception of a few minor revisions, has basically been frozen in time for nearly two decades.

Many of the Corps’ problems stem from an increasingly obsolete planning process that was developed at a time when water projects were seen as more of a job creation program than a national investment.

Our Nation and thinking certainly have changed since the New Deal Era, but the Corps still relies on the 1936 Flood Control Act’s standards to call a billion dollar project economically justified if the benefits outweigh the costs by even one dollar. No business would ever make an investment knowing that they would get no return on their dollar, and we deserve no less from our investment of tax dollars.

The Smith-Feingold-McCain bill’s proposal to require project benefits be 1.5 times the total estimated costs in order to qualify as economically justified makes strong fiscal sense, by ensuring at least a modicum of a return to the Federal taxpayer.

An additional benefit is that this reform will help break the backlog by deauthorizing marginal projects that have yet to start construction.

Another problem with the Corps is that it studies and plans projects in a vacuum. The Corps assumes there are no budget or other constraints when developing a construction schedule. For example, the Corps benefit-cost analysis for the \$420 million Delaware River deepening project, anticipated construction over a 4-year period. There was virtually no chance of this ever happening, as the project would have to receive more than \$90 million—5 percent of the agency's overall construction budget—each year for four straight years. The actual construction appropriations for the project have not exceeded \$20 million—with none of those funds ever being spent on actual construction—but by optimistically scheduling construction over only 4 years, the Corps was able to reduce estimated costs by maximizing scales of efficiency. In fact, this problem was cited by the General Accounting Office as another factor that led the Corps to overestimate the true benefits of the project.

Although being able to construct large-scale projects quickly is ideal and preferred because it minimizes construction costs while quickly returning benefits to taxpayers. However, such scheduling does not reflect the harsh reality of a massive backlog and growing budget constraints. S. 1987 requires the Corps to devise more realistic construction schedules for projects and reflect the impacts on project costs.

The Corps' tunnel vision is also apparent in its planning of port development projects. Currently, there is a "race to the bottom" amongst major U.S. ports, including 12 major Corps deepening projects along the East Coast that together will cost taxpayers \$2.4 billion to complete. This phenomenon is stoked by a shift amongst the shipping lines to larger and deeper-draft container ships and a fear among ports that they may be left behind.

The problem is that few of these ports will be successful in alluring these larger ships to their docks. With significant deregulation of the shipping industry in the 1990's and other factors, shipping lines have consolidated and begun to rely more heavily upon hub ports like New York/New Jersey Harbor and the Ports of Los Angeles and Long Beach. The result is these larger ships will carry more cargo, but to fewer ports. Medium-sized ports are poised to become feeder ports in this system, similar to the way the airport network has evolved. These ports will also find advantages in specializing in niche cargos, like the Port of Wilmington, Delaware's successful makeover into one of the nation's premier ports for refrigerated produce.

Certain ports like those in New York and Los Angeles are logical choices for hubs due to the tens of millions of consumers within a relatively few miles of the piers. Other ports have natural advantages like the Port of Seattle that requires very little dredging to maintain its deep berths, or Hampton Roads, Virginia, which already is maintained at a deep draft and is well positioned only a few miles from the Atlantic Ocean.

On the other hand, the Ports of Philadelphia and Portland, Oregon are more than 100 miles inland, and the cost of maintaining deep access channels is inherently expensive. Furthermore, it is more difficult and much slower to navigate up 100 hundred miles of a restricted channel, consequently it takes much longer for ships to traverse those rivers to deliver their goods than it would to a port near the open ocean.

The Corps continues to pursue many more deepening projects than the Nation needs. This is because the Corps evaluates a particular deepening project without any consideration of potential adverse economic affect upon its competitor ports. These studies do not take into account the potential impacts of other nearby port development projects in the works, but not yet completed, that can affect the ability of the port under study to ultimately attract more ships.

Also, the Corps expertise and mandate generally limit it to only consider deepening a port's access channels when studying port improvements. However, a port's depth is only one of many factors that determine its competitiveness. The amount of dockside land available to store containers, intermodal connections to rail and highways, crane equipment, labor conditions, geography and many other factors are just as important.

On April 15, the Alameda Corridor project opened, connecting the Ports of Los Angeles and Long Beach to downtown L.A.'s rail and highway nexus, 20 miles inland. The \$2.4 billion collaborative project was on time, on budget, had almost no public opposition, and used only a moderate amount of Federal funds—22 percent of the total cost plus a \$400 million loan. The loan and the rest of the costs of the project are being borne by the ports, Los Angeles County, and revenue bonds to be paid off over time by a \$15 user fee on each loaded container that uses the corridor.

Port experts are predicting that the efficiencies gained from the corridor by facilitating the quick transfer of containers from ships to the highways and rail lines leading out of L.A. will solidify Los Angeles and Long Beach's position as the Nation

top two ports for decades to come. Transportation Secretary Norman Mineta at the corridor dedication ceremony called the project, "a powerful example of what we want to encourage" throughout the country.

We urge Congress to require the Corps to institute rational port planning to consider what investments are in the best national interest on a regional basis. In fact, the Department of Transportation is already ahead of the Corps on this issue, and is currently funding a project at the University of Rhode Island Transportation Center to develop a comprehensive framework for sustainable container port development.

S. 1987 would require the Corps to work with the National Academy of Sciences in revising its project planning guidelines include rational port planning. Unfortunately, in recent years some port interests have pushed for increasing the Federal subsidy of dredging ports deeper than 45-feet from 40 percent to 65 percent. If such a change were applied to the New York/New Jersey Harbor project to deepen to 50-feet, taxpayers would be fleeced for more than \$375 million. There is no need for the U.S. to subsidize port overcapacity through the dredging of dozens of ports past 45-feet. A few select ports with depths of 45-feet or more can serve the whole Nation well as hubs.

We strongly urge Congress to reject any attempt this year to increase the Federal subsidy for dredging deep draft ports past 45-feet.

ENSURING EVERYONE PAYS THEIR FAIR SHARE

Weeding out wasteful water projects through a streamlined deauthorization process, holding the Corps more accountable and modernizing the planning process are all effective ways to ensure the best water projects get built. Cost sharing is another tool for breaking the backlog. Forcing beneficiaries to pay their fair share, can be used to reduce the budget, freeing up Federal resources to speed up construction of good projects, and provides incentives for good local policies that also further reduce Federal disaster bailouts.

In 1995, Dr. Robert P. Inman of the Wharton School of Business published a study on the effects of cost sharing for Corps of Engineers water projects, "Changing the Price of Pork." The study examined the Water Resources Development Act of 1986 and the unique situation where Members of Congress and their constituents had an opportunity to seek smaller-scale, more efficient projects once it became apparent that cost-sharing rules were going to be adopted in the legislation. The Inman study found that the cost-sharing rules of 1986 saved Federal taxpayers more than \$3 billion, or a 48 percent savings of what taxpayers would have otherwise paid for projects in the bill. The financial effect on local communities was marginal, a 12 percent increase of what they otherwise would have paid, even though they were paying a significantly greater share of the cost. The reason the increased costs for local communities was minimal is that they chose smarter and more efficient projects that met only their true water resource development needs.

The cost sharing reforms of WRDA 1986, championed by President Reagan, ushered in a new era that sought to instill market-based economics into water development project planning. It marked a significant evolution from the New Deal era thinking of building projects to simply put people to work regardless of whether the project had any lasting benefits.

The cost sharing reforms of the Smith-Feingold-McCain bill seeks to build upon the Reagan reforms. The guiding principle behind S. 1987's cost share formula changes is that the greater the proportion of benefits that are local in nature the greater the financial responsibility of the local sponsor. The Inman study also endorsed this principle.

Specifically, S. 1987 implements tiered cost sharing for operations and maintenance of inland waterways, reduces the Federal subsidy for flood damage reduction projects to 50 percent, and reduces the Federal subsidy for beach building projects to 35 percent.

According to the Corps of Engineers, the Inland Waterways System currently has a maintenance backlog of \$350 million. However, each year 30 percent of the inland waterways maintenance budget is spent on underused waterways that carry only 2.3 percent of the system's cargo. Eliminating the huge Federal subsidy of the most wasteful waterways and requiring a 25 percent cost share contribution from non-Federal interests for other low use waterways could free up tens of millions of dollars each year to reduce the maintenance backlog on the nation's workhorse rivers, like the Ohio and Mississippi.

The effect of eliminating subsidies for the handful of waterways would be minimal. For example, if the Corps were to stop dredging the Apalachicola River in Florida's Panhandle, only three-dozen barges a year would be affected. On average only

one barge every 10 days floats down the Apalachicola at more than the river's natural depth. Yet, recent annual Federal appropriations for this waterway have been \$12 million.

Despite the Corps of Engineers having spent more than \$120 billion on flood control projects over the last five decades, annual flood damages continue to increase. This trend was cited in the Interagency Floodplain Management Review Committee or Galloway Report on the Midwest floods of 1993, which recommended a new course for the Nation to implement policies that discourage further or more intensive development within floodplains. A 1998 report by the National Wildlife Federation, *Higher Ground*, illustrates the double, triple, and even quadruple subsidies from the Federal Government as a result of a series of uncoordinated policies.

Corps of Engineers subsidized construction of large structural projects encourages further development of floodplains by making people feel safe to live closer to the river. Inevitably, there will be the big flood, which then usually brings flood insurance claims and Federal Emergency Management Agency disaster assistance. And as *Higher Ground* documented, there are tens of thousands of homes that have repeatedly flooded and received checks from the Federal Government to rebuild within the floodplain.

Reducing the Federal subsidy of Corps of Engineers flood damage reduction projects from 65 percent to 50 percent can help break this cycle of subsidies and encourage smarter flood damage reduction options like non-structural flood-proofing of moderate risk homes and voluntary buyouts of homes located within high risk flood zones.

Beach building projects are another example where the beneficiaries are easily identified and are very local in nature, the people who visit the beach, the people who live along the beach, and the people who own second homes along the beach and rent them out. In fact, beneficiaries of beach projects tend to be the most affluent beneficiaries of any Corps subsidy.

For example, roughly one-third of America's 74 wealthiest beach towns are beneficiaries of a Corps beach building project. Palm Beach County, Florida is receiving a \$2 million reimbursement from Federal taxpayers this year for sand that was pumped in front of very wealthy homes, including those in Gulf Stream where the median home value is \$1.5 million. All the beaches in the Hamptons of New York have been maintained by Federal sand subsidies.

During the 106th Congress, a provision was snuck into WRDA 2000 approving the world's most expensive beach project, \$1.8 billion for Nags Head, Kitty Hawk, and Kill Devil Hills in North Carolina's Outer Banks. This 15-mile stretch of beach is one of the most highly eroding beaches along all of the Atlantic Coast. To compensate, the Corps will have to rebuild one-third of the beach every year repeatedly for the next 50 years. A cursory glance at any of the websites for the many real estate brokers in this booming county will turn up a half-dozen or more listings for \$1 million beachfront homes for sale. The going rate for beach house rentals during the peak summer season is \$4,000 to \$8,000 a week. Obviously, these towns are not poor by any means.

Federal subsidy for beach projects is a relatively recent phenomenon. Federal subsidies for sand pumping projects were not very common before the 1980's, but in the last 3 years these projects have been consuming a rapidly increasing amount of the Corps' construction budget. Many towns nourish beaches on their own without Federal assistance, using hotel occupancy taxes or property taxes assessed on a home's proximity to the beach. The State of Florida recently established an annual beach building fund.

Between the wealth of the beneficiaries and the proven alternative local revenue raising mechanisms, reducing the Federal beach subsidy to 35 percent is common sense. Such a policy change will also discourage the more intensive development of high-risk coastal areas, which would in turn reduce Federal flood insurance bailouts following hurricanes. Some states have sought to limit development of high-risk areas with only limited success. Despite zoning regulations in Florida that establish a "line of control" beyond which developers cannot build seaward, the state has issued developers more than 400 permit waivers in the last several years.

Many of these same points are made in a White House Office of Management and Budget memo to the Corps, which is very critical of a draft agency report that attempts to determine an optimal cost sharing formula for beach projects. We have included this OMB memo as an attachment to this testimony.

Ultimately, beach erosion only becomes a problem when there are homes on the beach. Beaches naturally migrate, and they will always exist. It is just a matter of where the beach is and if it is in front of your house or rental house. Federal policies, including cost sharing for beach nourishment, ought to discourage irresponsible development in high-risk zones.

EFFECT ON DISADVANTAGED COMMUNITIES

Some have concerns over whether cost sharing and even other reforms could negatively affect underprivileged communities. However, most likely the reforms in the Smith-Feingold-McCain bill would be a net benefit to poor and minority communities.

In the case of cost sharing reforms, Section 103(m) of the Water Resources Development Act of 1986 allows for cost sharing reductions on flood damage reduction projects down to as little as 5 percent for qualifying poor communities. In WRDA 2000, Congress extended the ability to pay rules to all Corps projects and directed the Corps to rewrite the qualifying rules and formulas. The Corps has not completed revision of these rules, and concerns regarding the impact of cost sharing upon financially strapped communities are best addressed through that process.

A significant benefit to disadvantaged communities and all stakeholders are the reforms in S. 1987 that call for greater public involvement in the project planning process, inclusion of adverse economic impacts of a project on a community in the benefit-to-cost analysis. Additionally, independent peer review would ensure that the voices of all communities are better heard and listened to by the Corps.

One of the worst cases of the Corps failing to take into account a project's effect on a poor, minority community is the \$715 million Inner Harbor Navigation Canal in New Orleans. This project lacks economic justification. In addition, there is evidence that the Corps used Enron-style accounting and cost-apportionment to add on a hundreds of million dollar deepening element of the project, to benefit just one shipyard.

This lock replacement and canal-deepening project was first authorized in 1956 and has been vigorously fought by the surrounding poor African-American neighborhoods ever since. Concern over the Corps' ignorance of the local residents in planning the project came to a head in 1991, when Congress directed the Corps to create a stakeholder advisory committee composed of local citizens from affected neighborhoods and to establish a mitigation fund to compensate those in the neighborhood who would have to suffer the extremely disruptive effects of seven straight years of construction.

However, despite this congressional directive, the Corps has in many ways treated the local residents even worse by hiding critical facts from them about various aspects of the project.

In an off-hand remark to residents at a public meeting about the project, a Corps engineer mentioned that the canal was going to be dredged to 40-ft. The plan Congress approved only included designs for a 36-ft deep lock. Testing has shown that between 36 and 40-ft levels there are tons of toxic sediments, which now will be flushed out to Lake Pontchartrain, a popular swimming area for the children of the nearby neighborhoods. This additional dredging would also add tens of millions or more costs to the project to only accommodate a handful of additional ships.

The Corps also claimed for years that the project would actually reduce traffic congestion at the bridges that cross the canal because barges and ships would be able to move through the new lock faster. After close examination of the Corps' plans, a local retired engineer discovered that the construction process would frequently cause several mile long backups for 45 minutes or more each day, creating a traffic nightmare for thousands of commuters trying to get to their jobs in the heart of New Orleans. Only recently at a public meeting did the Corps acknowledge that these traffic problems would be created and now pledge to investigate solutions. New solutions that could add another hundred million dollars or more to the cost of this already unjustified, over-budget project.

There are dozens of other cases where the Corps has ill-treated or just flat out ignored citizens who are not considered their project "clients" such as:

- The poor African-American Cadillac Heights neighborhood of Dallas, which prefers a non-structural flood control alternative. The Corps' plan is designed specifically to accommodate new toll highways inside existing levees that would actually reduce the flood capacity of the river channel;
- Rice farmers on the Grand Prairie of Arkansas who are being forced to swallow higher taxes and a gold-plated project just to get the smaller-scale on farm assistance that they really desire;
- Crab fishermen who are the greatest economic engine of struggling Clatsop County, Oregon and Pacific County, Washington whose fishery will be at risk from the Corps' plan to dump tens of millions tons of dredged material onto their fishing grounds.

TIME FOR CHANGE

The Corps of Engineers has a vast influence over our nation's waters, and its work affects millions of Americans. Many projects have had a positive effect, protecting countless lives from floods and bringing the fruits of midwestern farmers' labor to the rest of the world. But there are also many projects that have had a significant negative effect on people's lives, have harmed other industries and users of the nation's waters who are not the Corps' traditional "clients", and most outrageously squandered taxpayer dollars on these activities.

At the root of so many of the agency's problems is the belief that the local sponsor of a project is Corps' sole client. What agency officials lose sight of when they promote a wasteful project is that the Federal taxpayer is the primary client, and the majority shareholder of virtually all Corps projects.

The Army Inspector General went out of his way to highlight these concerns in his December 2000 report on the Upper Mississippi River project scandal:

Although this investigation focused on one study, the testimony and evidence presented strong indications that institutional bias might extend throughout the Corps. Advocacy, growth, the customer service model, and the Corps reliance on external funding combined to create an atmosphere where objectivity in its analysis was placed in jeopardy. The overall impression conveyed by testimony of Corps employees was that some of them had no confidence in the integrity of the Corps study process.

The Corps has certain expertise and resources that can greatly assist local communities in building something they would not be able to do on their own. But the agency is accountable to the Nation as a whole, and its mandate is to pursue a civil works program that will benefit the overall national economy and welfare of its citizens.

Unfortunately, the Corps has failed to remember that it serves the American taxpayer. Therefore, it is imperative upon Congress to enact real Corps reform this year. In fact, no Water Resources Development Act should pass without reform. At risk is the public's confidence in the Army Corps of Engineers and any hope that Congress can restrain itself from ever-escalating pork barrel spending, even in the midst of the a very expensive and important war on terrorism.

TAXPAYERS FOR COMMON SENSE

THE CONSTRUCTION BACKLOG

Taxpayers for Common Sense performed a detailed analysis of 285 projects in the U.S. Army Corps of Engineers' "Known Active Construction Backlog" based upon a review of the FY02 Budget Justification Statements submitted to Congress by the Corps in support of the President's budget request.¹ The full construction backlog is currently \$52 billion.²

CONSTRUCTION DELAY

- There are 285 projects in the known active construction backlog—those projects that are funded in the Construction General account of the President's budget request—which still require \$28.1 billion to complete.
- The typical project in the known active construction backlog is only 24 percent complete (based on median rate of completion).
- 190 projects in the known active construction backlog are less than 50 percent complete and will require \$22.3 billion more of taxpayer funds to complete.

PROJECTS WITH A BENEFIT-TO-COST RATIO OF LESS THAN 1.5 TO 1.0

- 60 projects—representing \$4.6 billion of the known active construction backlog—provide a low economic return compared to taxpayer investment.

¹Projects by the Corps' Northwestern Division were not included in this analysis because Budget Justification Statements for this division were not available on the Internet.

²Based upon \$28 billion of the known active construction backlog (those projects listed in the Corps' FY02 Budget Justification Statements, not including the Northwestern Division), \$8 billion of inactive projects (those that even the Corps has determined are no longer economically justified, are no longer in the Federal interest, or are no longer supported by a local sponsor), approximately \$16 billion in additional projects that have been authorized by Congress and projects in the Pre-construction Engineering and Design (PED) phase.

- 39 of these projects (\$4.3 billion remaining balance) are less than 50 percent completed, with the typical project being 24 percent complete (based on median rate of completion).
- The Dare County Beach replacement project will cost \$1.8 billion to maintain 15 miles of wide beach in front of four booming beach towns for the next 50 years. The Corps has estimated only a 27 percent return in net benefits (1.27 to 1.0 benefit-to-cost ratio), despite much uncertainty about the cost and ability of the beach to hold the sand for very long.

PROJECTS WITH OUTDATED ECONOMIC ANALYSES

- 61 projects—representing \$8.1 billion of the known active construction backlog—whose most recent economic analyses upon which the project was approved is ten or more years old.
- 30 of these projects (\$4.4 billion remaining balance) are less than 50 percent completed
- The Corps has been relying upon a 1974 economic analysis as the basis for claiming justification for the \$207 million Yazoo Backwater Pumping Plant, which is still only 5 percent constructed.

STATUS OF PROJECTS AUTHORIZED IN THE WATER RESOURCES DEVELOPMENT
ACT OF 1986

- 44 projects—representing \$4 billion of the known active construction backlog—were authorized 16 years ago, however, the typical project is still only 39 percent completed.
- 25 of these projects (\$2.4 billion remaining balance) are less than 50 percent completed.

INLAND WATERWAYS BACKLOG

- Completing the 25 high-priority projects as identified by the 2001 Inland Waterways Users Board Annual Report plus an estimated \$60 million in annual major rehabilitation costs for renovating the 37 locks and dams on the Upper Mississippi and Illinois Rivers will cost \$7 billion over the next 20 years.
- With annual revenues of only \$100 million and a current \$400 million surplus, there still will be a \$1.1 billion shortfall for the Inland Waterways Trust Fund's (generated from a \$0.20 per gallon barge fuel tax) share of the inland waterways backlog.

BEACH REPLACEMENT PROJECTS

- In recent years the Administration has budgeted a modest amount for sand pumping projects only to see Congress dramatically increase funding for beaches. In the last 3 years, beach funding has increased 60 percent while the overall Corps budget increased 9 percent.
- 35 projects—representing \$6.3 billion of the known active construction backlog—were budgeted for in President Bush's Fiscal Year 2002 Budget.
- Congress subsequently funded a total of 58 beach projects for construction and 48 studies of new beach projects, which if all are continued through to completion over the next several decades would cost taxpayers well over \$10 billion.

THE DISTRIBUTION OF SHORE PROTECTION BENEFITS, DRAFT ARMY CORPS OF ENGINEERS REPORT, NOVEMBER 2001, COMMENTS OF THE OFFICE OF MANAGEMENT AND BUDGET

BASIC ASSUMPTIONS

The analysis of the hypothetical scenario in the draft report relies upon two key assumptions that lead to a substantial understatement of the benefits that accrue locally.

It uses an inappropriate measure—the place of principal residence of the people who own local property or who use the beach—to allocate the benefits of a project to the “beach region” (local) or to the “rest of the nation” (national). The issue here is not who benefits, but whether the way in which the benefits accrue enable the State or local authorities to support a non-Federal cost-share. That depends largely upon where the benefits will occur, not on where the people who receive the benefits reside most of the year.

Although the report views some national and some regional economic development benefits as local, it limits the local area to the county or counties in which the shore protection project physically is located. Coastal States typically pay much of the non-Federal costs of these projects. e.g., between 50 percent and 100 percent in the five States that the Corps surveyed. Therefore, we believe the report should have viewed as local all benefits that flow to any resident or business in the State or should have attempted, at a minimum, to estimate the benefits that accrue in-State beyond the county line. Instead, it simply includes them on the national side of the ledger.

