

110
THE ADMINISTRATION'S NEW WETLANDS POLICY

Y 4. M 53: 103-62

JG

The Administration's New Wetlands P...

SUBCOMMITTEE ON ENVIRONMENT
AND NATURAL RESOURCES

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

ON

REVIEWING THE DETAILS OF THE ADMINISTRATION'S
NEW WETLANDS POLICY

SEPTEMBER 28, 1993

Serial No. 103-62

Printed for the use of the Committee on Merchant Marine and Fisheries



MAR 2 1994

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1994

74-733

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402

ISBN 0-16-043386-X

B

THE ADMINISTRATION'S NEW WETLANDS POLICY

Y 4. M 53: 103-62

IG

The Administration's New Wetlands P...

SUBCOMMITTEE ON ENVIRONMENT
AND NATURAL RESOURCES

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

ON

REVIEWING THE DETAILS OF THE ADMINISTRATION'S
NEW WETLANDS POLICY

SEPTEMBER 28, 1993

Serial No. 103-62

Printed for the use of the Committee on Merchant Marine and Fisheries



MAR 2 1994

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1994

74-733

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402

ISBN 0-16-043386-X

COMMITTEE ON MERCHANT MARINE AND FISHERIES

GERRY E. STUDDS, Massachusetts, *Chairman*

WILLIAM J. HUGHES, New Jersey	JACK FIELDS, Texas
EARL HUTTO, Florida	DON YOUNG, Alaska
W.J. (BILLY) TAUZIN, Louisiana	HERBERT H. BATEMAN, Virginia
WILLIAM O. LIPINSKI, Illinois	JIM SAXTON, New Jersey
SOLOMON P. ORTIZ, Texas	HOWARD COBLE, North Carolina
THOMAS J. MANTON, New York	CURT WELDON, Pennsylvania
OWEN B. PICKETT, Virginia	JAMES M. INHOFE, Oklahoma
GEORGE J. HOCHBRUECKNER, New York	ARTHUR RAVENEL, Jr., South Carolina
FRANK PALLONE, Jr., New Jersey	WAYNE T. GILCHREST, Maryland
GREG LAUGHLIN, Texas	RANDY "DUKE" CUNNINGHAM, California
JOLENE UNSOELD, Washington	JACK KINGSTON, Georgia
GENE TAYLOR, Mississippi	TILLIE K. FOWLER, Florida
JACK REED, Rhode Island	MICHAEL N. CASTLE, Delaware
H. MARTIN LANCASTER, North Carolina	PETER T. KING, New York
THOMAS H. ANDREWS, Maine	LINCOLN DIAZ-BALART, Florida
ELIZABETH FURSE, Oregon	RICHARD W. POMBO, California
LYNN SCHENK, California	HELEN DELICH BENTLEY, Maryland
GENE GREEN, Texas	CHARLES H. TAYLOR, North Carolina
ALCEE L. HASTINGS, Florida	PETER G. TORKILDSEN, Massachusetts
DAN HAMBURG, California	
BLANCHE M. LAMBERT, Arkansas	
ANNA G. ESHOO, California	
THOMAS J. BARLOW, III, Kentucky	
BART STUPAK, Michigan	
BENNIE G. THOMPSON, Mississippi	
MARIA CANTWELL, Washington	
PETER DEUTSCH, Florida	
GARY L. ACKERMAN, New York	

JEFFREY R. PIKE, *Chief of Staff*
THOMAS R. KITSOS, *Chief Counsel*
MARY J. FUSCO KITSOS, *Chief Clerk*
HARRY F. BURROUGHS, *Minority Staff Director*

SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

GERRY E. STUDDS, Massachusetts, *Chairman*

GEORGE J. HOCHBRUECKNER, New York	JIM SAXTON, New Jersey
FRANK PALLONE, JR., New Jersey	DON YOUNG, Alaska
GREG LAUGHLIN, Texas	CURT WELDON, Pennsylvania
JOLENE UNSOELD, Washington	ARTHUR RAVENEL, Jr., South Carolina
JACK REED, Rhode Island	WAYNE T. GILCHREST, Maryland
ELIZABETH FURSE, Oregon	RANDY "DUKE" CUNNINGHAM, California
DAN HAMBURG, California	MICHAEL N. CASTLE, Delaware
BLANCHE M. LAMBERT, Arkansas	CHARLES H. TAYLOR, North Carolina
ANNA G. ESHOO, California	JACK FIELDS, Texas (Ex Officio)
EARL HUTTO, Florida	
W.J. (BILLY) TAUZIN, Louisiana	
SOLOMON P. ORTIZ, Texas	
BENNIE G. THOMPSON, Mississippi	