STORM DAMAGE REDUCTION

All storm damage reduction effects redound to the benefit of the local community. By reducing damages to structures and their contents and to local infrastructure, a shore protection project raises local property values compared to the "without project" condition. Since real property is a fixed asset, most of this added value remains within the reach of local authorities and augments their ability to contribute towards the project's construction costs, for example, through property or occupancy taxes. It does not matter that some property owners may reside elsewhere. The project reduces storm damages only locally, for those who live elsewhere, it reduces damages to their second home, rental property, or business; its contents; and the surrounding land.

RECREATION

Shore protection projects that support recreation can add significantly to the ability of the State and local sponsor to contribute to the costs of construction. The analysis of the hypothetical scenario in the report underestimates these local benefits in several ways:

In limiting the beach region to the county, the report understates the local component of the regional economic development benefits. The people who travel farther to reach the beach are more likely to stay overnight nearby in a hotel or rental unit and to spend money when they get there. Their beach-trip spending beyond the county line is likely to occur mostly in-State, but the report allocates the associated benefits to the "rest of the nation."

Although spending by foreign tourists in the coastal State is new spending from a national perspective, the added value that it contributes to the national economy primarily benefits the local coastal community and the State.

The intangibles, subjective value of the beach experience generally exceeds the financial costs that beach users incur. For beach users who live within the State either part-time or full-time, all of this consumer surplus is local.

The State or local authorities can access only a part of this consumer surplus via a user fee without significantly affecting overall tourist spending. Since the amount that they could so collect from out-of-State and foreign visitors is potentially available to help pay for the project, it is a local benefit as well.

The report treats the Federal tax revenue from spending in the beach region as a benefit that occurs outside the beach region. However, the net effect of a project on Treasury receipts probably is insignificant. In the absence of the project, it is likely that: (1) spending by recreation users (perhaps elsewhere) would generate a similar level of tax revenue and (2) the alternative Federal investment (same amount spent elsewhere) would produce a comparable level of tax revenue.

PUBLIC FINANCE CAPABILITIES

The draft report does not sufficiently explore a complex question that is central to determining an appropriate non-Federal cost-share. To what extent will the predicted benefits of a shore protection project occur within the reach of local or State authorities and therefore potentially be available to support a non-Federal cost-share?

The draft report assumes that local authorities can support a portion of the project's costs only through belt tightening or by developing an additional source of recreation-based revenue. However, a shore protection project chiefly benefits homes and businesses in the local coastal community. By preserving existing property value and facilitating further coastal development in that community, a project in effect augments the long-term local tax base. The draft report did not examine the extent to which this effect of a project on private property values, under a range of property tax rates that now prevail, contributes to the revenues that coastal communities now are collecting.

The report also should have examined the option of charging existing users of the beach a fee or a higher fee. It focuses only on the ability of local authorities to raise additional funds from new visitors or a sales tax increase.

In calculating the fiscal capability of State and local interests, the report also makes two significant computational errors:

It does not represent the stream of payments property. Beach replenishment occurs periodically over a project's lifetime. The report assumes the local sponsor would issue a bond at the outset of a project that is large enough to pay all future costs up front, years and decades before much of the work actually will occur.

It also overestimates the up-front sum that non-Federal interests would need to borrow when it multiplies average annual costs by 50. The amount that a local sponsor would borrow is equivalent to the principal of the loan; average annual costs include both the principal and a substantial interest component.

ENVIRONMENTAL IMPACTS

According to the draft report, shore protection projects can benefit species that use the beach such as shorebirds, but cause short-term damage to habitat in the marine subtidal zone. The draft report does not try to assess the relevance, if any, of these benefits to possible changes to the cost-sharing formula.

Project opponents claim that shore protection projects also can lead to more serious long-term impacts, e.g., to fishery habitat areas of particular concern, new estuaries, and in shallow areas that are less subject to littoral drift such as a bay. By facilitating the further development of certain coastal communities and adjacent areas, projects may have other adverse environmental impacts as well. Since the early 1970s, the Corps has recommended dozens of projects that involve periodic beach replenishment, covering major stretches of the New Jersey, Florida, and North Carolina coastlines and significant segments in a few other States. It is involved in a multi-year effort to monitor the biological impact of six projects in New Jersey, but has not examined the cumulative environmental impacts of: (1) the Corps program as a whole; (2) the many other such projects that local authorities and States now fund on their own; and (3) related Federal disaster relief and Federal flood insurance efforts that affect coastal development. The draft report does not address such concerns.

STATEMENT OF G. EDWARD DICKEY, PH.D.

Mr. Chairman, members of the Committee, I appreciate this opportunity to present my views on how Congress can improve the Army's Civil Works Program executed by the Corps of Engineers. My remarks draw upon my two decades of experience in policy development and implementation in the Office of Assistant Secretary for Civil Works, my years as Chief of Planning for the Corps of Engineers, and my education as an economist. Having worked many years with many fine professional and dedicated people in the Corps, both civilian and military, I know first hand of their capabilities and their desire to be responsive to the values and priorities of the public as expressed in law and executive branch policy.

Water resources are indeed precious and warrant careful management. Water is not only a vital factor in human activities, it obviously also profoundly influences the environment. These influences are realized through complex physical, chemical and biological processes that also support our economic well being. The Civil Works Program is the major mechanism for the Federal Government to make investment and management decisions regarding use of the Nation's water resources. As a result of past investments, we have a valuable legacy of facilities that allows us to manage and redirect those resources in the interest of human welfare. These facilities must be periodically modernized and their operations modified to respond more fully to current demands including those of natural ecological systems. In addition, construction of new facilities can both add to our nation's productivity and restore damaged natural ecosystems.

If Civil Works projects are a vital governmental responsibility, why has it been increasingly difficult for the program to compete for budgetary resources? In my view, the answer is simple; not all proposed projects are equally meritorious. Some are unproductive; that is, they would not produce benefits commensurate with their economic and environmental costs. Past policies and practices have not resulted in a uniform inventory of compelling investments, and available funds are not always applied to the best projects. The tools are available to change the situation. Congress and the Nation can have the full benefit of the Army Corps of Engineers unique and indispensable ability to plan and implement the development, management and restoration of our nation's water resources.

Congress needs to provide a consistent and unambiguous policy framework and allow the executive branch to develop recommendations to Congress within that framework. The Corps is a highly responsive agency; it will bring the full power of its expertise to solve problems in a more productive way if that is what the Congress directs. New authorizing legislation is the means for Congress to provide a new and clear direction and to remove the vestiges of earlier generic and project-specific accommodations of special interests which have so powerfully shaped the program in the past and which now limit its ability to compete for budgetary resources.

My statement addresses three policy elements, which, if incorporated into legislation, would produce a total package of changes necessary for the effective redirection of the program. They are (1) the project planning and decisionmaking process; (2) project cost sharing; and (3) Corps organization to maximize professional capabilities. Congress and the President must work together to achieve success in modernizing Civil Works. Congress can provide clear direction in each of these areas; however, the executive branch has an essential role to play in modernizing the program as well.

PROJECT PLANNING AND DECISION MAKING

The need to update planning guidelines

Congress assigned responsibility for Corps of Engineers planning framework to the President and the U. S. Water Resources Council in the Water Resources Planning Act of 1965 (P. L. 89-80, as amended). Pursuant to this authority, President Reagan issued the present statement of Economic and Environmental Principles for Water and Related Land Resources Implementation Studies in 1983, and the Council issued its Economic and Environmental Guidelines for Water and Related Land Resources Implementation Studies that same year. These Guidelines are composed of "Standards" and "Procedures," which are more specific guidance to the Corps (as well as the Bureau of Reclamation and the Natural Resources Conservation Service) on the conduct and content of water project implementation studies.

These Principles and Guidelines direct the Corps to develop systematically cost-effective plans that also address all Federal concerns, as expressed through environmental and other laws and executive branch policy, as well as state and local concerns. The present Principles and Guidelines are the third version of Water Resource Council planning guidance issued since 1973. I believe the current Principles are carefully crafted and, collectively, define a planning framework that is both powerful and simple. They essentially direct agencies to weigh the economic and other benefits and costs for every reasonable alternative and to recommend the best plan considering all benefits and costs. As a planning model, they are far superior to other decision frameworks that govern other Federal programs that are based on standards, such as in the case of the water quality program.

Congress should direct the U.S. Water Resources Council to review its Economic and Environmental Guidelines for Water and Related Land Resources Implementation Studies and to update them to reflect the improvements in economic and other evaluation techniques and the changes in law and policy that have occurred in the last two decades. In this regard, the reports of the National Research Council's Committee reviewing Corps procedures pursuant to Section 216 of Water Resources Development Act (WRDA) of 2000 will provide valuable information to the executive branch concerning the most appropriate evaluation techniques.

The lack of value in additional objectives

I do not believe water project planning would be in *any* way improved by specifying additional generic planning objectives such as "environmental enhancement" beyond the single objective now stated in the Principles. Section 2(a) of the Principles states: "The Federal objective of water and related land resources planning is to contribute to national economic development consistent with protecting the Nation's environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements." The Principles and the Guidelines (P&G) clearly provide for accommodation of other Federal, state and local and international concerns in the context of a specific study. The flexibility of the present P&G was amply demonstrated by the ability of the Corps to develop the Comprehensive Everglades Restoration Project, which was authorized in WRDA 2000.

The present Federal objective is well defined and made operationally meaningful in each individual project study by a broadly accepted body of economic theory. This theory also provides clear and objective standards for measuring economic benefits and costs. Virtually all controversies over Corps of Engineers studies involve chal-

lenges to either (1) the quality of Corps' estimates of economic benefits and costs, or (2) the subjective tradeoffs between economic benefits and other values reflected in the Corps' recommended plan. Much can be done to improve the analysis of economic and environmental impacts, but difficult choices between economic and non-monetized values will remain subjective and controversial no matter how well they are analyzed.

In contrast to economic benefits and costs, there are no generally accepted theories of environmental, ecological or social value that allow the executive branch to develop objective, operationally meaningful evaluation standards. Specification of additional objectives will not lead to better analysis or more effective consideration of these kinds of impacts in planning individual Civil Works projects. Moreover, as demonstrated by the 1980 version of the Principles, adding additional planning objectives will only result in unproductive complexity and ambiguity in the planning process, which already is criticized as being overly complex and lengthy.

Improving project productivity

One area in which there is apparent congressional concern is the economic productivity of Civil Works projects. The Corps of Engineers Modernization and Improvement Act of 2002 (S. 1987) would require future projects to have a 1.5 to 1 ratio of benefits to costs at the current discount rate. The issue of project productivity can be best addressed by directly considering the discount rate, which governs the formulation of projects. The discount rate, which is used to convert future benefits and costs to present value equivalents, is an important public policy choice. The present discount rate is based on a formula established by Section 80 of the WRDA 1974 (P.L. 93-251). This law bases the discount rate on the current cost of long-term Federal borrowing and also "grandfathers" certain old (now at least over 30 years) projects at a lower discount rate (3.5 percent or less).

In considering the policy regarding the discount rate, it is important to know that the discount rate used in water project evaluation is a "real" or inflation-free rate since all benefit and cost estimates are in constant dollars. Thus, a study being conducted today would project future costs and benefits in 2002 dollars. However, benefits and costs occurring in the future would then be reduced by the discount rate because we place a higher significance (economic value) on benefits and costs when they occur today rather than in the future. The higher the discount rate, the less important we consider a benefit or cost that would accrue in the future. Choice of a discount rate affects not only the number of projects having benefits greater than costs, it also affects the scale of projects and their design. As the discount rate is increased, fewer projects will have benefits greater than costs, and the best projects will be smaller and more capital intensive. Most of the completed Corps projects that are now criticized as "unproductive" were based on low discount rates. The choice of a discount rate has important consequences for our future infrastructure.

The discount rate formula in Section 80 of the WRDA⁷⁴ (P.L. 93-251) is not based on economic theory. Furthermore, annual recalculations of the benefits and costs of uninitiated construction projects are generally required because the rate usually changes based on the required yearly application of the formula. Finally, grandfathered discount rates for certain projects create false expectations about those projects' prospects for future funding. No Administration that I worked for made new construction start recommendations on the basis of any rate lower than the current discount rate.

The Office of Management and Budget (OMB) presently establishes the discount rate to be used in the evaluation of other public investments. OMB Circular A-94 directs the use of 7 percent real discount rate for these projects. According to the circular, "This rate approximates the marginal pretax rate of return on an average investment in the private sector in recent years."¹ Congress should either establish a discount rate based on sound economic theory or allow the Corps to apply the rate used to evaluate other Federal investments.

Allowing the executive branch to fulfill its responsibilities for good analysis

In my view, Congress should have the executive branch's best analysis and recommendation before it considers a project. Congress may reject that analysis, evaluate the information in the analysis differently, or make its decision based on other considerations; that is Congress' prerogative. However, in some instances Congress has legislated how the Corps of Engineers is to measure certain economic benefits. I am aware of at least two cases where legislation specifies a particular way of measuring benefits that cannot be supported by commonly accepted economic the-

¹ Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, page 7.

ory. In Section 7(a) of the Department of Transportation Act (P.L. 89–670), Congress defines the primary navigation benefits in terms of rate savings to shippers rather than resource cost savings. In Section 219 of WRDA 1999 (P.L. 106–53), Congress requires to Corps to “. . . calculate the benefits of the nonstructural project using methods similar to those used for calculating the benefits of structural projects, including similar treatment in calculating the benefits from losses avoided.”—despite the fact that the economic impacts of structural and non-structural alternatives are quite different.

The executive branch develops implementation guidance that allows the best estimate of economic benefits within the constraints imposed by law, but benefit-defining legislation signals that Congress seeks outcomes different from those that would be produced by objective economic analysis. Unfortunately, S. 1987 would move further toward legislating benefit procedures for the executive branch. Congress should affirm its commitment to using the best analytical techniques in every Civil Works project study by abrogating past benefit-defining provisions and by avoiding new constraints on objective benefit and cost measurements.

Review is an essential part of the recommendation development process

Sound water project planning requires not only a clear policy framework in which to conduct analyses, it requires time—time to develop a plan and time for review of the plan so that national as well as local perspectives can be brought to the attention of decisionmakers. During the last decade, the quality of the internal executive branch review processes has declined; one major reason for this decline is that Congress has authorized many projects that had not received the full benefit of executive branch review. The executive branch project review culminates when the Secretary of the Army transmits a report of the Chief of Engineers to Congress. In the last decade, Congress has authorized dozens of projects without waiting for completion of the report development and review process. Many of these authorizations were conditioned on favorable report of the Chief of Engineers by a future specific date.

Conditional authorizations create enormous pressures on the Corps’ review staff. In the interest of time and to avoid disappointing Members of Congress who supported conditional congressional approval, problems are glossed over and reviewers’ concerns are ignored. In any case, even if the Chief of Engineers’ report is completed by the deadline, the Secretary and the other Departments of Government may not have even initiated their final policy-level review.

It is not surprising that projects that have been found deficient in one way or another in recent times Delaware River Deepening, The Chesapeake and Delaware Canal and the Dallas Floodway Project were authorized without a report transmitted by the Secretary of the Army. In the case of the Upper Mississippi River Navigation study, Congress specifically authorized the Corps to proceed with engineering and design on expanded locks before even a draft report was released. Is it surprising that the Corps was eager to find expansion projects justified? Except in the most extraordinary circumstances, Congress should authorize only those projects that have completed the executive branch review process.

COST SHARING AND IMPROVED RESOURCE ALLOCATION

Appropriately structured non-Federal financial participation and pricing for project services contribute to at least three important objectives: increased project credibility, increased returns on scarce Federal funds, and better utilization and greater benefits from existing project capacity.

Project cost sharing

The first two objectives can be realized by non-Federal participation in the financing of water project construction. Whenever a non-Federal sponsor is willing to pay for a major portion of the cost of a project, added credibility is given to any analytical justification for the project. The absence of a non-Federal public entity willing to pay the non-Federal share suggests the project is not being given a priority by that entity’s constituents, who normally are also the project’s beneficiaries. Second, non-Federal financing allows limited Federal funds to be spread over a greater number of projects resulting in a greater total investment. The effective constraint in the rate of water resource investment is the availability of Federal funding. By requiring every project to have a significant amount of non-Federal financing, unproductive, low priority projects would be set aside, and productive projects could move ahead more quickly. Congress has not been consistent in its approach to project cost sharing. Since the major reforms of WRDA 1986, Congress has exempted particular projects from cost-sharing and, in other cases, eroded cost sharing though requiring consideration of “ability to pay” in establishing financing requirements. As an econo-

mist, I see a glaring inconsistency between project advocacy based on the importance of project benefits and a plea that the beneficiaries, or their governmental proxies, cannot possibly pay their share of project costs. Congress should apply the purpose-specific cost-sharing formulas to all projects serving those purposes. There should be no exceptions or exemptions.

Demand management as an essential management tool

The third objective of financial participation is obtained by improved use of existing project capacity. Efficient management of existing projects requires use of appropriate pricing or other demand management strategies whenever public use begins to exceed their capacity. As consumers, we expect demand management to be an essential part of the normal course of business in the management of utilities water, electricity, telephone service and natural gas. Airlines and railroads are becoming increasingly sophisticated in this arena as well.

No more compelling case can be made for demand management than in the case of congested inland waterway locks. The Federal Government, as the sole manager of the greatest inland waterway system in the world, should be enthusiastic about adopting congestion management to increase the benefits of important, highly valuable waterway facilities. The National Research Council's Committee to Review the Upper Mississippi River Illinois Waterway Study recommended: "The benefits and costs of lock extensions should not be calculated until nonstructural measures for waterway traffic management have been carefully assessed." Congress should ensure that the Corps has the necessary authority to make demand management an integral part of continued modernization of our nation's inland waterways.

Study scope and cost sharing

Finally, the Congress should review cost sharing for feasibility studies. Cost sharing by non-Federal sponsors has greatly reduced the total cost of Civil Works project feasibility studies and substantially reduced the time to complete them. In cases where a project is likely to emerge from the study process, study sponsors are anxious to get on with it. When the prospects for a project are slim or non-existent, sponsors have better uses for their resources.

There is a downside to study cost sharing, however. The non-Federal sponsor may have preconceived ideas as to the desired solution and may resist expending funds on alternatives that it believes would be inferior or beyond its capability or authority to implement. For problems warranting comprehensive basin studies, states or regional bodies should be required to be the sponsor, or other mechanisms should be found to limit study cost and time. For studies of deep-draft ship channel improvements, which are often rightly criticized for their naiveté and lack of regional perspective, Congress should require regional analysis of improvements and adjust study cost-sharing requirements accordingly. Unless the present requirement for feasibility study cost sharing for deep draft navigation channel improvements is altered, unbiased regional port planning will not be done—regardless of the existing requirements for regional studies in the current Water Resources Council Guidelines and the continuing complaints of watch-dog groups and independent project reviewers.

Improving Corps Analytical Capabilities and Products

To be able to meet the challenges of modern analysis, the Corps must reorganize and concentrate its professional planning resources into centers of expertise. Reorganization would have many benefits: (1) Professionals in the major planning disciplines would be able to share knowledge and experience face-to-face. (2) Enhanced opportunities for professional growth and advancement within a given discipline would be created. And, (3) pressures to "justify" a questionable project would be reduced. Such changes in Corps planning were last proposed at the end of the Administration of George Bush in 1992. Like earlier attempts at reorganization, this last attempt was abandoned in the face of powerful congressional opposition.

The Army and the Corps are taking steps to reestablish an effective internal review process after a decade of decentralization and denigration of the review function. While consultation with outside experts and independent review of planning documents is appropriate for large, controversial or highly risky projects such as the Comprehensive Everglades Restoration Project and the Missouri River operating plan, it should not become a routine requirement. Such reviews are expensive, time consuming and unlikely to produce a definitive conclusion regarding the best investment or management decision. Moreover, for such outside consultation to be effective, the outside experts must have a clear charter and understanding of the policy context in which their help is being solicited. In short, I believe there is no substitute for an initial high quality Corps of Engineers study that is reviewed thor-

oughly by the many Federal agency experts in the normal course of development of a final Administration recommendation.

Congress should direct the Secretary of the Army to reorganize the Corps in the interest of improving its analytic capabilities and to ensure effective internal reviews for Civil Works projects. Congress should authorize the Secretary to utilize the services of outside experts at the beginning of studies likely to lead to large and controversial projects and to provide for independent review of those projects prior to their transmittal to Congress. It should also provide criteria for the types of studies for which outside consultation and review is required.

SUMMARY AND CONCLUSIONS

The Corps of Engineers is uniquely qualified by its professional resources and its adherence to the Principles and Guidelines to address the full spectrum of the nation's water problems. I believe that the best opportunity for the Nation to integrate the management of all water quality and quantity problems is through the Civil Works planning process under the existing Principles and up-dated Guidelines.

Congress and the President must work together to take full advantage of the Corps' potential to develop solutions to the nation's water and related land resource problems and to recommend productive, cost-effective public investments. Congress can best ensure that the Corps consistently pursues sound water resources development and management by taking these actions: (1) direct the U.S. Water Resource Council to review and update executive branch planning guidance, (2) remove obstacles to unbiased analysis created by past legislation, (3) authorize only those projects that have completed the executive branch study and review process, (4) re-institute substantial cost sharing for all projects without exception, (5) clarify the kinds of studies it expects and modify study cost sharing to support those studies, and (6) require demand management be an integral part of the delivery of project services when it can increase project benefits. Finally Congress should support the Department of the Army and Corps in strengthening the Civil Works planning and review capabilities and require use of outside experts to guide and review important studies.

RESPONSES OF G. EDWARD DICKEY TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. I am particularly interested in your suggestion in your written testimony that the Corps reorganize to concentrate its professional planning resources into "centers of expertise." Can you comment in more depth how you would envision these "centers of expertise" working, describe the 1992 proposal, and what the specific opposition was to this attempted reorganization?

Response. "Centers of expertise," in my view, are offices where there is a concentration of experts in a particular area of economic or environmental analysis. These experts would be called upon to perform all benefit or impact analyses of a particular type for Corps studies. For example, one or two districts or the Corps' Institute for Water Resources could house all the deep-draft navigation benefit estimation experts. This organizational structure would allow the staff who are most knowledgeable in a given subject area to routinely interact, to keep abreast of the latest analytic developments, and to continually apply their detailed and specific knowledge to concurrent and successive studies. In addition, the potential for bias toward favorable study outcomes is reduced. The analysts' future employment and that of their fellow workers would not be tied to a favorable study outcome, and the lack of proximity to the sponsor may reduce untoward pressures for the outcome sought by the non-Federal sponsor.

The 1992 study called for this kind of organization. Under that plan, the project manager for the study would remain in the geographic district where the project would be located; he would then contract with other Corps offices to do study tasks just as he presently does with private contractors. Another objective of the 1992 plan was to promote competition among districts with the goal of improving cost and schedule performance as well as study quality.

Congressional opposition to the 1992 plan came from two sources: The first was the loss of employment in and diminution of the stature of specific districts that would not become centers of expertise. The second, I believe, was a fear that the Corps would not be as responsive to local desires as they are under the present organizational structure.

Question 2. Can you give some specific examples of how the Corps project planning process needs to be modernized?

Response. Two obvious and compelling examples are the integration of demand management into inland navigation studies and adoption of regional port analysis for deep draft navigation studies. The Corps, reflecting the concerns of its traditional constituencies as well as its own proclivities for structural solutions, has resisted evaluating demand management despite the large economic costs to shippers associated with congested locks. In similar fashion, the Corps continues to justify coastal navigation improvements based on the assumption that the port's volume of commerce will be the same without the improvement being in place as with the project. This assumption can result in a serious distortion in the estimate of project benefits and is contrary to existing guidance in the Water Resource Council's Guidelines. The reason Corps continues to conduct these naive analyses is that neither the executive branch nor Congress has raised serious objection. Project advocates are content with the present approach because I believe they recognize that a more defensible analysis may reduce their prospects for getting a project.

Question 3. What steps can be taken to improve the credibility of Corps studies?

Response. Good water resources planning is ultimately an art requiring professional judgments and policy direction to determine "how much study is enough." There are several elements to producing a credible project recommendation. The first is to insist that competent analysts carry out every project study. Second, the analytic techniques must be appropriate to the size of the expected project and the character of the alternatives. When it comes to techniques, one size does not fit all. In some cases, state-of-the-art analytic techniques may be much too expensive for the decision to be made. Third, studies must be thoroughly and effectively reviewed for their technical soundness and compliance with law and policy. A complete executive branch review should be the norm, and Congress should have the benefit of the Administration's recommendation not simply that of the Corps. Fourth, the Corps needs to also consult with outside experts in the case of especially complex studies with exceptional risks and uncertainties. My own experience with the Comprehensive Everglades Restoration Projects, shows that large ecosystem restoration projects should routinely rely upon input from outside experts including those from other Federal and state agencies.

Question 4. In your opinion, what steps can be taken to ensure that Corps projects maximize both economic and environmental benefits?

Response. Unfortunately economic and environmental "goods" are seldom coincident; it is rarely possible to maximize both in the same project. Water projects typically involve manipulation of the natural environment in the interest of some economic benefit. If the preserving and protecting natural ecosystems is an environmental "good," then a development project will have some adverse consequences. While such consequences may be reduced or mitigated at no economic cost, not all of the adverse environmental impacts can be avoided through refinement of the plan. Choices made between competing values must be made. In my view, the proper role of the Corps is to analyze the choices and to make a recommendation as to the most appropriate balance between economic, environmental and other considerations. Since such choices are ultimately subjective, we can expect controversy. The Corps should not be blamed for showing that there are tough choices to be made. However, it should be held responsible for the quality of the analysis that describes the public's choices.

RESPONSES OF EDWARD DICKEY TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. You stated that independent review may be appropriate for some, large controversial projects, but not for all. In your opinion, should the Corps reestablish a more independent, internal organization to review all other projects?

Response. I think there should be a review organization that reports to the Secretary of the Army. In 1992, the Administration did not object to Congress' elimination of the Corps' own review body, the Board of Engineers for Rivers and Harbors. The Board had become redundant in light of the more complete review function then being performed by the Office of the Assistant Secretary (Civil Works) in close cooperation with review staff in the Corps Headquarters. These review activities were largely eliminated during the eight years of the Clinton Administration. In my opinion, the downgrading of the Washington level review function accounts for much of the present lack of credibility in Corps planning reports. It is my understanding that the Office of the Assistant Secretary is rebuilding its review capabilities. I believe Congress should review the Secretary's actions and either support the reestablishment of the Secretary's review function in its present form or further strengthen it by providing a clear charter and policy direction in legislation.

Question 2. You indicated that the available procedures for the evaluation of the environmental potentials of Corps projects are limited. Do you believe that most Corps projects adequately consider the environmental opportunities or impacts? If not, what would you recommend to improve this?

Response. I believe the Corps has all the authority to evaluate the environmental potential and impacts of its projects that is necessary or appropriate. Moreover, the Corps has been a leader in developing analytic techniques to measure and evaluate environmental impacts. Unfortunately, in some (rather than most) situations, Corps districts have not chosen to apply all of the agency's expertise or comply with existing policy guidance. In some cases, the study sponsor, who must pay half the cost of a project study, may have no appreciation for or interest in such values and thus resists such analyses. In other cases, the district itself may not have an appropriate appreciation of the need to study and consider environmental consequences. These twin forces result in Corps districts avoiding studies that explore the full range of choices or which indicate the importance to both the economy and the environment of the choices to be made. The way to fix these serious problems is first through reestablishment of effective Washington level review that will assure that: (1) More than local perspectives are reflected in the scope of district project studies and in the range of alternatives considered, and (2) the districts' evaluation techniques are appropriate and correctly applied. The second step would be to allow the Corps to move its experts, who should be responsible for important environmental evaluations, into centers of expertise. As I stated in my prepared statement, there is no substitute for an initial high quality Corps study that has been reviewed thoroughly in the course of developing a final Administration recommendation.

STATEMENT OF LISA HOLLAND ON BEHALF OF THE ASSOCIATION OF STATE
FLOODPLAIN MANAGERS, INC.

INTRODUCTION

The Association of State Floodplain Managers, Inc. (ASFPM) is pleased to share comments on issues related to Authorization programs of the Corps of Engineers. These include the 2002 Water Resources Development Act (WRDA), and proposed bills S. 1987 and S. 646.

The Association of State Floodplain Managers, Inc. and its state chapters represent over 4,500 state, local and private sector officials as well as other professionals who are engaged in all aspects of floodplain management and hazard mitigation. All are concerned with reducing our Nation's flood-related losses and many have worked with Corps Staff on the implementation of flood control and restoration projects in their community or state.

The ASFPM chooses not to comment on specific water resource projects, rather we choose to focus on policies that drive project formulation and implementation.

THE PROBLEM

In general the ASFPM believes that the US Army Corps of Engineers has a long proud tradition of providing water resource projects to the Nation. However, we also believe that the model being used today best served the Nation in a past era, and that it is time reshape the Corps based on modern domestic policies.

Current policy and process have resulted in disagreement over the economic and environmental viability of many projects; a huge backlog of controversial projects; division among the nation's policymakers on how to invest in projects; and a situation where the cost of operating and maintaining existing projects is becoming excessive.

The policy and process model that we are currently working under:

1. Assumes that national return on investment (NED) is our focus for water resources, yet we never consider the opportunity cost of this investment.
2. Assumes that environmental or social benefits are of a lesser value than economic benefits, in spite of congressional actions to the contrary.
3. Has led to many non-Federal sponsors wasting time and money on projects that are not justified, or will not be funded.
4. Has attempted to meet national objectives through an altruistic planning process that is prone to manipulation to meet pre-conceived project outcomes.
5. Has failed to expand from a Federal investment mentality to one that embraces and supports a broader array of domestic policies, most notably the lack of focus on actions that reduce future disaster expenditures.

In order to address these issues and others, we will focus our testimony on the following areas:

Trends in Flood damages—Growing disaster expenditures

Despite the expenditure of over 100 billion dollars and years of efforts in Federal programs to reduce flood damages and encourage sound floodplain management flooding costs are now approaching \$5-\$8 billion per year. On one hand this may be surprising, but on the other hand it was predictable. Our policies and practices have tended to encourage people to occupy areas that are marginally protected from flooding, or to take actions in the floodplain that have transferred their problem onto others. The economist would suggest that these occasional damages are reflected in the economic models, and as long as benefits exceed cost, that escalating flood damages is a rational outcome. For this model to work however, based on current policies, it would need to assume that there is virtually an unlimited supply of money to pay for the disaster costs, and that other programs of domestic policy would not suffer because of the transfer of dollars to pay for disasters.

The fact is that there is not an unlimited supply of cash, and that other domestic programs do suffer from escalating disaster costs. To break this cycle the Corps must begin to modify its model such that it leads to solutions that provide permanent flood protection with an eye toward reducing disaster costs. Many times these solutions may be the least cost solution, but may not satisfy the NED criteria. Recognizing the regional economic development goals of many local sponsors, we would suggest that Congress encourage the ability to link Corps projects with other programs of economic development outside of flood hazard areas.

Principles and Guidelines (P&G)

The P&G have been used since 1983, when they replaced the Principles and Standards. In spite of their shortcomings, in theory they provide a reasonable approach to justify an investment mentality for project alternatives. In reality, they are a maze which both Federal and non-Federal sponsors navigate to justify a preconceived outcome. The P&G alone fall short of supporting the domestic policies of the Nation. At a minimum the P&G need to be reissued with the environmental quality account being a required input to the process.

For P&G to be effective, the Congress must mandate the Corps to develop and adopt methods for quantifying the economic value of environmental, cultural, and social inputs. For the expenditures of the Corps to be effective, the P&G must be augmented with decisionmaking criteria that reflect current domestic policies and programs. In essence they need more than tweaking. The P&G do not reflect the way planning is done today, by any level of government, let alone the Corps. Forcing Corps staff to use these guidelines sets up an instant conflict in the project alternatives. The Principles and Guidelines need to reflect a collaborative, multi-objective approach in the beginning, rather than attempting that collaboration at the end of the process. The list of Environmental operating principles put forth by General Flowers provides some excellent ideas for incorporation.

We would urge that the Principles and Guidelines be revised in collaboration with a group of Corps "partners", who work with the Corps and other programs in developing projects for flood loss reduction and environmental restoration. Incorporating the ability to coordinate project implementation with other programs will provide an opportunity to leverage dollars.

Benefit / Cost analysis.—There is broad support of the need for modifications in the approach for determining the cost effectiveness of projects. Much of this focus is misplaced due to the emphasis in the process that results in selection of the NED plan. Better to spend our efforts re-thinking the process to select the alternative, so we end up with a project appropriate to the multiple needs of the local partner.

Incentives in cost sharing

There has been considerable discussion about the Federal/non-Federal cost share formula. We offer no preference on a specific cost share, and suggest that formula is a policy decision of Congress. We urge Congress to base their decisions on independent studies, which carefully assess where the true interests of the nation's taxpayers lies.

What we do urge is a sliding cost share for non-Federal partners, which would provide incentives for those partners to take responsibility for reducing flood risk in their community.

There are communities in the Nation that are aggressively implementing programs that reduce the need for Federal project expenditures or for disaster relief. Yet, we have likewise heard concerns from our members as to why should they continue to proactively fight future flood damages, when they can take the easy political route, do nothing and simply wait for Federal projects and disaster relief. The current system makes no sense, and does nothing to encourage local accountability and responsibility for combating disaster expenditures.

It is time to Congress to communicate to those States and Communities that are taking proactive steps to combat future flood losses, that they are doing the right thing for their community and for the Nation. We would argue that by providing a more favorable cost share to those communities that are proactively dealing with future losses, that in the long run Federal expenditures for projects and disasters will decrease.

Some might argue that this may be quite complex, but we would like to remind these individuals that in the mid-90's Corps Staff had developed the details for implementing a similar plan, and that FEMA has over a decade of experience in a similar program called the Community Rating System. These positive actions would demonstrate a commitment that will save the Federal taxpayers money on disaster relief, thus justifying the investment in the sliding cost share. A list of low cost incentives is attached.

The Federal role

The Federal Government has a key role to play in helping to reduce flood damage, but that role has changed and evolved from what it was 30 to 60 years ago. It has become apparent that federally developed solutions often yield single purpose projects which tend to address specific flooding problems, but may pay insufficient attention to other critical local considerations such as economic development, housing, water quality, watershed planning, natural resources, recreation and quality of life. Without those considerations, local buy-in is often razor thin.

We have learned that some structural solutions to specific flooding problems can inadvertently create new flooding problems downstream. Some generate higher operation and maintenance costs than can realistically be supported by the local sponsor. Current programs tend to promote that flooding and flood protection is a Federal and not a local issue. Local governments and citizens grow to believe the Federal Government will bail them out if flooded or if the problem gets worse.

Structural flood control projects are necessary in many instances and are often advocated by our members. Unfortunately, without the ability to offer various solutions or a mix of approaches, structural policies and programs can provide incentives to pursue solutions, which may not be the best choice for building hazard resistance in some communities. It is important to recognize that current Federal flood policy rewards those communities and states, which do the least to prevent and solve their flooding problems. Those rewards come in the form of Federal disaster assistance, Federal flood control projects and cost sharing for these actions. The Corps cost-sharing formula needs to evolve in order to be consistent with the evolution to new approaches in flood loss reduction in the Nation.

Independent Peer Review

The ASFPM understands the cry for independent review, in light of the revelations during recent years. The problem with the independent peer review proposal is that peer review is necessary for two reasons. The first is to introduce a level of quality control, the second is to safeguard against what some might see as abuses to the process. If the peer review is meant to implement a level of quality control, than one needs to question why this is not already being accounted for within the planning and design process. If it is to safeguard against abuses, than one needs to question whether the problem is so severe within the Corps that the entire program needs to be reorganized with new management. While clearly there is always room for improved quality, the evidence would suggest that "cleaning house" is NOT necessary.

What we do believe is necessary however is the following:

1. A renewed commitment by the Corps to quality Control measures and plans.
2. Occasional GAO audits of projects.
3. A zero tolerance policy for those found to be directing the manipulation of project results.
4. Independent peer groups that are formed to evaluate the assumptions used in the planning guidance.

While some direct abuses have been alleged, for the most part what we have heard about tends to indicate planning guidance that is out of touch with real world situations and current domestic policy. If independent project review comes about, we suggest a streamlined process and a logical funding threshold is considered. Surely a \$25 million project is not reasonable. We see some individual homes being built in the Nation with costs approaching that. Perhaps something 8 to 10 times that amount might make more sense.

Backlog and de-authorization

There is a need to address review of the huge backlog of projects, with an eye toward either re-authorizing or de-authorizing the projects. The experience of our

members suggests this backlog creates many problems. A common example occurs immediately after a flood disaster. The community wants to do something because of the damages it received, and the first thing they think of is some Corps project that was looked at in the past, which sits on the shelf now, in an inactive state. It may be there for a number of reasons, including being not cost effective, major environmental harm, controversy, etc. In most instances, the project would probably not be viable under today's circumstances, if it ever was. But the community sees it as a quick solution and spends lots of effort and time trying to make the project work, rather than looking at their problems and needs today, and working with all the interests in community to identify viable and implementable solutions.

STATEMENT OF CHRISTOPHER J. BRESCIA, PRESIDENT, MIDWEST AREA RIVER
COALITION 2000

Chairman Jeffords and members of the Committee, my name is Christopher Brescia, President of the Midwest Area River Coalition 2000. MARC 2000 is composed of leading agricultural producer groups, grain and industrial shippers, cement manufacturers, utilities, waterway transportation companies, labor unions, rail feeder systems, concerned individuals, economic development entities and many more facets of the Midwest community. Our coalition members generate over \$125 Billion in economic activity from the Midwest and conservatively employ or self-employ more than 130,000 people in 24 states. These activities principally span the length of the Mississippi, Missouri, and Illinois Rivers. I am pleased to appear today to address proposals for a Water Resources Development Act of 2002, especially as it relates to the Upper Mississippi River Basin.

MARC 2000's Upper Miss Basin proposal includes support for the authorization and construction of an initial group of seven new 1200-foot locks, five on the Upper Mississippi (locks 20–25) and two on the Illinois River (LaGrange and Peoria), five guidewall extensions (locks 14–18) and appropriate mooring cells. This proposal is limited to the placement of new 1200-foot locks at 7 out of a possible 37 locking locations, clustered at the lower portion of the river system just north of the confluence of the Upper Mississippi and Illinois Rivers. We are not advocating new locks on the entire 1202 miles of the basin system.

We also strongly support an enhanced environmental restoration effort for our basin, beyond those identified as mitigation for navigation impacts, with a reliable and consistent funding mechanism. Our proposal's third element calls for timely completion of the WRDA'99-authorized Comprehensive Plan, designed to develop an integrated flood-control system for the Upper Basin.

WORLD CLASS TRANSPORTATION & ECONOMIC SYSTEM

According to the U.S. Department of Transportation, U.S. maritime trade is expected to double in less than 25 years. Freight in the U.S. is expected to clog the nation's highways and rails. Our waterway system is a logical means by which we can accommodate growth and reduce incidents of spills, air pollution, accidents and deaths to our population. But while our markets experience increased congestion, the world does not stay still. K. Kiplinger, author of "World Boom Ahead," notes that, "World agriculture trade will blossom in the next two decades. Grain trade will increase two-thirds or more by 2020. Imports and exports of soybeans will double. Livestock trade will triple." Does any casual observer of these trends believe the Midwest, the center of our productive capability can respond to these developments?

The Upper Mississippi Basin covers a total area of 1202 river miles, which was 10 percent of the inland waterway system, but which provides 48 percent of the ton-miles of the total inland waterway system. In the Upper Midwest, between 100–120 million tons of traffic moves through an antiquated lock and dam system, operating well beyond the 50-year design life. The Upper Miss navigation traffic data connected to likely future scenarios project a 60–70 percent increase in this traffic over the next 50 years. Today, the typical 15-barge tow (1100 feet long) must break in two parts in order to transit locks designed for paddlewheel ships of another era. With the advent of towboat power and stronger engines in the 1940's, the 600-foot lock system built in the Upper Mississippi has rapidly become obsolete. Major rehabilitation efforts have been underway for over 20 years to shore up crumbling concrete, outdated electrical systems and many moving parts. But none of these actions have addressed the issue of increasing the locking capacity of the Upper Miss system.

Our Nation relies on this outdated transportation system for the movement of our corn, soybean and wheat exports into the world market. Over 60 percent of all grain exports move through the Upper Mississippi, en route to New Orleans. Grain ex-

ports still account for a trade surplus in our balance of payments account, but at a considerable cost to our producing community. The report issued by the National Corn Growers Association last month on the impact of this outdated system to the nation's economy is very sobering. The staggering expected loss of farmer income, grain exports and the resulting increase of the Federal deficit by \$1.5 Billion dollars per year should be sufficient cost/benefit analysis for congressional action.

It's important to view the investment of our navigation infrastructure within the context of a global economy, just as American companies view their competitive position. Over the last 10 years, the U.S. has worked hard to open world markets through World Trade Organization negotiations and other regional multilateral agreements. U.S. agricultural trade policy supports active programs encouraging corn and soybean exports. Our transportation infrastructure, however, is not keeping up with these developments, nor is it positioning U.S. producers to capture future growth. Rather, inaction has fueled foreign competition with increased virgin land put into production and a juggernaut in the making.

Over the last 10 years, our South American competitors have visited our country, learned from our past investments and are duplicating the vision of our forefathers by creating a state-of-the-art transportation infrastructure. While they have invested in their future, we have "studied the problem." While we determine the best forecasting tool and argue whether exports will grow at 1.5 percent average annual growth or 2 percent average annual growth, they seize on our nation's indecision by taking away market share growth from our farm community. Brazil has doubled their share of soybean exports over the last 5 years. U.S. soybean exports have fallen 27 percent.

About 18 percent of U.S. annual GDP goes to private investment money spent by individuals and businesses for goods and services, which will endure and produce future value. Foreign trade's share of total economic activity nearly doubled, from 13.8 percent in 1986 to 26 percent in 1996. Looking forward, there is no reason to suggest that the trade share of total economic activity will not continue to grow dramatically.

As our economy becomes more dependent upon exports, our ability to access and compete for world markets will become more critical. Many believe that the world stands on the threshold of a long, strong surge in economic growth and subsequent higher living standards. Those nations who will share in that growth will be those who have the most efficient export-oriented infrastructures in place to compete in the marketplace.

All the major U.S. grain companies agree that 60–65 percent of future grain exports will travel down the Mississippi River. Ocean freight rates will determine whether, on an annual basis, about 5 percent of movements might shift from the Mississippi River to the Pacific Northwest or vice versa. Well-established shipping patterns of the last 30 years are expected to be replicated in the next 30 years. Private sector investments in the infrastructure have already been made and now we are waiting for the Federal Government to make infrastructure investment in the Upper Basin a priority.

Currently, about 10 percent of world food production enters international trade. Most scenarios have the volume of trade doubling by 2010 and doubling again by 2025. The most environmentally benign transportation system our inland waterways—is physically incapable of handling this surge in demand. We don't rely on 1940's vintage roads and air transportation to meet our needs, neither should we expect modern tows to rely on steamboat era locks.

U.S. investment to reverse the years of neglect and restore our inland waterway system into a world-class transportation system is critical to merely keep pace with other nations and supporting our economy. According to independent studies conducted by Price Waterhouse and Mercer Management Consultants, the Upper Miss provides benefits to a wide range of employment groups. More than 400,000 jobs are supported from traffic that originates and terminates in the Upper Mississippi River Basin. Of those, 90,000 are in the manufacturing sector. Those jobs are estimated to generate \$4 Billion in income and between \$11–\$15 billion in business revenue.

Equally important to the modernization decision in the Midwest is the fact that an efficient waterway transportation system is integrally connected to the sustainability of agriculture in general. The food and fiber industries are our nation's largest sector contributing approximately 13.1 percent of total GDP, 17 percent of the value-added, 16.0 percent of the total labor force, and 10 percent of the total income. It also accounts for about 23 million jobs.

The efficiencies and economies of scale created by agricultural exports are what keep our consumer prices the lowest in the world, about 10.7 percent of disposable personal income. If exports fall, the production base contracts and consumer food prices rise. If exports rise, further efficiencies are created to keep consumer food cost

prices low. Over 30 percent of U.S. crop acreage can be considered produced for export. As world demand rises, simply maintaining current market share would require an inland waterway system capable of handling twice the tonnage by year 2025.

UPPER MISSISSIPPI/ILLINOIS RIVERS NAVIGATION FEASIBILITY STUDY

Mr. Chairman, MARC 2000 has been involved in the Upper Miss navigation study since the inception of the feasibility study in 1993. Ten years later, we are on the edge of our seats as the Corps of Engineers is poised to issue an Interim Report on July 1 of this year. We believe there will be sufficient information in that report for Congress to initiate a balanced modernization program in the Upper Mississippi Basin that includes lock modernization and enhanced environmental restoration programs.

This study has taken many turns and permutations over the last 10 years. One of the most important developments in the past year has been the Chief of Engineers' decision to restart and restructure this study with the assistance of other Federal and state agencies and stakeholder groups in the basin.