DANIEL ASHE, *Professional Staff*
KAREN STEUER, *Professional Staff*
GINA DEFERRARI, *Professional Staff*
LAUREL BRYANT, *Minority Professional Staff*

CONTENTS

	Page
Hearing held September 28, 1993	1
Statement of:	
Eshoo, Hon. Anna, a U.S. Representative from California	9
Fields, Hon. Jack, a U.S. Representative from Texas, and Ranking Minor- ity Member, Committee on Merchant Marine and Fisheries	10
Furse, Hon. Elizabeth, a U.S. Representative from Oregon	5
Gilcrest, Hon. Wayne T., a U.S. Representative from Maryland	9
Hamburg, Hon. Dan, a U.S. Representative from California	6
Lambert, Hon. Blanche, a U.S. Representative from Arkansas	8
Saxton, Hon. Jim, a U.S. Representative from New Jersey, and ranking minority member, Subcommittee on Environment and Natural Re- sources	2
Studds, Hon. Gerry E., a U.S. Representative from Massachusetts, and Chairman, Subcommittee on Environment and Natural Resources	1
Taylor, Hon. Charles H., a U.S. Representative from North Carolina	5
Wayland, Robert H., III, Director, Office of Wetlands, Oceans & Water- sheds, Environmental Protection Agency	10
Prepared statement	33
Weldon, Hon. Curt, a U.S. Representative from Pennsylvania, and Rank- ing Minority Member, Subcommittee on Oceanography, Gulf of Mexico, and the Outer Continental Shelf	7
Prepared statement	7
Young, Hon. Don, a U.S. Representative from Alaska, and Ranking Mi- nority Member, Subcommittee on Fisheries Management	2
Additional material supplied:	
Young, Hon. Don, Ranking Minority Member, Subcommittee on Fisheries Management: Critique of the Clinton Wetlands Plan	30
Wayland, Robert H., III: List requested by Hon. Don Young, of meetings held September 21- 23, 1993, to discuss the President's wetlands plan on Alaska	42
Protecting America's Wetlands: A Fair, Flexible, and Effective Ap- proach	43
American Farm Bureau Federation: Statement regarding wetlands provi- sions of the Clean Water Act	70
Communications submitted:	
Franklin, Thomas M. (The Wildlife Society, Bethesda, MD): Letter of September 27, 1993, to Hon. Gerry E. Studds, followed by a report titled, "Mitigation Banking and Wetlands Categorization—The Need for a National Policy on Wetlands"	86
Ishmael, Susan A. (Associated Builders and Contractors, Inc.): Letter of October 6, 1993, to Hon. Gerry E. Studds	82

THE ADMINISTRATION'S NEW WETLANDS POLICY

TUESDAY, SEPTEMBER 28, 1993

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, DC.

The Subcommittee met, pursuant to call, at 10:24 a.m., in room 1334, Longworth House Office Building, Hon. Gerry E. Studds [chairman of the Subcommittee] presiding.

Present: Representatives Studds, Hochbrueckner, Pallone, Unsoeld, Reed, Furse, Hamburg, Lambert, Eshoo, Hutto, Ortiz, Saxton, Young, Weldon, Ravenel, Gilchrest, and Taylor.

Staff Present: Dan Ashe, Senior Staff Member; Lesli Gray, Research Assistant; Marvadell Zeeb, Staff Assistant; Harry F. Burroughs, Minority Staff Director; and Cynthia M. Wilkinson, Minority Chief Counsel.

OPENING STATEMENT OF HON. GERRY E. STUDDS, A U.S. REPRESENTATIVE FROM MASSACHUSETTS, AND CHAIRMAN, SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

Mr. STUDDS. We are here this morning to review the details of the administration's newly announced wetlands policy.