This Interim report should provide a fresh look at the risks we take in not modernizing the lock system in the Upper Miss Basin. It should also provide important guidance on the risks we take as a Nation if we don't address pressing environmental declines in the river. Private stakeholder groups have met and continue to meet to find the right balance toward sustaining economic growth and protecting the environment. The discussion has shifted from one of mutual exclusivity in investment to how we manage the future of the river for all uses without jeopardizing the uses of future generations.

The following is clear and irrefutable:

First, this waterway system is critical to the future competitiveness of the Midwest agricultural economy. Without efficient waterway transportation, Midwest grain exports will be lost at considerable expense to producers and the national treasury;

Second, with continued and increased congestion costs on the waterway, shippers will have to find alternatives to ship their goods or lose sales. Every modal shift study concludes considerable economic, environmental and social benefits to keeping freight on the waterway. Creating higher cost structures on the water through investment inaction will lead to lost economic activity, increased air emissions, increased fuel consumption, increased accidents and increased fatalities in our communities.

Third, continuing to show indecisiveness in modernizing the waterway infrastructure in the Midwest will continue to embolden our global competitors to increase placing virgin lands into production and work to capture the growing share of a world food market that will double in the next 10 years. Our inactivity is ensuring that the U.S. may not be in a position to capitalize on these new markets.

Fourth, the environmental benefits of the waterway system, including those initially created with the construction of the lock and dam system, are declining. Without a high priority commitment to redressing that decline, we will continue to lose islands, important backwaters, and other ecosystem elements critical to this recreational Mecca and national flyway.

STRONG BASIN SUPPORT

Equally clear and irrefutable are the thousands of private citizens who have expressed their support for modernization of the lock system over the last 10 years, either through direct communications to Congress, at Corps of Engineers-sponsored public meetings and information sessions and most recently through statewide-elected officials.

The MARC 2000 coalition includes a multitude of industries, individuals, labor groups, trade associations and community economic development groups. These constituent groups know that as a region, over 151 million tons of commodities moved on the 2,000 navigable miles of the Upper Mississippi, Illinois, and Missouri River System in 1999. The combined value of these commodities totaled approximately \$24 billion. For the same year, 92.5 billion tons of commodities were shipped out of our region $\frac{2}{3}$ of which consisted of corn, soybeans, wheat and other grains. Louisiana receives 54 million tons of this grain for export to world markets, while 3 million tons went to processing facilities on the Tennessee River.

Our region's docks received more than 28 million tons from outside the system, most of which were fertilizers and other chemicals. Another 30 million tons moved within the basin in 1999, more than half of which consisted of gravel, sand, and other aggregates.

A 39 percent majority of the shipments out of our region consisted of grain, but many other commodities travel our river system. The Corps of Engineers figures reveal impressive statistics for total traffic in 1999 on the UMRS: almost 28 million tons of coal (\$1.1 B), over 10 million tons of petroleum (\$1.6 B) 27 million tons of aggregates (\$943 million) over 59 million tons of grain (\$8.7 B) over 9 million tons of chemicals (\$4.3 B) over 3 million tons of ores and minerals (\$453million) over 6 million tons of iron and steel (\$4.2 B) and over 8 million tons of other products (\$2.3 B) moved on our waterways in 1999.

On a state level, shipments to and from Illinois totaled 92.3 million tons, worth over \$15 B. Shipments to and from Missouri totaled 46.1 million tons, worth over \$3.8 B. Shipments to and from Minnesota totaled over 20.2 million tons, worth over \$3.3 B. Shipments to and from Iowa totaled 18.4 million tons, worth over \$2.7 B. Shipments to and from Wisconsin totaled over 4.5 million tons, worth over \$340 million. These shipments of goods connected our five states with 17 other states in the Nation (TX, OK, KS, NE, MI, IN, OH, KY, WV, PA, AR, MS, AL, TN, LA, FL and GA), not to mention world markets. Copies of our state profiles can be accessed on our web site at www.marc2000.org.

The importance of the waterway to this region has not been lost on witnesses over the years. Our stakeholder groups have spent the last 10 years waiting for the Federal study process to produce an assessment of the navigation and environmental needs. While the restructured study may achieve that goal, the economic and environmental imperatives dictate action necessary this year to launch a lock modernization and enhanced restoration initiative.

Last year, the State of Minnesota started a process that has mushroomed in the basin. Acting on its own initiative and encouraged by Rep. Jim Oberstar, the state legislature passed House Resolution 208 and Senate Resolution 551 overwhelmingly, expressing support for lock modernization and environmental restoration. Minnesota rejected suggestions that they could not offer direction just because the Corps study was not completed. Minnesota legislators recognized the economic and environmental value of moving bulk commodities on the inland system—as most Americans do when offered the choice—and chose to forge ahead with their expression of support.

This year, the Iowa, Missouri, Illinois and Wisconsin legislatures went a step further, passing their own resolutions recognizing that:

- Efficient operations of the inland system is critical to their economy and environment;
- Modern 1200-foot locks have a proven track record of alleviating congestion on the inland waterway system; and among other things,
- It's time to get on with this program and authorize funding to construct 1200-foot locks.

Mr. Chairman, I would ask that copies of Minnesota House Resolution 208, Illinois Joint Resolution 54, Iowa House Concurrent resolution 109 and Senate Concurrent Resolution 104, Missouri Senate Concurrent Resolution 44 and House Concurrent Resolution 11, and Wisconsin Assembly Resolution 56 be included in the record with my testimony. These resolutions passed with broad bi-partisan support and call on Congress to authorize and fund the construction of 1200-foot locks on the Upper Mississippi and Illinois Rivers.

Testimonies at the most recent round of public meetings made it clear that the labor community joins our industrial, agricultural, and economic development communities in expressing strong support for the authorization and construction of new locks on our inland waterway system. These projects provide a double investment to the economic security of our region and country. First, good family wage jobs in our Nation are supported by the efficient functioning of our transportation system and the construction of modern locks. Second, infrastructure renewal has a proven record of stimulating additional economic activity and more jobs. Historically, navigation water project investments have returned to the national economy benefits many times over the original dollar investment.

SMALL SCALE OPTIONS

Smaller scale investments are certainly part of the study's area of concentration. Industry representatives have spent countless hours with engineering contractors and the Corps of Engineers reviewing over 100 different proposals. It appears we are revisiting some of the same alternatives, such as industry self-help and now scheduling.

The theoretical underpinnings of scheduling promise to reduce lock congestion, reduce barge rates to shippers, improve equipment utilization for barge operators and reduce operating costs for barge operators. In reality, all it will likely accomplish

is another layer of bureaucracy and delay solving the problem with the most efficiently recognized alternative, 1200-foot locks.

Lock delays and resulting high barge rates are symptoms of a seasonal river system that primarily operates 9 months, and inadequate lock infrastructure incapable of meeting shipper demand. Congestion is a function of the timing of market demand with the ability to move carrying capacity to the areas of the system to meet that demand.

Scheduling will not allow the industry to increase barge supply in the spring, will not result in increased barge supply in the fall, will not reduce shipper rates in the spring, nor in the fall. It might minimize some lock delay costs. But, in order to reduce carrier operating costs, equipment that otherwise would be waiting in queues must be productively and economically employed in alternative income producing uses. On the Upper Mississippi River system, equipment either waits in queue or waits at an alternate location until scheduled lockage time is allocated. Mr. Chairman, I would like to introduce into the record a report issued by the Inland Waterway Users Board to the Chief of Engineers outlining these key reasons why scheduling is not the answer to our problems on the inland waterway system.

Finally, some have suggested that small-scale measures, though not the long-term solution to address a 60 percent growth in traffic, might be a short-term solution. Regrettably, this thinking is what got us behind the eight ball today. History has proven that average annual growth is not how the real world works, but only how models can operate to project future needs. The reality of surges in grain exports means that if we build infrastructure solely to meet average annual growth, rather than capturing peak movements, we will continue to lose growth opportunities.

ENVIRONMENTAL PRIORITIES

This Feasibility study has already spent over \$26 million reviewing biological impacts of increased traffic and the cumulative impacts of navigation on the Upper Basin system. In addition, we have invested \$76 million more creating a monitoring system under the Environmental Management Program (EMP), which has proven invaluable in providing us with better information about the environmental status of the river's ecology.

In addition, the Upper Mississippi River Conservation Committee has issued a document entitled "A River that Works and a Working River," chronicling the evolution of the Mississippi River sustaining multiple uses, but one whose environmental values provide a mixed report. Through the EMP, our region has also produced a Habitat Needs Assessment outlining initial ideas on activities to restore lost habitat to the river's ecosystem. These combined efforts have helped scope a range of opportunities for an enhanced restoration effort in the Upper Mississippi River Basin.

The solutions to site-specific navigation improvements are well documented. Agreement on how best to achieve environmental sustainability is still very much the focus of our collaborative effort. MARC 2000 would urge the Committee to give careful consideration to evaluating WRDA 2002 proposals to address the following concerns:

- The Corps' traditional approach and funding of Operation and Maintenance needs to be re-evaluated to address both the navigation system and the ecosystem. O&M costs have been increasing as the navigation infrastructure ages and the challenge of finding environmentally acceptable approaches increases pressure on a budget item unable to meet current needs;
- Setting aside the traditional approach of addressing environmental restoration in the Upper Miss Basin primarily through mitigation by exploring means by which the full range of actions required for future environmental sustainability can be implemented;
- Establishing a viable approach for funding environmental improvements. While the Inland Waterway Trust Fund provides cost-sharing dollars for navigation improvements, there is considerable question on how to finance environmental restoration efforts largely needed to balance the creation of a Federal locking river whose benefits are enjoyed by multiple users.

CONCLUSION

Mr. Chairman, our Basin is prepared to work with Congress to find a reasonable approach to lock modernization and environmental restoration. In addition to working as part of the collaborative process with the Corps of Engineers and other Federal agencies and the Governors' representatives, we are engaged in dialogs with leading environmental groups in the Basin. We sincerely seek a balanced approach to the Basin's needs.

Unfortunately, the lack of resource commitment to completing navigation projects of national significance is sapping our Nation of vital economic benefits associated with responsible water resource development.

Lock modernization on the Upper Miss and Illinois must begin this year with authorization language and pre-construction and design work if we have any hope of staying competitive in world grain trade. It will take at least 2 years or more for the PED process to be completed prior to construction. We believe the Interim Report will provide sufficient guidance for Committee action. In order for the benefits of U.S. Trade, Agriculture and Transportation policy to be realized in our part of the country, we must move rapidly to protect our Achilles heel: the aging, antiquated, trade-limiting inland waterway system.

Many different products are transported on our waterway system. However, I would like to close with another agricultural example of why this investment decision should be acted on immediately. In the 1999/2000 farm production year, over 270 million bushels of soybeans and 1.214 Billion bushels of corn were loaded on barges for export from the Upper Miss Basin. Those exports were valued at over \$4 Billion. According to USDA multipliers, these exports generated a gross economic output of over \$22 Billion, personal income of over \$6 Billion and supported gross employment of over 230,000. This activity would have generated \$776 million to the U.S. treasury, or almost 60 percent of the total cost of lock modernization on the Upper Mississippi and Illinois Rivers.

By any other standards, this investment would be a given, especially when half the cost of modernization is paid for out of the Inland Waterway Users Trust Fund, which is currently running a surplus of over \$400 million. Modernization helps redress the extensive rehabilitation costs of old structures and reduces the backlog. The economy wins with stronger farm economies, efficient transportation systems and a reinforced jobs base. The environment wins with slower growth of alternative modes that consume more fuel and emit more pollutants, such as hydrocarbons, carbon monoxide, and nitrogen oxides into the air. Societies win with sustained quality of life, fewer accidents and transportation-related fatalities.

It is far more likely that export growth will surge prior to completion of new locks than construction of new locks being built prior to the next wave of export growth. The risk to the Nation is greater if we can't meet that surge of demand than if we're meeting it head on or waiting for it to develop as food experts predict it inevitably will.

CORPS OF ENGINEERS STUDY PROCESS

Mr. Chairman, I would like to express a few words about the Corps' Feasibility study process.

The picture of the Corps painted by certain elements of the press along with the glib commentaries of selected opponents to water resource development are very different from the Corps of Engineers we work with and, yes, argue with over technical analyses and how best to achieve congressionally authorized purposes for projects and programs throughout this Nation. The Corps is made up of a unique blend of civilians and military personnel who serve their Nation well. This agency was recently voted as one of the two best government agencies in value produced for taxpayer dollar received.

The people in our basin worked side-by-side with Corps personnel in 1993, 1995, and 1997 and most recently during the 2002 floods that have resulted in minimum loss of life and in protection of the environment. Before the long-standing policies and procedures of the Corps of Engineers are too quickly attacked, let's reflect on the fact that we're dealing with an organization that has an unprecedented record of civil works and emergency response accomplishments. The last thing in the world that we need is change which makes the Corps study process more costly, time-consuming and burdensome.

The Upper Miss study is an example of an extremely open participative process. The public has been involved in this study at every step of the way. There have been over 80 "open" technical meetings at each step of the way. There have been over 41 public meetings between 1993-2000. Some might even argue this has been too much public participation and has perpetuated the problem of paralysis by analysis.

This study is a compilation of countless other smaller studies that have been scoped out, conducted collaboratively with resource managers and economists throughout the basin, and then reviewed by expert elicitations and peer reviews. The direction of the study has evolved over these years. Additional sub-studies have been commissioned. I can't imagine how many PhDs this study has produced over the last 10 years. There has never been any problem with the public's access to in-

formation. If anything, this open, collaborative process has miscued over one important promise and congressional desire—to be expeditious, deliberative and conclusive within a 6-year timeframe.

We agree with the National Academy of Sciences (NAS) that certain expectations placed on this study, such as 50-year projections, are unrealistic. In addition, we believe the process is overwhelmed because there is a crisis of clarity over what this nation's priorities should be. Any attempts to change technical assumptions without clear policy agreement, at this time, would be premature and likely harm and confuse the Corps' ability to meet congressional objectives.

Many of the concerns articulated over project purposes, benefit cost analysis and cost sharing are reflective of a lack of National consensus about water resource development priorities. In our basin, the citizens overwhelmingly would prefer that barge transportation move bulk commodities on the inland waterway system, rather than further overburdening the highways and rails that move through our communities. The national benefits of the waterways have been recognized since the inception of our Nation, and need to be re-emphasized. Water resource projects built our basin and now support an economic structure that competes in a global marketplace. Our investment in modernizing navigation lock infrastructure and improving the ecosystem must begin in earnest if we are to continue to provide family wage jobs in our basin.

Thank you for the opportunity to present MARC 2000's views on WRDA 2002 lock modernization opportunities and the Corps of Engineers study process. I would be pleased to answer any questions.

STATEMENT OF TONY MACDONALD, EXECUTIVE DIRECTOR, COASTAL STATE ORGANIZATION, INC.

Mr. Chairman and Members of the Committee: Good afternoon. I am Tony MacDonald, Executive Director of the Coastal States Organization (CSO). On behalf of CSO, I want to thank Chairman Jeffords and the Members of the Committee for the opportunity to present testimony on the U.S. Army Corps of Engineers water resources programs and Water Resources Development Act of 2002 (WRDA). Since 1970, the Coastal States Organization (CSO) has represented the Governors of the nation's coastal and Great Lakes states, Commonwealths and Territories on issues relating to the improved management of coastal development and the protection of coastal resources.

My comments today focus primarily on the need to get beyond the criticism of the implementation of the Corps of Engineer's current limited single-purpose, project approach to water resources management to building support for an affirmative national policy that encourages efficient and sustained investment in the nation's water resources and port infrastructure. This must include investment in the nation's "green" infrastructure including wetlands, critical habitats, nonstructural and natural flood and storm protection features, and the beneficial use of dredged material. In CSO's view, this can best be achieved by making individual Corps projects accountable to a consistent national policy to manage the nation's shoreline and navigable waterways. This policy should be supported by an enhanced partnership with the states that builds upon the expertise of states and other local project sponsors in coastal, watershed and basin-wide management.

Pursuant to the Coastal Zone Management Act of 1972 (CZMA), states develop programs for the management of rapidly developing coastal areas, and protection of water dependent uses and coastal resources. Under the CZMA, States must develop a planning process for assessing the effects and ways to control or lessen the impact of improper development in flood prone, storm surge and shoreline erosion prone areas, and to restore areas adversely affected by coastal hazards. Corps and other Federal activities are required to be consistent to the maximum extent practicable with federally approved coastal zone management plans.

Under WRDA 1986, States share in the cost of Corps Civil Works projects. States also serve as local project sponsors, or work with port authorities and local governments that serve as local project sponsors. States have a public trust responsibility to their citizens to protect coastal resources including navigation, fishing and public access. Increasingly, states and local governments are also embracing initiatives to manage coastal sprawl and collaborative community-based planning and management models such as the National Estuary Programs. Effort to "reform" the Corps must take into account these multipurpose, multi-stakeholder efforts that go beyond traditional economic benefit analysis to take into consideration the value of environmental, cultural and social inputs, as well as so-called national economic development benefits.

Recent conflicts over significant port expansion projects in Delaware River and Charleston, SC and challenges posed by port expansion in places like the Columbia River, Houston and New York demonstrate the importance of a broader incorporation of local and regional concerns into national port planning. A closer look at port project success stories such as Oakland and Houston reveal that port and transportation benefits can and must be matched with environmental restoration and enhancement efforts.

THE NATIONAL INTEREST IN THE COASTAL WATER AND NATURAL RESOURCE
INFRASTRUCTURE

The critical importance of the Corps' Civil Works programs to the Nation should not be lost amidst the often legitimate criticism. More than half of the nation's population lives within 50 miles of the shore. Our ports and harbors are the nation's interface with the global economy. Ports are connected by inland waterways and other transportation access to every state. Ninety-five percent of international trade by volume passes through U.S. ports. In 1996, U.S. Customs revenues totaled \$15.6 billion. A recent report by the Federal Reserve Bank of Kansas City, The U.S. as a Coastal Nation, observed: ". . . the coastal concentration of U.S. economic activity reflects a productivity effect of access to navigable water." In addition, the report examined the significant historical and cultural importance, as well as quality of life factors that draw people to live, work and recreate along the nation's coasts and beaches.

The coast provides a staging area for fishing fleets, seafood processing, and offshore oil and gas production, as well as supports critical habitats for spawning fish, shellfish and threatened and endangered species. Any visit to the beach confirms that they are the nation's premier recreation areas. Their beauty and accessibility provide a magnet not only for international visitors, but also provide readily accessible recreation and respite for millions families from diverse urban and rural areas that may not have other options. Travel and tourism is the nation's largest industry with more than 85 percent of industry revenues being generated in coastal areas. Federal tax revenues from beach tourism activity has been estimated to generate \$14 billion in California alone. Most importantly, these same beaches provide protection of life and property as natural barriers to flooding, waves and storm surges. A recent Corps of Engineers study of six coastal communities in North Carolina showed that communities with shore protection projects suffered significantly less from Hurricane Fran.

Arcane cost-benefit ratios and budgeting exercises obscure the full range of benefits—the economic stimulus, tax revenues, environmental protection, and life and property protection—derived from our nation's coastal infrastructure. For example, we spend billions on constructing highways and transportation corridors to enable people to get to coastal areas and the beach. Yet, to spend several million on ensuring that the beach exists protecting the natural and economic resource which justifies the transit project is characterized by some as extravagant. The entire national budget for beach nourishment projects—approximately \$135 million in fiscal year 2002—would be a virtual rounding error on most significant transportation projects.

I want to dispel several myths which too often distort the debate over shore protection projects.

- Shore protection projects do not simply wash away into the sea. They absorb wave energies that typically save millions of dollars in property damages. Although the sand is lost temporarily from the beach, many times the majority of the sand remains in the littoral system and is either returned to the beach or deposited on downstream beaches.

- Nourishment projects are typically less expensive in current dollars than structural solutions as much of the costs are deferred well into the future while structures must be paid for at the time of initial construction.

- In addition, nourishment projects are preferable to hard structures which would undermine the natural protective features of the shoreline and would be less environmentally acceptable and adversely impact downdrift beaches.

- Finally, the Federal investment is justified based on formulating a project for hurricane/storm damage protection and not recreation. In addition, for Federal participation, all shore protection projects must have a benefit / cost ratio of greater than 1.0 and more than 50 percent of that justification must be based on storm damage reduction benefits.

In addition to the clear national interest and economic return of investment in the coastal water resource infrastructure, many Corps Civil Works projects have historically had, and continue to have, adverse effects upon the proper functioning of littoral system. Dams, channelization and improvements to navigation including

navigational dredging and jetties often disrupt the natural flow of sand and other sediment material resulting in sediment starvation and erosion. While it is a Federal responsibility to mitigate damages resulting from these Civil Works projects, current Corps policies only support mitigation of damages directly induced by the project and do not give priority to a comprehensive solution to overall shore protection problems. While it is important to remedy past errors, it is even more important to provide a framework for planning and implementing Corps projects that encourages not simply mitigation but the maximization of economic and environment benefits.

PROBLEMS IDENTIFIED WITH THE CIVIL WORKS PROGRAM

There are significant opportunities for project savings by simplifying Corps project reviews and allowing local sponsors, working with private sector partners, to take the lead more often in planning and implementing water resource projects. However, given the Corps continued insistence in controlling the planning process and the uncertainties in obtaining sufficient funding to reimburse project sponsors, there is no incentive for the Corps to take advantages of the efficiencies that could be generated by implementing these changes.

There is a catch-22, which is common among all Corps project types, that results from the gap between construction authorizations under WRDA and annual congressional appropriations for the Civil Works Program. With huge project backlog within the Civil Works Program, the Corps has allocated funding among as many projects as it can keep going. By allocating less funding per project to sustain a greater number of projects, the Corps has lengthened the completion times and costs for projects, and consequently for local project sponsors. Timelier project completion is one of the primary means of reducing costs within the Civil Works Program and reducing the project backlog.

There are fundamental problems with the Civil Works Program which should be addressed in the Water Resources Development Act of 2002.

1. The project by project approach to project planning and authorization does not take into account how projects affect each other, including opportunities for achieving efficiencies among projects or limiting cross-project impacts.

2. It simply takes too long to complete a project. If greater local participation in projects is sought, projects, particularly project studies, needs to be simplified and streamlined.

3. The Corps Districts and Divisions are effectively discouraged from finding creative ways for the beneficial uses of dredged material. The so-called "Federal standard," least-cost environmentally acceptable alternative requirement, favoring open water disposal of clean dredged material, thwarts the long-term cost savings to the Federal Government and resource benefits resulting from keeping sand within littoral systems. The effect of the least-cost alternative policy is to miss opportunities for environmental restoration and shift costs from the Corps budget to other Federal accounts such as disaster assistance due to the lack of protection that would otherwise have been available from sand starved beaches.

4. The full range of benefits resulting from projects, both economic and environmental, are not being credited. For example, states with comprehensive planning in place which limits development along the shore and bans sea walls have difficulty meeting the benefit thresholds for renourishment assistance, thereby penalizing states for good coastal planning. Without the availability of renourishment assistance, the pressure to allow sea walls or other shore protection structures can be overwhelming. The effect of hard structures is increased erosion as wave energy is focused at the point of impact with the wall. With the loss of the beach, the associated recreational, economic and environmental benefits are also lost.

5. The increasing pressure to reduce spending is impairing the ability of the Corps to fulfill its service functions to support state and local efforts. In addition to assistance for project planning and construction, the Corps provides much needed services to states and coastal communities, such as technical advice and data for flood plain management, planning assistance for state constructed projects, and research for improved understanding of coastal littoral systems and project designs.

WRDA 2002: AN OPPORTUNITY

WRDA 2002 presents the opportunity to improve the Army Corps of Engineers Civil Works Program through requiring more comprehensive and strategic planning, rational project selection, effective project design, and enhancement of the cost effectiveness of Civil Works projects. Making these improvements will require institutional and legal changes, as well as changes in the overall approach to managing the nation's coastal infrastructure.

There are lessons to be learned by passage of laws like the Estuary Habitat Restoration Partnership Act, which was championed by this Committee. That law not only set out a clear national policy goal of restoring one million acres of estuarine habitat, but also called for the Corps to take the lead in development of a multi-agency national restoration strategy to guide selection of the Corps projects funded under the Act and to serve as guidance other Federal, state and local investment in estuarine restoration.

In changing the overall approach to managing coastal water resources infrastructure, we recommend that Congress incorporate the following basic premises:

Our management of coastal infrastructure needs to take a systems-based approach.—The entry and movement of the sediment which forms our shoreline is a dynamic system. Man has made many alterations to the system through the erection of dams, navigational dredging, jetties and groins. While man has altered the system in many ways, we cannot stop it. We can work with the system or against it. The difference is found mostly in long-term project effectiveness and overall costs.

Working within the littoral system, we need to develop a strategy for meeting regional and state needs.—We need to move away from taking a project by project approach to the coast and develop a framework that addresses crosscutting coastal shoreline issues along with setting priorities and strategies for meeting our Nation's coastal infrastructure protection needs including targeted needs for specific inlet and regional management plans.

CSO RECOMMENDATIONS

(1) Use of Dredged Material

(a) Congress should declare sand within littoral systems a natural resource which is in need of management and conservation.

(b) The Federal standard should include a presumption that favors retaining sand within the littoral system.

(c) The authorization for beneficial uses of dredged material under section 204 should be expanded to include beneficial uses in addition to ecosystem restoration but with ecosystem restoration being the priority use of available funds.

Congress should establish a national policy which mandates a preferred alternative to keep sand and sediment within the littoral system. In some cases, the difference between the preferred beneficial use alternative and open water disposal is less than 5 percent of project costs. The Corps is locked into rigid cost-benefit analyses that do not take into account the long-term cost of traditional disposal. If a beneficial use is reasonably available, it should be incorporated into the project design and cost. There should be incentives provided for Districts and Divisions to include environmental restoration and beneficial use into planning and design navigation and other Corps projects. Currently, local projects sponsors are left to patch together a quilt of disparate Corps authorities into a project that meet restoration, protection and water resource goals.

When it is determined through sampling and testing that dredged material from a project or portion of a project, contains predominantly sand or other coarse grained material, the Corps of Engineers, and other agents of the Federal Government, should be required to look to the beneficial use of dredged material as the first option for dredged material. The Corps should work with the states and other local partners to provide guidance to the Districts and Divisions on the implementation of best management practices in beneficial use to plan and implement the on-shore or near-shore disposal of the dredged material.

Congress should remove the institutional and legal constraints which deter better management, e.g., the Corps' least cost alternative policy which is limited to assessing what is the least costly option to the Corps rather than the least cost.

(2) Regional Sediment Management Planning

(a) Direct the Assistant Secretary of the Army for Civil Works to study and prepare recommendations including projected resources to carry out a comprehensive program for regional sediment management studies.

(b) Authorize the Corps to amend existing project authorities and expand the construction and maintenance of navigation projects that promote the natural movement of sediments.

With the objective of improved information-based decisionmaking, increased project coordination and more cost effective management, Congress should direct the Corps to develop a plan to undertake regional sediment management. The plan should include estimates of baseline data requirements and their maintenance, and cost-savings from implementation.

The project-by-project approach to responding to shoreline change is costly, inefficient and sometimes inconsistent. The nation's water resources policy long ago recognized that in order to manage rivers effectively, the entirety of the river and its surrounding watershed needs to be considered. The same needs to be done for managing the nation's shoreline. Shoreline management requires an understanding of the littoral processes and systems occurring along the shore, sediment sources and their movement within the system.

The goal of regional sediment management (RSM) is to manage sand for coastal projects on a regional scale. RSM recognizes that the dynamics of littoral systems extend beyond individual, local-scale projects. Regional sediment management planning will provide an inventory and strategic vision of regional coastal sediment management needs. RSM planning will identify, evaluate and prioritize sediment management approaches in a Geographic Information System framework that coordinates existing information into one body of knowledge that can be applied to efficient implementation of sediment management projects. By synthesizing data from past and current projects on a regional basis, opportunities to address multiple sediment-related problems can be developed and redundant studies avoided.

In addition to providing a better understanding of littoral systems, regional sediment management can provide improved information on the environmental, economic and social consequences of proposed actions and potential tradeoffs associated with management decisions. RSM can improve planning, development, damage reduction, and resource management in coastal regions resulting in reduced Federal and local sponsor expenditures for channel maintenance and nourishment of storm-damage reduction projects.

Among leading experts in the field of coastal processes and shoreline management, there is already strong support for the RSM concept. The Strategic Plan for the Corps of Engineers Coastal Engineering program produced by the congressionally chartered Coastal Engineering Research Board (CERB) has recommended the adoption of a systems approach to coastal sediment management.

The objectives of RSM are within reach with new monitoring, modeling, and information management capabilities. Several RSM demonstration projects are already underway—

Northern Gulf of Mexico Regional Sediment Management (RSM) Demonstration Program covers the shoreline of Mississippi, Alabama and the northern Gulf coast of Florida. The product of the demonstration program will be a Regional Sediment Management Plan consisting of a calibrated regional sediment budget, a calibrated numerical regional prediction system, and a regional data management and Geographic Information System. These tools will assist in making management decisions and will increase benefits resulting from improved sand management throughout the region.

California Coastal Sediment Management Master Plan—is a collaborative effort between Federal, state, and local agencies and non-governmental organizations to evaluate California's coastal sediment management needs on a regional, system-wide basis.

Great Lakes Regional Sediment Management—The Great Lakes region has been designated as one of the demonstration sites for regional sediment management. The region being studied is from Ludington, Michigan at the north end, to Michigan City, Indiana at the south. This 172-mile region contains 11 Federal structures, several of which have Section 111 beach nourishment programs in place. The goals of the Great Lakes demonstration project are: to identify key stakeholders who have a role in sediment management for the Southeast Lake Michigan Region; collect available coastal data and develop a centralized web page and GIS data base for use by all regional stakeholders; improve current coastal programs and Corps operations and maintenance performance by linking navigation, dredging, disposal, and beach nourishment projects; and, to implement regional sediment management practices for the southeast region of Lake Michigan. These results will have direct ties to the operation of the Section 111 program, the National Shoreline Management Study, the Lake Michigan Potential Damages Study, and the National Erosion Control Development and Demonstration Program.

Additional demonstration sites are planned for the New York/New Jersey, New England, North Carolina/Virginia, and the Pacific Northwest.

The Corps also should be authorized to expand the design and maintenance of navigation projects to promote the natural movement of sediments to benefit adjacent shorelines and beaches. Small amounts of additional spending for activities like advanced maintenance, sand bypassing, berm building and catchment basin pump-out can enhance the movement of sand to produce environmental and economic benefits. The Corps presently has some authority to promote better sediments management. For example, the Corps can protect, restore or create aquatic habitat using

dredged material (Section 204 of WRDA 92) and place suitable material on adjacent beaches (Section 145 of WRDA 76). But these authorities are difficult to apply to sediment management measures with indirect, delayed or cumulative benefits, and activities with widespread beneficiaries across multiple communities or states. These authorities should be supplemented by authorizing the Corps to undertake additional Federal expenditures to promote proper sediment management.

(3) Amend the Authorization for the National Shoreline Study

(a) Congress should amend the authorization for the National Shoreline Study (Section 215, WRDA 99) to require that it be conducted by an independent body under a set timeframe and budget,

(b) The study reauthorization should also include a specific directive for state and Federal interagency participation including but not limited to the Corps, NOAA, USGS, and FEMA;

(c) The study authorization should include a directive that the study be conducted using and analyzing existing information and studies.

Section 215(c) of the Water Resources Development Act of 1999 requires the Corps to prepare a report describing the—

- Extent of erosion and accretion along the shores of the U.S.;
- Economic and environmental effects of shoreline change;
- Systematic movement of sand along the shores of the U.S.; and
- Resources committed by Federal, state and local governments to restore and re-nourish beaches.

The report is to include recommendations on the—

- Use of a systems based approach to sand management; and
- Appropriate levels of Federal and non-Federal participation in shore protection.

The study will bring into full view the geophysical, anthropogenic, economic and environmental factors needed to be assessed in order to improve the nation's policy to manage the shoreline in a manner which fulfills multiple objectives.

Much of the data and information required for the completion of this study has already been developed. The Corps has a wealth of project specific data including information being developed by on-going regional sediment management demonstration projects. FEMA, through the John H. Heinz Center, recently completed a congressionally mandated study of erosion and its economic impacts, The Hidden Costs of Coastal Hazards. NOAA, through the use of LIDAR laser technology, employed by the Coastal Services Center (CSC), has remapped the shoreline of most of the continental U.S. CSC is also converting analog data contained on over 14,000 T-sheets to a GIS format. This will provide an electronic record of shoreline change for much of the coast. The USGS Coastal and Marine Geology Program has already compiled excellent regional and local studies of the coastal geologic framework of the U.S. Much of the most comprehensive information about shoreline change and related economic and environmental impacts has been developed by states.

The National Shoreline Study is particularly timely in two respects. First, it has been nearly 30 years since the first National Shoreline Study was completed in 1971. The new study will provide an opportunity to re-examine the critical erosion areas identified in the original study to determine what has happened in those areas in terms of geophysical processes and the responses to shoreline change. The new study will determine whether the number of critical erosion areas has increased and, more importantly, whether the vulnerability in those areas has increased. The new Study is also warranted and particularly timely given recent leaps in technology and methodology. In just the last few years, a technology threshold has been crossed which has provided the opportunity to examine shoreline process utilizing complex modeling like never before. It is expected that an ancillary benefit of the National Shoreline Study, which may even exceed the prescribed outcomes for the study, will be improved interagency cooperation and data integration.

The National Shoreline Study is a necessary step toward examining and reassessing Federal and state programs and policies responding to shoreline change. It is hoped that the study will provide a stimulus and objective basis for—

- Recognizing a shared national interest in responding to shoreline change;
- Developing a systems based approach to responding to shoreline change through a better understanding of shoreline processes; and
- Integrating Federal agency policies and processes, including data and information sharing, to tailor shoreline change response decisions to littoral systems and regional objectives.

Completion of the study has been hampered by an oversight in the authorization for the study. Without an express authorization of funding, it has been difficult for the Corps, Office of Management and Budget, and congressional appropriators to have a sense of the scale and funding parameters of the study and we request that

Congress included a specific funding authorization and completion date based on the date when appropriations are made available.

To this end, we also request that Congress amend the study authorization with a specific directive that the study is to be conducted using and analyzing existing data and information. Congress should also specify that the study is to be conducted making use of information to be made available from the United States Geological Survey, National Oceanic and Atmospheric Administration and Federal Emergency Management Agency, and close cooperation with the states.

Thank you for the opportunity to testify before you. I am pleased to answer any questions.

STATEMENT OF JIM ROBINSON, JR., PINHOOK, MO

Chairman Jeffords, Senator Smith, Senator Bond and Members of the Committee. Again for the record, my name is Jim Robinson and I am here on behalf of the people of Pinhook, Missouri. Pinhook is located in the Southeastern corner of Missouri in the Bird's Point/New Madrid Floodway about half-way between Memphis, Tennessee and St. Louis just a few miles from the Mississippi River. I have lived there most of my life. The land that I farm was purchased by my father when we moved from Tennessee. My people were not allowed to own certain lands or live in town. We were only able to purchase the land that the Mississippi River flooded. We cleared the land with our own hands with axes and mules. We built up our own community and are proud of what we have and what we have done. Pinhook is our home and it is what I want to pass along to my children and grandchildren.

My entire life I have lived with floods on the Mississippi River destroying what I have worked for. Where we live the Mississippi River backs up through a 1500-foot hole in the levee that was left there when the levees were built in the 30's. So every few years the river comes up and backs through that hole and we get flooded.

I don't know how many of you have ever been through a flood and know what it is like to have raw sewage in your home. What it is like when you get out of bed in the morning to have to wade through that mess. To have your children live in it. For them to have to ride in a tractor drawn open-wagon through the water just to get to a school bus. My people should not have to live that way year after year.

If I go north to St. Louis I see fine homes surrounded by big levees, or if I go south to Memphis I see that same thing. Those people have been able to build their levees and protect their homes. I don't want to take that away from them, I just want the same thing for us.

There has been a project on the list for years that would close our levee and give us some relief. And we thought we were close to ending the problem. But then in 1986, Congress raised the local cost share and we were told that we had to come up with 35 percent of a multi-million dollar project. We farm some, our children work in small factories, we pay taxes, but we cannot afford \$20 million.

Finally in 1993 through the Enterprise Community program we were able to get some help and the local share was reduced back down to 5 percent. I thought we were going to get to close that hole. The Corps of Engineers went to work and we were on our way. That was 9 years ago and we had a flood again this year.

I have met with people here in Washington and they all seem like they want to help, like they understand what we are up against. But every time we get close, somebody from the EPA or Fish and Wildlife Service says the Corps has to go study some more. I am tired of studying the same old mud.

I have heard about what some of you want to do to the Corps of Engineers. All of the technical stuff is for someone else to comment on. I want to talk to you a little about the people that this will effect. I have lived along the Mississippi River my whole life, I helped evacuate homes in the Flood of 1937, we worked day and night. Over the years the Corps has built levees for the city areas and has slowly worked down to us it has taken most of my life for them to finally get to us. Now, after all of that work has been done you want to say to us that is it, no more unless you pay for half of it. You did not say that to the city folks, but after all these years when we finally are going to get our share you want to cut our piece in half.

And you and I both know that there is no way a farming community in the Mississippi Delta is going to be able to pay for half of any water project. This is not reforming the Corps of Engineers, that is just a nice way of saying you people are not going to get any help. It looks better in the newspapers to say you are reforming something.

I was here in Washington over 2 years ago for a meeting with the EPA, Fish & Wildlife, the Council on Environmental Quality and the Corps. I was told then that

the problems that were delaying our project would be fixed. Since then the only ones that have not drug their feet have been the Corps. Everytime someone comes down to look at the project they promise me that they are going back and find a solution and I never see them again, I see someone else who tells me the same thing. But I always see the same faces from the Corps and they come back and tell me that they are ready to build, but they can't because the other agencies hold them up. From where I sit it looks like you are trying to reform the wrong group.

Another point that I understand that is being considered is how the Corps figures its benefits. Some people don't want them to use increased crop production as a benefit. Is there something wrong with trying to make a living farming now? I farmed all last week and if I can increase how many bushels of soybeans I harvest this fall I think that is good. It is good for me, it is good for my family and it is good for this country. Farmers grow food and pay taxes and that has to benefit everybody.

That concludes my prepared remarks. I will be glad to answer any questions that you have.

STATEMENT OF PETER J. SEPP, VICE PRESIDENT FOR COMMUNICATIONS, NATIONAL TAXPAYERS UNION

Mr. Chairman and Members of the Committee, on behalf of the 335,000-member National Taxpayers Union (NTU), I am pleased to offer our support for S. 1987, the "Corps of Engineers Modernization and Improvement Act of 2002." Although I am unable to attend these important hearings in person, and am aware that several colleague organizations will be providing testimony on this legislation, I am pleased to offer NTU's own brief views on S. 1987.

Over the past several decades, taxpayers have witnessed a sharp decline in discipline as well as accountability in virtually every component of the Federal budget process. Federal taxes are hovering at a postwar high in terms of their burden on the nation's economic output, and thereby inflict huge "deadweight losses" on a private sector that is currently struggling its way out of an economic downturn. In the past 10 years alone, Federal spending has grown nearly twice as fast as the rate of inflation.

Meanwhile, agencies continue to mismanage these funds with an astounding level of indifference. This year the Office of Management and Budget (OMB) gave "red lights" for fiscal recklessness to over half of the 26 Federal departments in each one of the five categories used to evaluate them. For its part, Congress often shuns a more methodical merit-based appropriations process in favor of a politically tilted patchwork of earmarks and open-ended authorizations. Last year, the Washington Post reported that House Members alone had requested nearly 19,000 earmarks totaling \$279 billion in the spending bills before Congress, marking a threefold escalation of the practice since 1995.

Few areas of Federal spending seem more impacted by these trends than public works projects, many of which are undertaken by the Army Corps of Engineers. Members of the Committee and their staff, led by Senator Smith, are to be commended for taking such a systematic approach to addressing the accumulated defects of the water resources development spending process, through the Corps of Engineers Modernization and Improvement Act. Although this legislation cannot erase the fiscal perils of the past overnight, it could, if properly implemented and vigorously enforced, provide measurable and significant benefits to taxpayers.

Among the advantages we find most attractive are:

- *A more vigorous cost-benefit analysis.*—A recent study by Congress's Joint Economic Committee found that the cost to the economy of raising \$1 in additional taxes for new Federal programs is \$1.40—after factoring in the deadweight loss of consumer substitution, reduced private-sector activity, compliance costs, and government enforcement costs. Conversely, reducing government spending by \$1 and returning that money to taxpayers will eventually yield \$1.40 in overall economic benefits. Thus, the bill's provision to "require Corps projects to meet benefits at least 1.5 times as great as the estimated total cost of the project," is far more justified than the current "1:1" requirement. Indeed, the proposed "1.5:1" ratio ought to be the absolute minimum taxpayers expect for the dollars they send to Washington.

- *A more rational review process.*—As the National Endowment for the Arts and the National Science Foundation have both demonstrated, a review process for federally supported projects is no guarantee that tax dollars will be spent wisely. However, this legislation holds a better promise of success, by creating an Independent Review Board overseen by the Director of OMB, and operating within the Army Inspector General's office. Equally important to avoiding past mistakes is the bill's re-

quirement for a “balance of expertise” among Board members, which will include economists and engineers.

A push toward self-sufficiency.—Federal taxpayers have long been threatened with spiraling costs associated with flood control and beach re-nourishment projects of parochial rather than national benefit. The legislation would encourage more state, local, and possibly private involvement in these particular projects—and perhaps lead to the termination of economically unsustainable projects—by reducing the Federal cost “share” among them.

A more visible “sunset.”—Far too many Federal construction programs take on a life of their own, especially when their systematic growth escapes the attention of Congress until billions of dollars are at risk. S. 1987 would help to address this problem in several manners, by de-authorizing projects that fail cost-benefit analyses, by restricting mission creep into areas such as school construction, and by encouraging de-commission of underused waterways. Obviously, de-authorizing a project does not ensure that it will be denied funding, but such a mechanism is helpful in highlighting expenditures of a lower priority.

No statutory legislation can promise to completely overhaul a fundamentally flawed budget process. In an ideal world, constitutional restraints on tax and spending increases, merit-and performance-based budgeting, more state and local responsibility for their own programs, and regulatory reform to promote privately built and—maintained public works projects, would all be part of a comprehensive solution. However, the Corps of Engineers Modernization and Improvement Act of 2002 could serve as a solid bridge to take our Nation toward this more fiscally responsible destination. Equally important, this bill could serve as a guide for policymakers seeking reform in other capital spending-intensive areas, such as transportation or Federal office space.

For these reasons, the National Taxpayers Union strongly urges Members of the Committee and your colleagues in the Senate to support the Corps of Engineers Modernization and Improvement Act of 2002, and NTU looks forward to working with you toward the enactment of this critical legislation. Once again, I appreciate the opportunity to present our perspective on an issue that deserves a rightful place on Congress’s agenda.

STATEMENT OF ERIC DRAPER, DIRECTOR OF POLICY, AUDUBON OF FLORIDA

Mr. Chairman, Senator Smith, and members of the Committee, on behalf of Audubon of Florida, a strategic alliance of the National Audubon Society, Florida Audubon Society and 43 chapters and 40,000 members in the State of Florida, thank you for the opportunity to present our views regarding proposals for the Water Resources Development Act (WRDA) of 2002. The purpose of our testimony is to recommend that consideration be given to the authorization of three urgent and crucial Everglades restoration projects and deauthorization of the Apalachicola-Chattahoochee-Flint River Project, as well as much needed comprehensive reforms to the U.S. Army Corps of Engineers (Corps).

Audubon of Florida recognizes the Chairman Jeffords’ support for Everglades restoration, a cause of utmost importance to Florida. We also recognize the contribution of past Chairman and Ranking Minority Senator Bob Smith for his vision, courage and determination in championing the historic legislation designed to restore the Everglades and return the abundance of birds and wildlife to its world-renowned ecosystem. We also thank the other members of the committee and the staff for their role in the passage of the Restoring the Everglades, an American Legacy Act in WRDA 2000, and for their continued support for Everglades restoration. We especially thank Florida’s senior senator, who has provided steadfast and effective leadership on the Everglades and other Florida issues.

EVERGLADES RESTORATION: EVERGLADES AUTHORIZATIONS FOR 2002

The Everglades is a model for future Corps environmental restoration projects. The Comprehensive Everglades Restoration Plan (CERP) is an outstanding example of how a reformed Corps would repair damage from previous water resource projects, while functioning in a manner that is responsive, accountable, and fiscally responsible. Again, we thank the Committee for its long-standing support for Everglades restoration and urge your continued support for the restoration of America’s Everglades.