If you were doing a crossword puzzle and the clue was, "an eight letter word for 'political stalemate'," you might be inclined to answer it, "gridlock." The correct answer, however, is "wetlands."

For more than a decade, our Nation and this Congress have been hopelessly paralyzed over this issue. While both sides of the debate have contributed many thoughtful, well-reasoned suggestions, genuine debate seems to have ceased sometime ago. Each side has built its equivalent of the Maginot Line and is too firmly entrenched to move an inch further toward compromise.

Late this summer, President Clinton took a giant step forward by announcing a new Federal wetlands policy. The President's leadership presents a golden opportunity to move away from polarization and begin serious Congressional action. To this end, I will soon be introducing legislation that reflects the administration's policy.

We have before us today some of the most knowledgeable people in our government on the issue of wetlands protection and regulation. We look forward to hearing what you have to say.

Welcome.

Mr. STUDDS. I would remind Members that with the exception of the Chair and Ranking Members, the rule is five minutes largely

because of the size of the State of one of our members. Members are asked, if possible, to confine their opening statement to one minute.

The gentleman from New Jersey.

STATEMENT OF HON. JIM SAXTON, A U.S. REPRESENTATIVE FROM NEW JERSEY, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

Mr. SAXTON. Thank you, Mr. Chairman.

Hopefully, this hearing can begin to mark the end of what has been a long and entrenched controversy in this country. The new wetlands policy outlines a commitment to provide for flexibility, fairness, and a streamlining of the wetlands regulation. These are changes which deserve early and serious consideration.

Also, the formal acknowledgment that "all wetlands are not the same" is a major step forward toward resolving the deadlock of recent years. This was perhaps the single most important factor responsible for the "wetlands wars." Rather than building consensus for the protection of our remaining wetlands, wetlands became the metaphor for big government, not exactly an effective strategy.

I am also pleased by the policy's long-term direction toward ecosystem and watershed management. Over a decade ago, New Jersey, in cooperation with the U.S. Fish and Wildlife Service, adopted what amounts to an "advanced planning" program for the pinelands ecosystem in Central New Jersey. Critical habitat areas were designated as "no growth," other areas were allowed to be marginally developed with mitigation options, while still others were slated as "full growth" areas.

Today I hope we will clarify how the nonregulatory options of advanced planning, mitigation, restoration and public/private partnerships will be supported within the agencies and given the technical and financial resources necessary for effective implementation.

Lastly, I am interested in how the policy will affect—and improve—State assumption of regulation of wetlands. The State of New Jersey is currently undergoing this process and it has become quite controversial. Serious concerns over New Jersey's proposal have been expressed by the U.S. Fish and Wildlife Service and various outside organizations interested in its case, which could set the stage for future State programs.

I hope to outline those concerns in more detail when I have an opportunity to question the witnesses.

Thank you, Mr. Chairman.

Mr. STUDDS. Thank you. Does the gentlemen from New York have an opening statement?

Mr. HOCHBRUECKNER. No, thank you.

Mr. STUDDS. The gentleman from Alaska.

STATEMENT OF HON. DON YOUNG, A U.S. REPRESENTATIVE FROM ALASKA, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON FISHERIES MANAGEMENT

Mr. YOUNG. Thank you, Mr. Chairman.

The problem with the current wetlands system is that it lacks broad-based public support. As Thomas Jefferson said in the Declaration of Independence, "No government has the right to act without the consent of the governed."

I can tell you this program has in large measure lost "the consent of the governed." There is likely no area where there is more frustration and downright hostility to the current system than in my home State of Alaska.

Mr. Chairman, as you know, there is probably no issue of more importance to the economic health and the future of the State of Alaska than wetlands regulation. Alaska has at least 170 million acres of delineated wetlands. This figure represents an amount of wetlands almost double those remaining in the Continental United States.

I hope all the Committee members have a map. And if you don't have one in front of you, you have one down there that you are looking at, the large one. All the dark green is wetlands. That has been identified. God knows what the EPA and Corps of Engineers may identify later on. But on the back map, those wetlands, if you compare the two that are delineated on this map, are already protected.

Look at the two of them together. If you look at that first map, look at the dark green. That wetland is already protected, 170 million acres of land are already protected.

Special recognition should also be given to the fact that 90 million acres of Alaska wetlands are already protected as national parks, wildlife refuges, wilderness, or wild and scenic rivers. This fact means that Alaska will never reach the percentages of wetlands loss that exist in lower 48 States.

Wetlands comprise almost 75 percent of the usable lands in my State, but unlike most of the rest of the Nation, we have only filled approximately 100,000 acres of our historic base. This represents a wetlands usage rate of less than one-tenth of 1 percent. To subject us to the same level of onerous regulation that might be placed on a State such as California which has lost over 90 percent of its wetlands is fundamentally unfair.

Alaskans have been trying without much success to work with the Federal agencies. They don't serve the people anymore—they've run the 404 program since 1989. We have worked to devise a fair and equitable solution for our wetlands problem.

In November of 1992, EPA published a Notice of Proposed Rulemaking in an effort to solve the Alaskan wetlands problem. The rules would have limited 404 permit review to ways to minimize wetlands impacts on-site until the State had developed 1 percent of its wetlands. Alaskans thought they had reached a balanced and workable approach.

While this plan engendered much opposition, most of it from groups outside of Alaska and from the bureaucrats who would have to give up their stranglehold on economic life in Alaska, the 1 percent rule was the simplest and fairest proposal ever discussed. It deserved better consideration than it received from this administration.

When President Clinton announced that he was organizing a task force to develop a solution to the wetlands morass, I and most

people in Alaska were excited to work with the President. I know myself and our two Senators appeared before that task force. Did they listen? No, they did not.

We worked very hard to provide the case for Alaska's interests. Unfortunately, when the plan came out, it was clear that my good faith efforts, those of our Senators, the Governor, and a wide variety of other interests had been cynically ignored. Nothing new in this administration. This was done to facilitate a politically convenient deal with several national environmental groups.

The article that appeared on the front page of the Washington Post on August 25th, 1993, provided the smoking gun that the legitimate interests of the people of Alaska had been traded away in hopes of buying off the Nation's farm community.

Fortunately, the farmers of this Nation appear to have more integrity on this issue than the administration does. A representative of the Nation's farmers told me that "they were not going to support the trampling of other people's rights in order to be sold a cow they already owned."

To realize just how crudely disguised this raw political deal was, one need only read the justification on page 23 of the President's plan. It states that 1.5 million acres of Alaska's wetlands would be destroyed if the proposed 1 percent rule was finalized.

Under what possible development scenario was this supposed to happen? To get that kind of development we would have to open ANWR and open up most of the parks and refuges created by ANILCA. I hardly think that President Clinton plans to propose any such action in the near future.

The White House also claims that "potentially all of Alaska's 345,000 acres of extremely valuable coastal wetlands" could be lost. I have no idea where, other than environmental community propaganda sheets, the number 345,000 acres of coastal wetlands came from, but with 34,000 miles of coastline in Alaska, I think 345,000 acres is orders of magnitude low. I also wonder if the person who wrote that "all coastal wetlands could be lost," ever looked at the map he or she was given or who has ever been there. I say no, they have not.

If whoever wrote the President's justification had looked at the map, they never would have made such a ridiculous statement.

As the map clearly demonstrates, most of Alaska's coast and therefore its coastal wetlands are already protected in Federal or State conservation units. To say that the 404 program provides the basis for the protection of these wetlands is absolutely absurd.

There are several other glaring factual errors that appear in the administration's justification, but I think that I have made my point.

So what did the President offer the people of Alaska? What did you offer us? He offered them a meeting. It appears that this meeting is supposed to go something like this: Alaskans are supposed to traipse in and present themselves at an audience before the very same bureaucrats who have been trampling over our rights for years. They were to present their case and then those bureaucrats will come to some magic solution, just as they have done in this program.

It doesn't wash. It is wrong. This is not government of the people. This is a trampling government.

If you think I am a little upset, Mr. Chairman, if you want to solve this problem you will take the one percent. Otherwise you are not going to solve it. We talk about working a solution here. This is wrong. This is a glaring error to the American people, especially my Alaskans. Now we have a bill and we are going to pass that bill. We will take care of this administration.