Audubon strongly urges the Committee to include in WRDA three critical Everglades restoration projects that are scheduled for authorization by Congress this year and contain more than half of the total land area of the Comprehensive Everglades Restoration Plan (CERP). These projects will deliver enormous benefits to the

Everglades natural system. Like other parts of the Everglades ecosystem, these projects are largely an attempt to repair previous damage by Federal and state projects. The partnership between America and Florida on these three projects will contribute significant improvements to the Everglades and our nation's natural resources.

The proposed 2002 Water Resources Development Act (WRDA) must include authorization for the Water Preserve Areas (WPAs), the Indian River Lagoon (IRL), and the Southern Golden Gates Estates (SGGE) Hydrologic Restoration Project in order to accomplish significant early restoration. The three projects also provide the earliest ecological and economic value for the investment that Florida's and America's taxpayers are making in this historic restoration effort.

The Indian River Lagoon Project will reverse the deterioration and restore a nationally significant and unique system connecting Lake Okeechobee to the most diverse estuary in North America. The project restores, protects and utilizes 92,900 acres of water storage and water quality treatment areas. Restoring, cleaning up and enhancing the area's wetlands and waterways increases the extent of natural storage and limits the dumping of harmful stormwater into Lake Okeechobee, the Indian River Lagoon and the St. Lucie Estuary. These water bodies will benefit enormously from land acquisition and improvements for stormwater retention and water storage and by changing the current project's drainage patterns.

The Southern Golden Gates Estates Hydrologic Restoration Project will restore to its previous natural condition 113 square miles (72,320 acres) of Southwest Florida that was ditched and drained for a sprawling development. Efforts to restore this area's unique ecology of cypress, wet prairie, pine, hardwood hammock and swamp have been underway for decades. The project is connected to the Florida Panther National Wildlife Refuge, the Belle Meade State Conservation and Recreation Lands Project Area, the Fakahatchee Strand State Preserve, and will restore flows to the Ten Thousand Island Estuaries and Aquatic Preserve through sheetflow and flowways rerouting approximately 185,000 acre-feet of water currently discharged as point source to the Faka Union Bay. Immediate benefits for the booming adjacent urban area include water supply through aquifer recharge and the prevention of saltwater intrusion while maintaining current authorized levels of flood protection for developed areas. The State of Florida has already acquired more than 90 percent of the 60,000 acres needed for the project. The restoration benefits of this project are critically needed and too long overdue.

The Water Preserve Areas (WPAs) Project, (including the Bird Drive Recharge Area and the Southern Compartment of the Hillsboro Impoundment), an integral part of the Everglades restoration plan, is located within Palm Beach, Broward, and Miami-Dade Counties east of the Everglades and west of existing development, creating a 13,600 acre buffer area (Recommended Plan of the Draft WPA Feasibility Study). The WPAs are designed to increase the spatial extent of wetlands acres, improve habitat in the Everglades Protection Area, enhance the Loxahatchee National Wildlife Refuge, as well as store water, and safeguard urban wellfields. WPAs provide a critical source of water storage for restoration by reducing undesirable losses from the natural system through seepage and providing a means of capturing stormwater runoff that was previously wasted to tide. Further, development continues to encroach on the remaining natural areas adjacent to the Everglades, which serve a critical role in the restoration of the Everglades by maintaining wetland spatial extent. The WPAs also provide a mechanism for increased aquifer recharge and surface water storage capacity to enhance regional water supplies for the lower east coast urban areas, thereby reducing demands on an already degraded natural system.

These three projects demonstrate large-scale ecosystem restoration, while maintaining or improving water supply and flood protection. The success of these projects hinges on timely authorization. These projects require intensive and significant acquisition of land under significant development pressure delay could result in failure. If authorized in 2002, these projects will result in significant ecosystem restoration early in CERP implementation the kind of early success that will be essential to maintaining the broad support CERP now enjoys from both the public and private sectors.

CORPS REFORM

The Army Corps of Engineers, through its authorized projects, has contributed to the nation's prosperity, saved lives and improved living conditions for millions of Americans. Many of these projects have also had serious negative environmental consequences. In Florida alone, billions of dollars are being spent to correct damage from Corps projects.

It is time to reform the role and activities of the Army Corps of Engineers and strongly supports legislation such as S. 1987, S. 646, H.R. 1310 and H.R. 2353 to accomplish reforms. We specifically urge the passage of legislation with the following elements:

- New tests and rules for fiscal responsibility, public accountability and environmentally sustainable projects.
- Full mitigation of environmental damages incurred by project construction.
- Increased public participation and input at the outset of every proposed project.
- Deauthorization of those projects that are shown to be economically unjustified.
- New rules to prevent the Corps from basing any of a project's benefits upon any economic value resulting from the destruction of wetlands.
- Requirements that the Corps to count the cost of destroying natural resources when calculating the economic costs and benefits of projects
- Independent peer review of large and controversial projects concurrent with the Corps' current project planning process.
- Increased fiscal responsibility and public accountability of the Corp activities and projects.

APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER PROJECT

In addition to the specific reforms noted above, Audubon of Florida supports deauthorization of the nine by 100 foot channel of the Apalachicola-Chattahoochee-Flint River Project between the Gulf Intracoastal Waterway near Apalachicola, Florida to Jim Woodruff dam near Chattahoochee, Florida as supported by the Governor and Cabinet of the State of Florida. The maintenance dredging of this section of the Apalachicola River, which is little used for commercial navigation, has had enormous negative environmental impacts. Remarkably, this river project accounts for 30 percent of the Inland Waterways operations and maintenance budget, although the project only amounts to 3 percent of all navigation in the Inland Waterways. Dredging of the Apalachicola-Chattahoochee-Flint River Project is both environmentally and economically irresponsible. By ending the dredging of this waterway, the Apalachicola River may repair itself and once more become home to abundant fish and wildlife.

Congress should enact meaningful Corps reforms to help restore faith in an agency that has suffered a significant loss of credibility. However, Congress should also act to authorize the three aforementioned Everglades projects and deauthorize the harmful operation of the Apalachicola River. We ask Congress to direct the Corps to manage ecosystems in an environmentally sustainable manner and to provide equal consideration and resources to environmental restoration as to flood control and navigation. Audubon of Florida will continue to support efforts to reform the U.S. Army Corps of Engineers and we look forward to working with you to ensure that the next WRDA contains comprehensive and much-needed reforms.

We greatly appreciate this opportunity to provide the Committee with our views for WRDA.

STATEMENT OF BOB PERCIASEPE, SENIOR VICE PRESIDENT FOR POLICY, NATIONAL AUDUBON SOCIETY

Mr. Chairman, Senator Smith, and members of the Committee, on behalf of Audubon's more than one million members and supporters, thank you for the opportunity to present our views regarding proposals for the Water Resources Development Act (WRDA) of 2002. The purpose of our testimony is to recommend for inclusion in WRDA 2002 much needed comprehensive reforms to the U.S. Army Corps of Engineers (Corps), as well as three projects, that are vital to the continued restoration of the Everglades. Audubon's mission is to conserve and restore natural ecosystems, focusing on birds and other wildlife for the benefit of humanity and the earth's biological diversity.

Audubon thanks the Chairman for his long-standing support for our nation's precious natural resources and for his recent actions to protect our environment since assuming the Chairmanship of the Environment and Public Works Committee. Audubon also recognizes the past Chairman and Ranking Member for his vision, courage and determination in championing historic legislation designed to restore the Everglades and return the abundance of wading birds and rich diversity of life to the unique and globally significant River of Grass. We also thank the other members of the committee and the staff for their role in the passage of the Restoring the Everglades, an American Legacy Act in WRDA 2000, and for their continued support for Everglades restoration.

CORPS REFORM

Before discussing specific proposals of Corps Reform legislation, Audubon would like to acknowledge the vital role that the Corps has played in helping to increase commerce and strengthen our economy and especially for its role in protecting American lives and safeguarding communities during natural disasters. The Corps has done an able job constructing congressionally authorized projects for over 220 years.

Unfortunately, 220 years of water resource projects have also left a legacy of environmental destruction and billions of taxpayer dollars wasted on projects that are often without merit. Water resource projects have been identified by the scientific community to be a leading cause of dramatic population declines in a large percentage of our wading birds, native fish and other freshwater species that are threatened with extinction.

Mitigation plans to repair the environmental damage for water resource projects often do not address the full impacts of the projects and in some instances are never undertaken. Several major Corps environmental restoration projects, such as Everglades restoration, are now directed at undoing the damage of previous Corps projects, yet additional projects that cause the same kind of environmental devastation continue to be constructed. Several currently authorized projects would destroy hundreds of thousands of acres of wetlands and threaten our environmentally sensitive floodplains, rivers and other critical aquatic habitat that so many species of wildlife depend on.

More than half of our country's original wetlands have already been lost, and we continue to destroy wetlands at a rate of approximately 60,000 acres per year. In addition to their enormous ecological benefits, wetlands also benefit society by filtering pollutants out of our water, providing flood control, recreational opportunities, and economic benefits. We can no longer subsidize the destruction of wetlands and other critical aquatic habitat through wasteful Corps water resource projects.

The need for comprehensive reform of the Corps and the water resources development process has become increasingly clear. Several Corps projects have recently been shown by government reports and scientific reviews to be wasteful, economically unjustified, and devastating to our nation's natural resources. The Corps has been shown by the Army Inspector General and the National Academy of Sciences to have used flawed economic models and intentionally manipulated data in order to justify expanding locks and dams on the Upper Mississippi River. The General Accounting Office has found the Delaware River Deepening project to be similarly unjustified. Government reports have also corroborated internal revelations that the Corps has an institutional bias toward large projects that are often without merit and result in grave environmental consequences for our environment and especially for our remaining wetlands.

Audubon strongly supports proposed reforms to the Corps that emphasize fiscal responsibility, public accountability and environmentally sustainable projects. The Corps reform bills introduced in the Senate and House (S. 1987, S. 646, H.R. 1310 and H.R. 2353) contain crucial reforms that cannot be postponed.

Audubon strongly urges the Committee to adopt reforms proposed in S. 646 and H.R. 1310 to ensure that environmental damages incurred by project construction are fully mitigated. This will require the Corps to acquire and restore an acre of similar habitat to replace each acre of habitat negatively impacted by a project. Seeking a balance between the economic developments of a project with other social priorities, and mitigating the environmental damages will positively impact all of the Corps water projects, while ensuring safer and healthier habitats for people, birds, and wildlife.

Audubon strongly supports reforms proposed in S. 1987, which aim to address the enormous \$52 billion construction backlog of Corps projects by deauthorizing those projects that are shown to be economically unjustified. We especially endorse the provision to prevent the Corps from basing any of a project's benefits upon any economic value resulting from the destruction of wetlands. We also back the proposal to deauthorize low-benefit projects that have a benefit-to-cost ratio of less than 1.5 and are less than one-third completed, if Congress chooses not to reauthorize this project within a 3-year period. A critical element of S. 1987 is its direction to the Corps to define economic development and environmental protection as co-equal goals of water resources planning and development.

Both S. 1987 and H.R. 2353 rightfully require the Corps to count the cost of destroying natural resources when calculating the economic costs and benefits of projects. Both bills also require the Corps to give taxpayers a better return on their investment by raising the cost-benefit ratio from 1:1 to 1:1.5, which will eliminate many unjustified projects.

Audubon also endorses reforms proposed in S. 646 and H.R. 1310 to increase public participation and input at the outset of every proposed project. The bills create new advisory and review procedures for the Corps and require that information on water resource project analyses be made available for review by the public throughout the planning process, thereby improving the public accountability of the Corps.

All of the proposed Corps Reform bills, S. 1987, S. 646, H.R. 1310 and H.R. 2353, contain provisions to improve the Corps' accountability by instituting a system of independent peer review for large and controversial projects. Audubon supports independent peer review that is concurrent with the Corps' current project planning process. Similarly, Audubon strongly endorses reforms proposed in all of these bills that will increase the fiscal responsibility and public accountability of the Corps.

Now more than ever, Congress must enact meaningful Corps reforms to improve the broken water resources development process and help restore faith in an agency which has suffered a significant loss of credibility. We ask Congress to direct the Corps to manage ecosystems in an environmentally sustainable manner and to provide equal consideration and resources to environmental restoration as to flood control and navigation. Audubon will continue to support efforts to reform the U.S. Army Corps of Engineers and we look forward to working with you to ensure that the next WRDA contains comprehensive and much-needed reforms.

EVERGLADES RESTORATION: EVERGLADES AUTHORIZATIONS FOR 2002

Again, we thank the Committee for its long-standing support for Everglades restoration and urge your continued support for the restoration of America's Everglades. The Everglades is a model for future Corps environmental restoration projects. The Comprehensive Everglades Restoration Plan (CERP) is an outstanding example of how a reformed Corps would repair damage from previous water resource projects while functioning in a manner that is responsive, accountable, and fiscally responsible.

Everglades restoration embodies Corps Reform. The Corps has set about to undo the damage wrought by a half-century of civil works projects that diked and drained the Everglades and each day divert up to 2 billion gallons of life-giving water away from the Everglades and out to sea. In Everglades restoration, the Corps has demonstrated public accountability by conducting extensive public outreach and remaining extremely open and accessible throughout the process. In some ways the Corps is already operating the largest restoration project ever attempted in human history in the manner that the proposed reforms intend. Everglades restoration amounts to Corps Reform in action, on-the-ground, righting the wrongs of the past by restoring one of the world's most unique and diverse ecosystems. Audubon strongly urges the Committee to include in WRDA three vital Everglades restoration projects that are scheduled for authorization by Congress this year and contain more than half of the total land area of the Comprehensive Everglades Restoration Plan (CERP). These projects will deliver enormous benefits to the Everglades natural system. Like other parts of the Everglades ecosystem, these projects are largely an attempt to repair previous damage by Federal and state projects. The partnership between America and Florida on these projects will contribute significant improvements to the Everglades and our nation's natural resources.

The proposed 2002 Water Resources Development Act (WRDA) must include authorization for the Water Preserve Areas (WPAs), the Indian River Lagoon (IRL), and the Southern Golden Gates Estates (SGGE) Hydrologic Restoration Projects in order to accomplish significant early restoration. These projects also provide the earliest ecological and economic value for the investment that Florida's and America's taxpayers are making in this historic restoration effort.

The Indian River Lagoon Project will reverse the deterioration and restore a nationally significant and unique system connecting Lake Okeechobee to one of the most diverse estuaries in North America. The project restores, protects and utilizes 92,900 acres of water storage and water quality treatment areas. Restoring, cleaning up and enhancing the area's wetlands and waterways increases the extent of natural storage and limits the dumping of harmful stormwater into Lake Okeechobee, the Indian River Lagoon and the St. Lucie Estuary. These water bodies will benefit enormously by land acquisition and improvements for stormwater retention and water storage and by changing the current project's drainage patterns.

The Southern Golden Gates Estates Hydrologic Restoration Project will restore to its previous natural condition 113 square miles (72,320 acres) of Southwest Florida that was ditched and drained for a sprawling development. Efforts to restore this area's unique ecology of cypress, wet prairie, pine, hardwood hammock and swamp have been underway for decades. The project is connected to the Florida Panther National Wildlife Refuge, the Belle Meade State Conservation and Recreation Lands

Project Area, the Fakahatchee Strand State Preserve, and will restore flows to the Ten Thousand Island Estuaries and Aquatic Preserve through sheetflow and flowways rerouting approximately 185,000 acre-feet of water currently discharged as point source to the Faka Union Bay. Immediate benefits for the booming adjacent urban area include water supply through aquifer recharge and the prevention of saltwater intrusion while maintaining current authorized levels of flood protection for developed areas. The State of Florida has already acquired more than 90 percent of the 60,000 acres needed for the project. The restoration benefits of this project are critically needed and too long overdue.

The Water Preserve Areas (WPAs) Project, (including the Bird Drive Recharge Area and the Southern Compartment of the Hillsboro Impoundment), an integral part of the Everglades restoration plan, is located within Palm Beach, Broward, and Miami-Dade Counties east of the Everglades and west of existing development, creating a 13,600 acre buffer area (Recommended Plan of the Draft WPA Feasibility Study). The WPAs are designed to increase the spatial extent of wetlands acres, improve habitat in the Everglades Protection Area, enhance the Loxahatchee National Wildlife Refuge, as well as store water, and safeguard wellfields. WPAs provide a critical source of water storage for restoration by reducing undesirable losses from the natural system through seepage and providing a means of capturing stormwater runoff that was previously wasted to tide. Further, development continues to encroach on the remaining natural areas adjacent to the Everglades. These remaining wetlands serve a critical role in the restoration of the Everglades by maintaining wetland spatial extent. The WPAs also provide a mechanism for increased aquifer recharge and surface water storage capacity to enhance regional water supplies for the lower east coast urban areas, thereby reducing demands on an already degraded natural system.

These three projects demonstrate large-scale ecosystem restoration, while maintaining or improving water supply and flood protection. The success of these projects hinges on timely authorization. These projects require intensive and significant acquisition of land under significant development pressure delay could result in failure. If authorized in 2002, these projects will result in significant ecosystem restoration early in CERP implementation the kind of early success that will be essential to maintaining the broad support CERP now enjoys from both the public and private sectors.

Chairman Jeffords and Ranking Member Smith, thank you for the opportunity to present our views to the Committee. We look forward to working with you and the other members of the Committee to ensure that the next WRDA includes comprehensive Corps Reform along with vital Everglades restoration projects that are a model for future Corps restoration projects.

STATEMENT MELISSA SAMET, SENIOR DIRECTOR OF WATER RESOURCES,
AMERICAN RIVERS

Mr. Chairman, Senator Smith and members of the Committee, thank you for the opportunity to present testimony on the Water Resources Development Programs within the U.S. Army Corps of Engineers. I am Melissa Samet, Senior Director of Water Resources at American Rivers, a national conservation organization dedicated to protecting and restoring the nation's rivers. American Rivers has, over 33,000 members across the country, and works in partnership with over 4,000 river and conservation organizations. American Rivers also works closely with a growing network of organizations working to reform the way the Army Corps of Engineers does business.

THE CORPS OF ENGINEERS MUST BE REFORMED

During the past few years, increased scrutiny of U.S. Army Corps of Engineers (Corps) projects has revealed a disturbing pattern of flawed economic and environmental analyses, biased and insupportable decisionmaking, and failed mitigation. These problems have been identified by the Army Inspector General, the National Academy of Sciences, the General Accounting Office, the Environmental Protection Agency, the U.S. Fish and Wildlife Service, the media, environmental and taxpayer organizations, and citizen activists.

Projects based on flawed analyses damage the nation's rivers and wetlands, wreak havoc on recreation, tourism, and other businesses that rely on healthy rivers, and squander agency resources and tax dollars. When tax dollars and Corps resources are spent on planning, defending, or constructing such projects, the Corps has less ability to carry out environmental protection and restoration projects, or more deserv-ing flood control and navigation projects.

To ensure that the Corps provides true benefits to the Nation, and does not cause unnecessary and entirely avoidable environmental harm, Congress should reform the way the Corps plans and constructs water resources projects. Importantly, these same reforms also will save taxpayer dollars.

American Rivers opposes the passage of another Water Resources, Development Act without these reforms. More potentially wasteful and environmentally damaging Corps activities should not be authorized without substantially changing the way the Corps plans, evaluates, and constructs its civil works projects.

American Rivers strongly supports congressional proposals that would change the way the Corps does business. We believe that reforms contained in S. 646 (Corps of Engineers Reform Act of 2001), and S. 1987 (Corps of Engineers Modernization and Improvement Act of 2002), H.R. 1310 (Corps of Engineers Reform Act of 2001), and H.R. 2353 (Army Corps of Engineers Reform and Community Relations Improvement Act of 2001), are essential to bringing about this change. In this testimony I would like to highlight three critical reforms: requiring independent peer review of costly or controversial Corps projects; requiring full and concurrent mitigation, and prohibiting the Corps from claiming project benefits for draining wetlands in cost-benefit ratios.

CORPS STUDIES MUST BE REVIEWED BY AN INDEPENDENT PANEL OF EXPERTS

Study after study has shown that the Corps' economic and environmental analyses cannot be trusted. Indeed, the Army's own Inspector General found that many Corps employees have no confidence in the integrity of the Corps' planning process.¹ Unfortunately, the impacts of flawed analyses go far beyond issues of trust and integrity. All too often, they are used to justify the construction of projects that unnecessarily harm the environment, and that divert tax dollars away from serving the real needs of the Nation.²

The transformation of the nation's rivers brought about by Corps levees, dams and dredging projects are among the leading reasons that North America's freshwater species are disappearing five times faster than land based species, and as quickly as rainforest species.³ The widespread damage has led the National Research Council to call for the establishment of a national goal to restore riparian functions along America's rivers. The National Research Council has concluded that protecting and restoring riparian areas will have a "major influence on achieving the goals of the Clean Water Act, the Endangered Species Act, and flood damage control programs."⁴

Despite an explicit environmental protection mission, and specific environmental restoration programs and projects, the Corps' traditional flood control and navigation projects do not appear to be doing any better for the environment. To the contrary, agency-wide biases, institutional barriers, and faulty analyses are all contributing to the continued degradation of the nation's rivers and wetlands.

Two National Academy of Sciences panels and the Army Inspector General have concluded that the Corps has an institutional bias for approving large and environmentally damaging structural projects, and that its planning process lacks adequate environmental safeguards.⁵ Less environmentally damaging, less costly, non-structural measures that would result in the same or better outcomes are routinely ignored or given short shrift.

The National Academy of Sciences, the Army Inspector General, the General Accounting Office and numerous other independent reviews also have revealed funda-

¹U.S. Army Inspector General, *Report of Investigation*, Case 00-019, 2000, at 8.

²The National Academy of Sciences has also found that the Corps is making unsupportable decisions in its Clean Water Act Section 404 regulatory program through which the Corps is responsible for protecting the nation's rivers, streams, and wetlands. National Research Council, *Compensating for Wetland Losses Under the Clean Water Act* at 6, 2001, "Conclusion 4: Support for regulatory decisionmaking is inadequate"; at 6. The General Accounting Office has similarly concluded that many Corps districts have touted the success of wetlands mitigation required under the Corps' regulatory program without having any data to support those claims and without having bothered to assess whether the mitigation efforts have been ecologically successful. General Accounting Office, *Wetlands Protection, Assessments Needed to Determine Effectiveness of In-Lieu-Fee Mitigation*, 2001, at 3.

³Ricciardi, Anthony and Rasmussen, Joseph B., "Extinction Rates of North American Freshwater Fauna"; *Conservation Biology*; 13 (5), October 1999, at 1220.

⁴National Research Council, *Riparian Areas: Functions and Strategies for Management*, 2002, at 2.