Mr. Chairman, I am disgusted with this group, the task force, the agencies, trampling on us. This is not America, Mr. Chairman. This is a government out of hand. You took a body of land, we did in 1971, 44 million acres, and gave it to my Alaskan natives and now you are telling them they can't develop or use their land.

God, what have we come to? If you want this problem solved, you better take care of Alaska first. If you don't want it solved you leave us under the type of thing that came out of this legislation. I will guarantee you, you will not have any legislation.

Mr. STUDDS. For those of us who have not been here before, this is a relatively mellow day. You should not be alarmed with the Alaskan's side's five minutes.

Are there opening statements on the Democratic side? The gentelady from Oregon.

**STATEMENT OF HON. ELIZABETH FURSE, A U.S.
REPRESENTATIVE FROM OREGON**

Ms. FURSE. I am pleased the administration has come forward with a national policy on wetlands. We need a rational and national policy to coordinate the agencies that oversee wetlands. We also need a policy that will allow private property owners to plan for their future and that will give States and Federal agencies the opportunity to protect our vital wetlands.

The salmon which, as you know, are so important to my district rely on healthy wetlands for their survivals. I look forward to your legislation.

Thank you, Mr. Chairman.

Mr. STUDDS. Are there any further opening statements from the Republican side?

Mr. TAYLOR. I have one, but I will yield.

Mr. WELDON. I will place mine in the record.

Mr. STUDDS. The gentleman from North Carolina.

**STATEMENT OF HON. CHARLES H. TAYLOR, A U.S.
REPRESENTATIVE FROM NORTH CAROLINA**

Mr. TAYLOR. Mr. Chairman, I will be brief. We have been experiencing wetland problems in our State of North Carolina. We thought "wetlands" was really two words, "wet" "lands". It has turned out that dry lands may also be considered wetlands. This shows once again to our folks that the depth of dumb cannot be fathomed in Washington.

One of our folks had a suggestion. If the ordinary Federal bureaucrat is standing in it and doesn't know it, then it ain't it. It might be a rule we can apply.

I look forward to getting involved with a sensible wetlands policy that protects private property rights and at the same time uses real science instead of pseudoscience and hysteria in approaching this issue. I will enjoy just working with our Chairman and Ranking Member in trying to solve this problem.

Mr. STUDDS. Are there further statements on this side? The gentleman from California.

**STATEMENT OF HON. DAN HAMBURG, A U.S. REPRESENTATIVE
FROM CALIFORNIA**

Mr. HAMBURG. Excuse me, Mr. Chairman, if I take a slightly different tack on this issue. Thank you for convening this hearing on wetlands. The case for the need for a comprehensive review of our wetlands policy could not have been made more dramatically than the flooding this summer in the Midwest.

Day after day, farmers, city dwellers, children, women, and men faced a rising tide of water that swept away their homes, their dreams and their livelihoods. The storage capacity that had been provided from the wetlands had vanished. In the upper Mississippi Valley, where the land was inundated with the inadequacy of our wetland policy, a testimony to the need to revamp our wetlands policies nationally.

Our man-made laws must be realigned with our hydrological laws. The health of our people, our communities and our futures depends as surely as the survival and health of wetlands-dependent species on a careful review of the role of wetlands.

Competition between maintaining wetlands and converting wetlands for other use must be resolved in a new balance. The consequences of the loss of wetlands is played out every day on stages only slightly less dramatic than the flood in the Midwest this morning. Historic wetlands in the upper reaches of the Klamath River in my district, and in Oregon, and Northern California stored hundreds of thousands of gallons of water that was released gradually in the hydrologic balance with the river to maintain water flows throughout the year. Today those wetlands are gone.

Today they are one of the most critical factors in the decline of the river's salmon population, coho salmon as endangered throughout the Pacific Southwest. Environmental train wrecks and massive inundation of our communities will surely continue unless we align our policy to ensure reasonable use together with comprehensive protection of our natural resources.

I applaud this administration's commitment to approach the wetlands issues from the watershed perspective. The artificial lines of property ownership are certainly as arbitrary and irrelevant to resolving wetlands issues as are the jurisdictional lines that historically have divided our Federal agencies. The commitment to inter-agency cooperation is a key element of this promise and potential of a new balanced wetlands policy for our country.