⁵National Research Council, *New Directions in Water Resources Planning for the U.S. Army Corps of Engineers*, 1999, at 4, 21, 61-63; National Research Council, *Inland Navigation System Planning: The Upper Mississippi River-Illinois Waterway*, 2001, at 25-28; 53-54; U.S. Army Inspector General, *Report of Investigation*, Case 00-019, 2000, at 7-8.

mental and critical technical flaws in the Corps' analyses of highly, controversial and expensive projects.

EXAMPLES OF THE FLAWS ARE QUITE SHOCKING:

- Just last week, the General Accounting Office reported that the Corps had overestimated the benefits of the \$311 million Delaware River Deepening Project by an incredible 300 percent. The General Accounting Office concluded that the "Corps' analysis of project benefits contained or was based on miscalculations, invalid assumptions, and outdated information."⁶ The Corps said the project would produce \$40.1 million in annual benefits. The General Accounting Office found that the project benefits could be no more than \$13.3 million a year. Unable to explain its own analysis, the Corps blamed \$4.7 million of that discrepancy on a computer error.⁷ The Corps suspended work on this project in late April 2002 when the General Accounting Office advised the Corps of its preliminary findings.

- In one of the Corps' more notorious episodes, the Army Inspector General concluded that the Corps had deceptively and intentionally manipulated data in an attempt to justify a \$1.2 billion expansion of locks on the Upper Mississippi River.⁸ In short, the Corps had "cooked the books."

- An independent economic analysis of the Corps' proposal to construct the \$181 million Yazoo Backwater pumping plant in Mississippi, clearly demonstrates that the Corps overestimated just the agricultural benefits of that project by \$144 million.⁹ That study also concludes that even if all the remaining benefit calculations were correct, those benefits could not justify construction of the project.

- The U.S. Environmental Protection Agency (EPA) working with the U.S. Geological Survey also demonstrated that the Corps had grossly underestimated the wetland impacts of the Yazoo Pumps project. EPA has concluded that the Yazoo Pumps will drain and damage more than 200,000 acres of ecologically significant wetlands—10 times more wetlands than are destroyed in an entire year by private developers. The Corps claims that "only" 23,200 acres of wetlands will be affected.¹⁰

- The U.S. Fish and Wildlife Service (the Service) also conducted an extensive analysis of the Yazoo Pumps and concluded that the Corps was claiming environmental benefits that were physically impossible to obtain. The Corps told that public that this agricultural drainage project would benefit the environment through attempts to purchase conservation easements on 62,500 acres of privately owned agricultural land located below the 87-foot elevation and within the project area. The Service documented, however, that in the project area, there are fewer than 9,100 acres of agricultural land in private ownership below 87 feet. In short, the Corps claimed environmental and economic benefits for reforesting 53,400 acres of privately owned agricultural lands that do not exist.

- The U.S. Fish and Wildlife Service also conducted a detailed investigation of the methodology used by the Corps to evaluate the relative costs of purchasing flowage easements for the \$62 million Big Sunflower River dredging project. The Service found that the Corps significantly overestimated the costs of utilizing nonstructural alternatives to meet the objectives of the Big Sunflower project.¹¹ The Corps' failings on this project continue. After EPA advised the Corps that it should prepare a supplemental environmental impact statement to evaluate, in part, the human health risks associated with dredging DDT and toxaphene contaminated sediments from 104 miles of the river bottom, the Corps issued an inadequate environmental assessment that does not even acknowledge the existence of the toxaphene contamination, let alone evaluate the impacts of dredging the toxaphene contaminated sediments.

- A newspaper's 6-month review of the economics of the \$188 million Columbia River channel deepening project revealed that the Corps had overestimated the project's benefits by 140 percent. The Corps told the public that the project would

⁶General Accounting Office, *Delaware River Deepening Project Comprehensive Reanalysis Needed*, GAO-02-604, June 2002 at 5.

⁷*Id.*

⁸U.S. Army Inspector General, *Report of Investigation*; Case 00-019, 2000, at 8.

⁹Leonard Shabman & Laura Zepp, "An Approach for Evaluating Nonstructural Actions with Application to the Yazoo River (Mississippi) Backwater Area"; February 7, 2000 (Prepared in cooperation with the U.S. Environmental Protection Agency, Region 4); Shabman and Zepp Review Comments on "Yazoo Backwater Reformulation" dated September 24, 2000. Dr. Shabman has participated in a number of National Academy of Sciences panels reviewing Corps activities.

¹⁰The Corps also claims that all of the wetland impacts of the Yazoo Pumps could somehow be mitigated by the purchase of 17,028 acres of conservation easements. However, the Corps is not proposing any mitigation for the project. Instead it has proposed a goal of purchasing conservation easements that, as discussed in the mitigation section below, cannot be met.

¹¹U.S. Fish and Wildlife Service, *Considerations in the Pricing of Flowage Easements: A Case Study of Non-Structural Flood Control in the Big Sunflower River Basin* (October 1997).

return \$2.10 for each dollar of public money invested. The Oregonian found that the project would return just 88 cents for each tax dollar spent. The newspaper identified six key areas where the Corps had relied on outdated or faulty data, or left out important factors. Lester Lave, the chairman of the National Research Council panel that investigated the Upper Mississippi River lock expansion project, endorsed the paper's analysis as fair and reasonable.¹² In just a few days before the Oregonian series ran—and after the Oregonian had shared its findings with the Corps—the Corps advised the paper that it would be reexamining the cost-benefit analysis.¹³

- Four retirees with engineering and other technical backgrounds from Cecil County, Maryland devoted an extraordinary amount of time and energy to document dozens of flaws in the Corps' economic analysis of the \$90 million Chesapeake & Delaware Canal deepening project. One of these flaws was a "basic math error that boosted the benefit-cost ratio from a failing 0.65 to a passing 1.21."¹⁴ In January 2001, the Corps finally acknowledged that the project was not economically justified and suspended work.

As evidenced by the range of projects discussed in this testimony, the Corps' inability to properly analyze costly or controversial projects is widespread. Unfortunately for the taxpayers and the environment, this is just a sampling of Corps projects with significant analytical problems.¹⁵

Flawed Corps studies also are a long-standing problem. For example, in 1987, the Washington Post editorialized that the Tennessee-Tombigbee Waterway "was justified over the years by egregiously skewed cost-benefit estimates—what you would call lies if your children told them instead of the Corps of Engineers."¹⁶

The Corps Is Unable Or Unwilling To Police Its Own Planning Process.—During the past few years, a steady stream of studies exposing fundamental and critical errors in Corps planning documents has driven the public to call for substantial reforms of the agency. Unfortunately, during this same time, the Corps has amply demonstrated that it is either unwilling or unable to reform itself—and it has continued to use egregiously flawed studies to support its recommendation of costly and highly destructive projects.

The Corps' unwillingness to reform itself is perhaps best exemplified by one of the Corps' most recent attempts to quell criticism of its planning process. After being forced to suspend two major projects in just 2 months—the \$311 million Delaware River Deepening project and the \$188 million Columbia River Channel Deepening project—when independent reviews revealed dramatic flaws in the Corps' economic analyses, the Corps announced an agency-wide "pause" of approximately 150 water resources projects.

This much-touted "pause" was ordered to address the "serious questions" that had been raised regarding the accuracy of the Corps' planning process. Corps Districts were ordered to "have a new economic analysis (not an update) completed before [projects with an economic analysis approved prior to fiscal year 1999 would be] allowed to proceed."¹⁷

The Corps quickly dashed any hopes that this was a serious attempt at reform. Just 17 days after it announced the project "pause" and review to the public, the Corps claimed that it had reviewed 171 projects, clearing 118 to proceed. Only eight projects were flagged for additional review as a result of the project "pause" directive.¹⁸ The remaining projects were already being reviewed before the Corps' an-

¹²The Oregonian, "Key parts of corps analysis don't hold water", March 3, 2002.

¹³The Oregonian, "Digging deeper in Columbia", March 10, 2002. The Corps noticed the new study on March 19, 2002 (67 Fed. Reg. 1246).

¹⁴Michael Grunwald, "A Race to the Bottom", The Washington Post, September 12, 2000, at A 15.

¹⁵For example, the General Accounting Office is currently investigating the Corps' analysis of the \$108 million Oregon Inlet Jetties project.

¹⁶Editorial, "Wet Elephant", The Washington Post, January 5, 1987, at A16.

¹⁷Memorandum from Robert H. Griffin, Major General, U.S. Army, Director of Civil Works, April 30, 2002.

¹⁸The Corps' already battered credibility took yet another hit when just a few days later it released a "corrected" list under the project "pause" directive that deviated in significant ways from the first list. The second list identifies only 164 projects as having been reviewed, clearing 80 to proceed (with the remainder already undergoing reevaluation due to previously identified problems). Again only eight projects were said to require additional review as a result of the review process. With no explanation, the Corps completely removed from the second list some of the worst projects that were identified on the original list with the nomenclature "review complete," including the Grand Prairie Irrigation Demonstration Project in Arkansas, the Yazoo Pumps Project in Mississippi, and the St. John's Bayou Project in Missouri. In addition to being costly, each of these projects is highly controversial and would destroy some of America's most valuable wetlands and aquatic habitat. Because the Corps has left the public completely in the

nouncement. A legitimate economic analysis for a Corps project requires the gathering of data, selection and justification of models and assumptions, and careful review and evaluation. Claims that the economic analyses for 118 projects can be redone in just 17 days is simply not believable.

As the St. Louis Post-Dispatch so aptly editorialized when the Corps announced its agency-wide project review:

Critics still worry, and rightly so, that the Corps may be trying to preempt true reform by making a show of falling on its sword. Congress must see to it that doesn't happen. For years the Corps has downplayed the costs of its projects to the environment and the taxpayers and overstated their benefits to agriculture and the barge industry.¹⁹

Congress should stop these abuses, and restore credibility to the Corps' planning and decisionmaking process.

American Rivers urges Congress to require independent peer review as set forth in S. 1987 and S. 646. These provisions would require independent peer review for projects whose total costs exceed \$25 million, or for projects that are deemed to be controversial. These provisions ensure that the review is truly independent by placing the review office outside of the Corps, and that each review is carried out by a panel that represents a balance of expertise in the areas of biology, economics, and engineering.

Importantly, independent review will not delay planning for projects of concern—unless, of course the review finds fundamental flaws or dishonesty, in which case delays would be inevitable but would serve the public interest. The Corps' review of costly or controversial projects typically takes approximately 1 year from the date the draft report is released for public comment until a final report is issued, and can take much longer. For example:

- A draft reformulation report/environmental impact statement for the Yazoo Pumps project discussed in this testimony was issued in September 2000, and 21 months later a final study still has not been released.

- A draft feasibility report for the \$311 million Delaware River Deepening Project discussed above, was issued in June 1990, and the final feasibility report was not issued until February 1992, 20 months later.²⁰

- A draft feasibility report/environmental impact statement for the \$390 million Lower Snake River Juvenile Salmon Migration project was issued in December 1999, and a final study was not issued until February 2002, 26 months-later.²¹

The 180-day independent review period required under S. 1987 and S. 646 could easily have been carried out during these time periods.

Independent review also will decrease wasteful spending by ensuring that analytical flaws are brought to light before a project is built or becomes entangled in protracted litigation. Independent review will ensure that the Corps plans, recommends, designs, and builds projects that are based on sound science and economics. Most importantly, independent review will help ensure that environmental impacts have been adequately addressed, that less environmentally damaging alternatives have been fully evaluated, and that Corps projects are economically justified.

Independent peer review is a common sense solution, and a practice used routinely in the scientific community. It is a practice that is sorely needed to help restore the Corps' battered credibility.

CONGRESS SHOULD REQUIRE THE CORPS TO FULLY MITIGATE FOR THE HARM CAUSED
BY CORPS PROJECTS AND TO IMPLEMENT THAT MITIGATION IN A TIMELY MANNER

The Corps has abjectly failed to plan and implement ecologically successful mitigation for the significant damage caused to rivers and wetlands by Corps projects. The Corps generally does not even attempt to mitigate hydrologic impacts to rivers and streams, and undertakes only limited efforts to mitigate for wetland impacts.

There are many reasons for the Corps' lack of mitigation success. The Corps' civil works mitigation is not properly planned, and typically calls for the creation of non-wetland habitat to "replace" wetlands harmed by Corps projects. It does not reflect

dark on the process used in its review, we can only conclude that although the Corps originally announced to Congress and the public that these projects had in fact been reviewed, the reviews never occurred.

¹⁹ Editorial, "Backpadding", St. Louis Post-Dispatch, May 6, 2002.

²⁰ Environmental threats from this project include severely damage to the banks of the Delaware River, its wildlife, and nearby drinking water wells and aquifers.

²¹ This study was prompted by National Marine Fisheries Service and U.S. Fish and Wildlife Service Biological Opinions on the impacts of operation of the navigation dams on four federally endangered salmon stocks.

contemporary science and the importance of natural systems, often is not implemented in anything remotely approaching a timely manner, and is not effectively tracked or monitored.

In reality, the Corps imposes far more stringent mitigation requirements on private developers than it imposes on itself. And, unfortunately, even the more stringent mitigation requirements under the Corps' regulatory program are alarmingly far from achieving the goal of no net loss of wetlands.²² The "actual amount of wetland impacts offset is only about 20 percent, meaning that the section 404 permitting program has been fostering an 80 percent net loss of wetlands."²³

Poor Planning.—When selecting a preferred project alternative for its own civil works projects, the Corps frequently provides little more than a vague indication of its intent to mitigate. Typically the Corps does not provide: (1) a detailed mitigation plan that identifies specific mitigation sites; (2) evidence that proposed mitigation will produce the promised ecological benefits; (3) evidence that the proposed mitigation can actually be implemented; (4) evidence that the proposed mitigation is ecologically appropriate with respect to mitigating project impacts; or (5) a detailed monitoring plan to ensure that the mitigation produces the promised ecological results.

The lack of detailed planning leads to a variety of problems. In the case of the Yazoo Pumps; project discussed earlier in this testimony, lack of a detailed plan led the Corps to claim that it could implement mitigation on lands that do not exist. Specifically, the Corps said it could purchase conservation easements on 62,500 acres of private agricultural land within the affected area to offset the project's impacts, when only 9,100 acres of privately owned agricultural land exist in that area.

Where the details of mitigation are not carefully planned, the Corps has no ability to effectively evaluate the potential for mitigation success. This leads to unsupportable claims—made routinely by the Corps—that a project should proceed because mitigation will alleviate the harms caused.

Just as importantly, where the details of a mitigation plan are not established, the costs of mitigation also cannot be realistically established. Since the costs of mitigation are a project cost, failure to have—a detailed and realistic mitigation plan can seriously skew the cost benefit analysis.

Out-of-Kind Mitigation.—The mitigation that is proposed by the Corps frequently ignores its "interim goal of no overall net loss of the Nation's remaining wetlands base, as defined by acreage and function" that was established by the Water Resources Development Act of 1990.²⁴

The Corps ignores the functional replacement element of this goal by frequently replacing rare aquatic and riparian habitat with more common terrestrial habitat. This out-of-kind mitigation by definition cannot replace lost wetland functions. The Corps has completely abandoned the mandate to ensure "no net loss of wetland acres" by consistently requiring far less than one-to-one wetland replacement.

For example, though the Corps' plan to dredge over 100 miles of the Big Sunflower River will adversely impact 3,631 acres of wetlands, the Corps has limited its mitigation to planting tree seedlings on 1,912 acres of frequently flooded agricultural lands.²⁵ This is not wetlands mitigation and will not replace the wetland functions that will be lost through the project. Even if this mitigation somehow miraculously created 1,912 acres of wetlands, it would still result in a 47 percent loss of wetlands.

Not Implemented In A Timely Manner.—Though existing law requires the Corps to implement mitigation prior to or concurrently with, project construction; the Corps has exploited the somewhat vague definition of "concurrent" to allow decades-long delays in the implementation of mitigation. For example, the Corps currently is scheduled to complete the enlargement of the Mississippi River Mainline levees in the year 2030. That project consists of hundreds of individual and completely separable construction projects (for example, some sections of levees will be raised in Louisiana while others will be raised in northern Mississippi) each with separate mitigation requirements. The Corps nevertheless asserts that all mitigation will

²² National Research Council, *Compensating for Wetland Losses Under the Clean Water Act* 2001, at 2.

²³ R. Eugene Turner, et al., "Count It by Acre or Function—Mitigation Adds Up to Net Loss of Wetlands", National Wetlands Newsletter, November-December 2001.

²⁴ 33 U.S.C. §2317(a)(1).

²⁵ Final Project Report and Supplement No. 2 to the Final Environmental Impact Statement, Flood Control, Mississippi River and Tributaries, Yazoo Basin, Mississippi, Big Sunflower River Maintenance Project, Volume 1, Project Report, Supplemental Environmental Impact Statement, and Appendices A-C, July 1996, at Appendix B, U.S. Fish & Wildlife Coordination Act Report at i. At least 443 acres of bottomland hardwood wetlands and 476 acres of farmed wetlands will be destroyed, and an additional 2,712 acres of wetlands will be severely impacted. *Id.*

have occurred “concurrently” as long as it is completed when the very last portion of levee is raised in 2030 or later, even though construction of most of the separate components will have been completed decades earlier.

This can lead to wholesale failures in the Corps’ mitigation program. For example, by its own admission, the Vicksburg District of the Corps has a mitigation backlog of almost 30,000 acres that it is legally obligated to implement.²⁶ Despite the fact that much of this mitigation was to have been undertaken years ago, the Vicksburg District has not even purchased the vast majority of the land needed to start these efforts.

Not Tracked or Monitored.—As importantly, the Corps makes little effort to track or evaluate the ecological success of mitigation efforts for either its own civil works program or the Clean Water Act Section 404 program. For example, it took the Corps almost 5 months to identify the promised mitigation—and the mitigation backlog—in just one of the Corps’ 38 domestic Districts. And despite a specific request, the Corps did not provide any data evaluating whether any mitigation that was attempted in that District has been ecologically successful. The Corps did not provide that information because it had none to provide—a response to a later Freedom of Information Act request revealed that no ecological monitoring had been carried out.²⁷

In another telling admission, the Corps has advised the General Accounting Office that the Corps bases its evaluation of whether or not mitigation is complete on the amount of money spent. “According to the Corps, the point at which 50 percent of mitigation is completed occurs in the fiscal year in which the Corps district office’s cumulative expenditures toward the mitigation plan total at least 50 percent of the estimated cost of these activities.”²⁸ Mitigation monitoring and ecological success apparently do not come into play in the Corps’ determination.

The Corps also does not track implementation of mitigation required under the Clean Water Act Section 404 regulatory program. The General Accounting Office has concluded that many Corps districts have touted the success of wetlands mitigation required under the Corps’ regulatory program without having any data to support those claims and without having bothered to assess whether the mitigation efforts have been ecologically successful.²⁹ The National Academy of Sciences also has found that the Corps is making unsupportable decisions in its Clean Water Act Section 404 regulatory program, which are causing profound impacts on the nation’s rivers, streams, and wetlands.³⁰

Even though the Corps apparently has little idea of whether promised mitigation is successful or even attempted, it continues to build projects and to issue Section 404 permits based on the premise that mitigation will correct all environmental damage. To make sound decisions, both the Corps and the public must have ready access to mitigation data.

Congress also recognized that it needed ready access to mitigation information in the Water Resources Development Act of 1986. That Act requires the Corps to include a specific fish and wildlife mitigation plan for any project proposal submitted to Congress for authorization after 1986, or provide Congress with a determination that the project will have negligible adverse impacts on fish and wildlife.³¹ However, the Corps often does not provide accurate mitigation information to Congress, preventing Congress from honestly assessing a project’s impacts prior to authorization.

Between 1986 and 2001, the Corps advised Congress that only 47 of 150 projects required a fish and wildlife mitigation plan.³² It strains credulity to suggest that

²⁶ As of June 24, 1999, the Corps’ Vicksburg District was legally obligated to implement compensatory mitigation on well over 25,000 acres that had yet to be purchased. That backlog did not include the mitigation required in the Vicksburg District for the Mississippi River Mainline Levee Project that includes the purchase and reforestation of an additional 5,200 acres of frequently flooded agricultural lands. Letter and Attachments from Joseph W. Westphal, Assistant Secretary of the Army (Civil Works) to Melissa A. Samet, Attorney, Earthjustice Legal Defense Fund (August 9, 1999).

²⁷ Response to September 25, 2000 Freedom of Information Act Request submitted by Melissa Samet, Earthjustice, requesting information and data on the Corps’ wetlands monitoring program in the Vicksburg District.

²⁸ General Accounting Office, *U.S. Army Corps of Engineers Scientific Panel’s Assessment of Fish and Wildlife Mitigation Guidance*, GAO-02-574, May 2002 at 4 n.2.

²⁹ General Accounting Office, *Wetlands Protection, Assessments Needed to Determine Effectiveness of In-Lieu-Fee Mitigation*, 2001, at 3.

³⁰ National Research Council, *Compensating for Wetland Losses Under the Clean Water Act at 6*, 2001, (“Conclusion 4: Support for regulatory decisionmaking is inadequate”); at 6.

³¹ 33 U.S.C. §2283(d).

³² General Accounting Office, *U.S. Army Corps of Engineers Scientific Panel’s Assessment of Fish and Wildlife Mitigation Guidance*, GAO-02-574, May 2002 at 4. The Corps provided the

only 31 percent of Corps projects require mitigation. This is particularly true when one examines some of the projects that did not include mitigation plans when proposed to Congress.³³

For example, the Corps did not present a fish and wildlife mitigation plan to Congress for the American River Watershed Flood Plain Protection Project, which the Environmental Protection Agency has determined will have “adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed.”³⁴ The Corps also did not provide fish and wildlife mitigation plans to Congress for the Boston Harbor Navigation Improvements and Berth Dredging Project or the John T. Myers and Greenup Lock Improvements, each of which the Environmental Protection Agency has said will have “significant environmental impacts that should be avoided in order to adequately protect the environment.”³⁵

The Corps should be required to mitigate for all unavoidable harm caused by its projects and to carry out its mitigation in a timely and ecologically sound manner. American Rivers urges Congress to pass into law each of the mitigation provisions in S. 646, which we believe would significantly improve the Corps’ mitigation success rate.

Among other things, S. 646 would require the Corps to mitigate fully for the adverse environmental harm caused by its projects, including adverse hydrologic impacts. It would require the Corps to—at an absolute minimum—implement one acre of mitigation for each acre of habitat harmed by a Corps project, and to ensure that each mitigation plan reflects contemporary science and the importance of natural systems. It would require the Corps to develop a specific mitigation plan that includes monitoring for each project.

S. 646 also would require the Secretary of the Army to determine that the mitigation plan has the greatest possibility of cost-effectively and successfully mitigating the adverse impacts of a project, before the Corps can proceed with that project.

To ensure timely implementation of mitigation, S. 646 also clarifies the definition of “concurrent” mitigation to require that 50 percent of mitigation be completed before project construction begins.

S. 646 further requires the Corps to set up a publicly accessible system to track promised and implemented mitigation, both for the Corps’ civil works program and its regulatory program.

Each of these mitigation reforms is critical for ensuring the protection and restoration of the nation’s rivers, streams, and wetlands. Without these provisions, the Corps will have no hope of meeting its statutorily established goal of ensuring no net loss of wetlands as defined by acreage and function. And the Nation will continue to lose key resources necessary to protect water quality, provide habitat for fish and wildlife, and provide protection from flooding.

CONGRESS SHOULD ENSURE THAT THE CORPS’ COST-BENEFIT CRITERIA COMPLY WITH
FEDERAL LAW AND LONGSTANDING FEDERAL POLICY

The Corps currently can, and does, claim project benefits for draining wetlands—an activity that undeniably harms the environment and that requires mitigation. For example, over 83 percent of the benefits of the Yazoo Pumps project are derived from draining wetlands to promote increased agricultural production on marginal lands that have always flooded. As I discussed earlier, EPA has concluded that the Yazoo Pumps will drain and damage more than 200,000 acres of ecologically significant wetlands. Approximately 150,000 of those wetland acres are located within the 2-year floodplain.

Claiming project benefits from the draining of wetlands is directly at odds with the mandates of the Clean Water Act Section 404(b)(1) Guidelines (which apply to Corps projects), the implementing regulations of the National Environmental Policy Act, and long-standing national wetlands protection policies, national farm policies, and national floodplain policies. It also is wholly inconsistent with the Corps’ envi-

mitigation planning information for 150 projects that it says were authorized between the Water Resources Development Act of 1986 and September 30, 2001 that received construction appropriations. *Id.*

³³ Information supporting the GAO’s May 2002 Study entitled *U.S. Army Corps of Engineers Scientific Panel’s Assessment of Fish and Wildlife Mitigation Guidance*. The list of projects was provided to American Rivers by the U.S. Army Corps of Engineers upon request.

³⁴ The Environmental Protection Agency gave the Corps’ environmental impact statement for this project a rating of EU2. The criteria for that rating, which includes the quote above, is described at <http://www.epa.gov/compliance/nepa/comments/ratings.html>.

³⁵ The Environmental Protection Agency gave the Corps’ environmental impact statements for each of these projects a rating of E02. The criteria for that rating, which includes the quote above, is described at <http://www.epa.gov/compliance/nepa/comments/ratings.html>.

ronmental protection mission and with the Corps' statutorily mandated goal of no net loss of the nation's wetlands. Specifically:

- This practice is at odds with the implementing regulations of the National Environmental Policy Act, and the Section 404(b)(1) Guidelines, both of which require mitigation for wetland impacts that cannot be avoided. 40 C.F.R. §1508.20; 40 C.F.R. §230.10(d).

- This practice is at odds with Executive Order 11990, which since 1977 has directed every Federal agency to provide leadership and take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values in carrying out agency responsibilities. Indeed, this Executive Order specifically compels the Corps to avoid draining, dredging, and filling wetlands.³⁶ The courts have held that Executive Order 11990 is judicially enforceable and should be given the full force and effect of law.³⁷

This practice is at odds with national farm policy and the Federal Government's significant efforts to take excess and environmentally sensitive croplands out of production, and to remove incentives for draining wetlands to enhance crop production.³⁸

For floodplain wetlands, this practice is at odds with Executive Order 11988, which since 1977 has directed all Federal agencies to take action to "restore and preserve the natural and beneficial values served by floodplains" in carrying out their water resources activities. This Executive Order was passed to help reduce flood damages by protecting the natural values of floodplains and reducing unwise land use practices in the nation's floodplains.

This practice is at odds with the long-standing bipartisan national policy of no net loss of wetlands which was established under the first Bush Administration, and which was codified as to the Corps in the Water Resources Development Act of 1990.

Congress should put a stop to this outdated practice. American Rivers strongly urges Congress to prohibit the Corps from claiming project benefits for increased value of privately owned property and services, or increases in the quantity of privately owned property, derived from draining wetlands, as provided in S. 1987 and S. 646.

CONCLUSION

American Rivers respectfully urges Congress to act quickly and decisively to restore credibility to the Corps' civil works program. The absence of meaningful review, the absence of clear requirements to ensure full and ecologically sound mitigation, and outdated methods of predicting project benefits, have created a climate where abuse has flourished. Without these long overdue reforms, these abuses will continue and the environment and the taxpayers will continue to suffer. We urge you not to pass another Water Resources Development Act unless these reforms are included. American Rivers would like to work with the Committee to make these reforms a reality.

³⁶Protection of Wetlands Executive Order (Executive Order 11990), reprinted in 42 U.S.C. § 4321. As importantly, Executive Order 11990 provides that each Federal agency: "shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize-harm to wetlands which may result from such use." *Id.* at Section 2(a). The term "new construction" is defined to include "draining, dredging, channelizing, filling, diking, impounding and related and any structures or facilities begun or authorized after the effective date" of the Executive Order. *Id.* at Section 7(b).

³⁷*City of Carmel By-the-Sea v. United States Dep't of Transportation*, 123 F.3d 1142, 1166 (9th Cir. 1997); *City of Waltham v. United States Postal Service*, 786 F. Supp. 105, 131 (D. Mass. 1992). The courts also have found that this Executive Order imposes duties on Federal agencies beyond those of NEPA. It requires a specific finding that no practicable alternative to the proposed action exists. *City of Carmel*, 123 F.3d at 1167.

³⁸The Food Security Act of 1985 and the Erodible Land and Wetland Conservation Program, 16 U.S.C. § 3801 *et seq.*, encourage the removal of fragile lands from production and provide various opportunities for wetland habitat protection and restoration. A special conservation provision in this Act, known as "Swampbuster," removes incentives for draining wetlands by eliminating most agricultural subsidies to farmers who drain wetlands to enhance crop production, or who produce commodities on wetlands converted after 1985.

STATEMENT OF THE NATIONAL ASSOCIATION OF FLOOD AND STORMWATER
MANAGEMENT AGENCIES

The National Association of Flood and Stormwater Management Agencies is very pleased to have the opportunity to submit this testimony to the committee for consideration on an issue of importance to the NAFSMA membership.

BACKGROUND ON NAFSMA

NAFSMA represents more than 100 local and state flood control and stormwater management agencies serving a total of more than 76 million citizens and has a strong interest in this important legislation.

NAFSMA's members are public agencies whose function is the protection of lives, property and economic activity from the adverse impacts of storm and flood waters. NAFSMA member activities are also focused on the improvement of the health and quality of our nation's waters.

The mission of the association is to advocate public policy, encourage technologies and conduct education programs to facilitate and enhance the achievement of the public service functions of its members. Many of NAFSMA's members are currently involved in ongoing water resources projects with the Corps of Engineers, including flood management and environmental restoration projects.

Since the organization was formed in 1979, NAFSMA has worked closely with the U.S. Army Corps of Engineers and other Federal agencies, including the U.S. Environmental Protection Agency and the Federal Emergency Management Agency in numerous efforts. Our members have supported the concept of cost sharing as first authorized in WRDA 86 and a group of our members worked closely with the Corps to redesign what is now the Project Cooperation Agreement in the early 1990's.

We have supported new initiatives such as the Corps Challenge 21 riverine restoration and other environmental restorations initiatives as a necessary complement and vital tool to add to the Corps ability to meet environmental challenges in their traditional water resource projects.

NAFSMA very much appreciates the Committee's commitment to hold hearings to keep WRDA on its biennial renewal process. NAFSMA members are on the front line protecting their communities from loss of life and property and therefore the organization is keenly aware that flood management measures are a necessary investment required to prevent loss of life and damages to people's homes and businesses. Flood management is a wise investment that will pay for itself by preserving life and property and reducing the probability of repeatedly asking the Federal Government for disaster assistance.

NAFSMA RELATIONSHIP WITH THE CORPS

Over the past twenty years of NAFSMA's existence, our relationship and the role of our agencies and the Corps of Engineers has changed. Our members are dedicated to looking at both non-structural and structural approaches to flood management. Environmental restoration is a key focus of our member agency missions as well as the Corps. Urban stream restoration and other similar projects have been undertaken and have been quite successful.

We are proud of the commitment of our member agencies to protect and restore the environment. The Corps is an important partner to state and local agencies in carrying out these environmental restoration initiatives.

NAFSMA firmly believes that the Corps has the technical capabilities and expertise to carry out its stated missions. The Corps must have the funding resources to maximize the public benefits that can be obtained from the Corps capabilities and expertise.

The Corps has strengthened and improved its partnership with the non-Federal sponsors over recent years. This partnership can continue to be strengthened and improved with some new policy initiatives. Changes in the Water Resources Development Act this year will help our member agencies better carry out their evolving missions and responsibilities. I would like to describe some of those issues for you today.

POLICY INITIATIVES FOR WRDA 2002

It is important to preface comments about WRDA with NAFSMA's position that the organization encourages Congress to make sufficient annual appropriations that support those projects and programs previously authorized and those yet to be authorized. As non-Federal sponsors, it is often difficult to keep project costs down and ensure the continuation of the local cost share funding while project costs escalate due to lack of matching Federal appropriations.

COST SHARING FOR FEDERALLY PARTNERED FLOOD CONTROL PROJECTS

NAFSMA supports the current Federal project cost sharing for flood control activities of 65 percent Federal/35 percent non-Federal. We also support the development of incentives to implement floodplain management measures above the minimum measures, allowing the project cost sharing to be modified upwards to 75 percent Federal/25 percent local. Decisions as to whether local communities would qualify for improved cost sharing could be based on the community's rating under the National Flood Insurance Program Community Rating System or submission of a floodplain management plan that substantially exceeds minimum requirements.

Such an approach has already been passed by the California state legislature and is currently implemented at the State level for State participation with local agencies in Corps-partnered projects.

We know that in the past, a number of interests have proposed that this cost sharing be reduced to a 50/50 Federal/non-Federal approach. NAFSMA is strongly opposed to such a move. This type of change would keep critical public safety projects from moving forward.

CREDIT FOR IN-KIND SERVICES

NAFSMA supports that local cost sharing requirements be allowed to be met in its entirety by local in-kind services. We also urge that credit toward the non-Federal share of the cost of authorized flood control, ecosystem restoration projects, or other Corps-partnered projects include all work that is determined to be an integral part of the project (such as the cost of design and construction) for work undertaken before the signing of the Project Cooperation Agreement (PCA).

ENCOURAGE MULTI-OBJECTIVE INITIATIVES WITHIN WRDA

Within the Water Resources Development Act, NAFSMA urges the Committee to include language that would encourage multi-objective efforts, to include flood management, river restoration, recreation, environmental preservation and enhancements. Such an approach would produce long-lasting multiple benefit projects for communities throughout the nation.

Although we can currently do combined flood damage reduction and environmental restoration, with some difficulty, under the Corps General Investigation Program, multiple objective projects cannot be done through the more efficient Continuing Authorities Program for small projects, such as flood control projects (Section 205), environmental restoration (Section 1135.) or, aquatic restoration (Section 206).

NAFSMA recommends combining all the continuing authority programs into a single program that allows inclusion of any of the benefits presently provided for in the individual continuing authority programs, or establishing anew continuing authority program for multi-objective projects. We are learning that single purpose projects do not meet the demands of today's society and are less efficient to implement.

REVISION OF CURRENT NED POLICIES

NAFSMA recommends the review and revision of current National Economic Development (NED) policies to encourage more environmentally sensitive, multi-objective flood management projects.

NAFSMA supports the Corps movement in this direction through their development and use of the National Ecosystem Restoration (NER) plan process for project formulation of ecosystem restoration projects. NAFSMA encourages the melding of NED and NER approaches to achieve multi-objective projects.

CONTINUED SUPPORT FOR SECTION 211 INITIATIVES

NAFSMA supports policies and programs, such as Section 211 of WRDA 1996, that allow local implementation of Federal projects where advantages and effectiveness can be demonstrated and provide for reimbursement.

MAXIMIZE THE BENEFIT OF THE USE OF FEDERAL FUNDS

NAFSMA is concerned about some of the approaches suggested for Corps reform. NAFSMA encourages a process and funding mechanism to maximize the benefit of the use of Federal funds for federally authorized projects. The following items address this issue.

Independent Peer Review

NAFSMA opposes efforts to add external independent peer review to the approval process for federally partnered flood control or environmental restoration projects. Corps projects presently go through an extensive review process that includes review and involvement by the U.S. Environmental Protection Agency, Fish and Wildlife and others. While there are constituencies promoting such reviews under the umbrella of cost savings and better use of Federal tax dollars, the addition of such a review process would only serve to slow down the process for much-needed flood management projects and increase the cost of such projects at both the non-Federal and Federal levels.

A logical sequence of events is to consider this issue after a thorough review of the congressionally requested National Academy of Sciences study on the feasibility of independent review panel. The study is expected to be released in July.

We understand that independent review panels are being recommended because the Corps feasibility study and project authorization process is believed by some not to fulfill the program's intent. That being the situation, NAFSMA suggests that first consideration be given to a review and correction of the existing feasibility and authorization process before adding an additional process such as independent review.

NAFSMA would be supportive of language to encourage partnerships that are formed early and amongst all parties, including the regulatory agencies, whose goal is to seek participant consensus on the recommended flood management and watershed enhancement projects.

Benefit Cost Ratio

NAFSMA opposes increasing the current benefit cost ratio for water resources projects subject to benefit cost analyses. The benefit cost ratio should not be the sole criteria for project screening. Non-Federal sponsors and the Corps are moving toward multi objective environmentally sensitive projects to better address public needs and maximize the use of Federal funds. Increasing the benefit cost would hinder that approach. We are also concerned that disadvantaged areas would be discriminated against with this higher benefit cost ratio. Non-Federal sponsors need to be involved in any effort to examine changes to the current benefit cost ratios.

NAFSMA supports review of all laws, regulations, policies, procedures, and guidance to determine what changes are required to expedite implementation of flood management and/or watershed enhancement projects, without the project suffering in quality. An example would be the elimination of the Preconstruction, Engineering and Design (PED) agreement.

NAFSMA urges Congress to authorize a process and Federal funding mechanism for nonfederal sponsor developed projects to maximize the benefit of the use of Federal funds for federally authorized projects. This would include local sponsors taking the lead in design and/or construction in partnership with the Corps on federally authorized projects.

Deauthorization of Backlogged Projects

Deauthorization of projects in the backlog should occur only where the Non-Federal sponsor no longer expresses desire to participate. NAFSMA believes that revocation of an authorization or commitment to the public without public support would be inappropriate. Deauthorization efforts shouldn't apply to projects where non-Federal sponsors have expressed a desire to participate, such as having executed Preconstruction, Engineering and Design (PED) agreements, Project Cooperation Agreements (PCA's) or initiated actions on Lands, Easements, Rights-of-way, Relocations, Disposal Areas (LERRDS).

Review Of Corps Projects That Have Exhausted Their Project Life

NAFSMA encourages Congress to authorize the Corps to develop Guidance and Policy for reevaluation of Corps-constructed or federally authorized flood control projects that have reached or surpassed their project life.

The guidance and policy should include at a minimum, an option for de-authorizing all or portions of the project, cost shared implementation of alternatives, such as nonstructural approaches that provide the same benefits, or cost shared reconstruction without going through the rigors required of new projects. NAFSMA is prepared to assist in developing such guidance.

Early Attention to Environmental Issues and Potential Benefits and Impacts

NAFSMA supports and encourages the Corps of Engineers to make personnel available to participate early and throughout the planning, design and permitting phases of new civil works projects to address all environmental issues and regulations in order to obtain the necessary permitting in a timely and uncontested manner.

Assessment of "True Costs" During Feasibility

NAFSMA advocates the Federal Government to assure the true costs and benefits incurred by the local sponsor for Lands, Easements, Rights-of-way, Relocations, Disposal Areas, construction, environmental mitigation, operation and maintenance are considered during the feasibility phase of the project. The true costs include those costs mandated by laws, rules, and regulations of local, state, and Federal Governments.

Full-Credit for Project Related Expenses, Including CERCLA

NAFSMA supports non-Federal sponsors receiving full credit for all legitimate project related expenses, similar to credit received by the Corps for project related expenses. NAFSMA members also urge Congress to make Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) activities necessary for project execution eligible for cost-sharing credit.

CONCLUSIONS

In closing, NAFSMA very much appreciates the technical capabilities, expertise and the commitment of the Corps representatives that we work with at the District, Division and Headquarters. We also appreciate the Committee's commitment to move forward with a WRDA bill this year. We pledge to work with you and the Corps to improve the project review process, to use a multi-objective approach to the nation's water resources activities, to keep the costs of projects down and maximize the benefits of Federal, state and local tax dollars.

YELLOWSTONE RIVER CONSERVATION DISTRICT COUNCIL,
Billings, MT., July 26, 2002.

Hon. JAMES JEFFORDS,
Chair, Environment and Public Works Committee,
U.S. Senate,
Washington, DC.

DEAR SENATOR JEFFORDS: Since 2000, the Yellowstone River Conservation District Council has been engaged as the local partner in a study authorized by section 431 of the Water Resources Development Act of 1999. This legislation directed the Army Corps of Engineers to conduct a comprehensive study of the Yellowstone River to determine the hydrologic, biological, and socioeconomic cumulative impacts on the river.

The Council would like to take this opportunity to enter comments related to the Yellowstone River Study into public comment record of the WRDA 2002 legislation.

We would first like to call attention to the efforts of the principal Corps representatives, Mr. Don Becker and Mr. Ralph Roza, Omaha District of the Corps, for their hard work in accommodating our exhaustive public involvement process and their efforts on behalf of the Study. They have been very responsive and helpful as the Council has sought to understand and participate in the process that will lead to the successful Implementation of the Study. The Council acknowledges that taking on such a wide-ranging study rather than a proposed water project is new territory and is hence a unique effort for the Corps, and we appreciate their hard work.

Our other reason for writing is to offer a few observations based on our own experience to date, which may offer insight on how to help ensure the success of this and other such projects in the future. In the spirit of constructive cooperation, the Council offers these observations:

Allow sufficient time to establish local buy-in.—The Council recognizes that the process we are going through is valuable, albeit lengthy and difficult given the complex nature of public involvement. In particular, while the Council, its Resource and Technical Advisory Committees, and its active partner the Yellowstone Conservation Forum make up a very diverse group, its members are committed to working together to find the areas on which we can agree and support each other.

One of the Council's fundamental goals for this study is to create information and tools that have practical application for the local and regional users of the river. This means that adequate time needs to be given to building the local buy-in that is crucial in order for such studies to enjoy support and success over the life of the study. This is critical and time-consuming since the study covers eleven counties and six hundred miles.

Provide a flexible framework for proceeding.—The Corps currently uses a process designed to investigate and engineer proposed water projects as the framework for defining how to proceed with this study. This type of procedure seems to work well

for water development projects, but it is cumbersome for a cumulative effects study such as ours:

- The collaborative nature of the Study, combined with stringent contractual commitments for cost sharing means that the local partners and their constituents must thoroughly understand a process whose structure has little to do with the study. This is time-consuming and expends resources that could be spent elsewhere, such as focusing specifically on the design and execution of the study. Because legal requirements for entering cost share agreements can vary across potential sponsors, the required use of institutional 'boilerplate' legal language without a means for tailoring it can present a substantial roadblock for local entities attempting to enter into such cooperative agreements. While such a mechanism works well for water projects, studies can have considerably more flexibility and offer more ways for partners to share the cost of the Study through their own contracting or in-kind assistance.

Strengthen the Corps' ability to enter into cooperative agreements with local partners.—Many Federal agencies successfully use such agreements. For example, the Conservation Districts in this area have a history of entering into flexible and creative agreements with the NRCS. This develops sound participation with local sponsors and promotes local buy-in, contributing to the overall success of such studies.

Increase flexibility of funding.—An effort such as the current study can and should draw on local expertise and past work performed by local entities. However, there is little procedural room to assign a monetary value on past work, even if that work is integral to and will be included as part of the ongoing study. If these efforts could be included in the local cost share, this would foster more local participation, because they share the costs of the work. In addition, the crucial local acceptance and buy-in is much greater if the work of the community is not only used in the study, but it is valued in a tangible—i.e., available for cost-sharing—way as well.

One of the outcomes we hope will result from these collaborative efforts are recommendations for best management practices that will stand up under rigorous challenges. We are looking forward to working with the Corps on these goals, and making the study a success.

Thank you for the opportunity to submit these comments.

Respectfully and on behalf of the Yellowstone River Conservation District Council,

BARBARA YODER,
YRCDC Coordinator.

YELLOWSTONE RIVER CONSERVATION DISTRICT FORUM,
Billings, MT., July 28, 2002.

Hon. JAMES JEFFORDS,
Chair, Environment and Public Works Committee,
U.S. Senate,
Washington, DC.

DEAR SENATOR JEFFORDS: This is letter to in support of the Yellowstone River Conservation Districts Council's (YRCDC) letter, dated June 26, 2002, explaining the process the stakeholders along the Yellowstone River have been involved in as a result of the Water Resource Recovery Act of 1999's mandate for the Army Corps of Engineers (Corps) to complete a cumulative impacts study for the 692-mile long Yellowstone River. This mandate also required that the public be included in this process which takes time. For the record, the Yellowstone River Conservation Forum (Forum) was in support of the mandate.

To date, the Corps has been determining Federal involvement through their Reconnaissance Phase at the cost of \$100,000; whereas, their potential cost-share partners have been doing actual research for the studies to be done during the Feasibility Phase and working to ensure public involvement. The potential partners did this work prior to the 25 percent to 75 percent Cost-Share Agreement (CSA) being signed. As an active partner with the YRCDC, who is one of the proposed signers of the CSA, the Forum, comprised of 22 cooperating conservation groups, believes that the Federal interest came from the Congressional mandate.

Because the process has been unwieldy, the Forum believes that language should be prepared that will:

- Have the Corps come up with a process for cumulative impact studies to include all the stakeholders and governmental regulatory and management agencies in a public process that will identify the needed studies, implementation of the studies and a draft of results and recommendations for future river use. This process would not include the current reconnaissance and feasibility steps used for decisions for a project.

- Allow partners in the CSA to use funds they have expended for research done primarily for the project studies prior to the signing of the CSA as part of their in-kind services.

With the Corps working toward consensus on reform, the Forum believes this would be an ideal opportunity for a different process to be implemented.

Thank you for your consideration in this matter.

Sincerely,

KATHLEEN K. BLEHM,
Project Liaison Officer.