Thank you, Mr. Chairman.

Mr. STUDDS. The gentleman from Pennsylvania, Mr. Weldon.

STATEMENT OF HON. CURT WELDON, A U.S. REPRESENTATIVE FROM PENNSYLVANIA, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON OCEANOGRAPHY, GULF OF MEXICO, AND THE OUTER CONTINENTAL SHELF

Mr. WELDON. Thank you. I will submit my statement for the record. But I will make a couple of comments. This is one of the most vexing problems we will face in this session of Congress. It is for that reason we must understand what is being faced by both landowners, developers and local officials.

Having been a county commissioner for five years before coming here, I am well aware of the frustrations in my home State of Pennsylvania and our Delaware Valley Region with local officials trying to understand the compliance process for permitting and adhering to the Clean Water Act.

We have come to terms with a definition, scientifically based that we can all agree on. We have discussed this for four or five years, we have to have the definition first.

The second, the permitting process is an absolute abomination. Anyone trying to deal with permitting with the number of Federal and State agencies involved and the overhanging jurisdictions and lack of coherent process is just impossible for anyone to deal with in a comprehensive and cohesive way.

Third, instead of always pushing from the top down, we have to find ways to encourage proper land use from the bottom up.

One of the things I am going to be doing, and I have done it already in some hearings, is focusing on what I think is a unique example in one of the three counties I represent; suburban Chester County, Pennsylvania, where the county actually floated a \$60 million bond issue on their own, established a land use plan taking into consideration both wetlands and endangered species, using some of the strategies we are talking about here but doing it locally with no prodding from the Federal Government. That is where we have to be moving.

The notion that we can sit here in Washington and determine what is best for local jurisdictions, I think, is wrong-headed and something that we have to be very careful about as we move in this debate.

I look forward to working with the administration. We have to move quickly because time is not on our side.

[The statement of Mr. Weldon follows:]

STATEMENT OF HON. CURT WELDON, A U.S. REPRESENTATIVE FROM PENNSYLVANIA

I would like to take this opportunity to thank Chairman Studds and Congressman Saxton, the Subcommittee's ranking Republican member, for holding this important hearing. This hearing promises to provide the Subcommittee with a better understanding of the Clinton Administration's new wetlands policy.

I have long been an outspoken advocate of protecting our nation's wetlands. As a member of the Migratory Bird Conservation Commission, I have worked closely with the Clinton Administration to protect some of the country's finest wetland habitat.

I believe that Federal regulations for the protection of wetlands must be fair and scientifically based, if we are to achieve the goal of "no net loss". All too often in the past, politics have been substituted for science. Likewise, the Clean Water Act permitting process has often been a bureaucratic nightmare from which many landowners can never wake.

As outlined, the broad policy principals or goals which the Clinton Administration used to craft its wetlands initiative seem laudable. Simultaneously achieving the goals of no net loss; efficient, fair and flexible regulations; increased reliance on non-regulatory programs; expanded partnerships with State and local governments and private parties; and wetlands policy based on credible science is likely to be a difficult task. I look forward to hearing from the Administration witnesses about how these goals will be achieved under the new Federal Wetlands Policy.

I would like to again commend the Chairman and ranking member for holding this hearing. Ensuring that our country's wetlands, and the enormous diversity of life which they support, are protected is one of our Subcommittee's most important responsibilities. Today's hearing is an important step in meeting this charge.

Mr. STUDDS. Are there further statements here?
The gentlewoman from Arkansas.

**STATEMENT OF HON. BLANCHE M. LAMBERT, A U.S.
REPRESENTATIVE FROM ARKANSAS**

Ms. LAMBERT. I thank the Chairman for holding this extremely important hearing. The designation of wetlands is a subject I have been very interested in.

I come from a largely agricultural district, hosting numerous existing wetlands and former wetlands. Also, since the Potlatch land swap, I have the largest timbered wetland in North America in my district.

Over the years the farmers in my district have become disgruntled with the current wetlands regulations, as many have expressed. With four Federal agencies and four varied interpretations, the results often lead to a clash in regulatory actions. These contradictory interpretations give my farmers little guidance in carrying out activities essential to their livelihood. That is certainly something we want to work on.

The administration recognized difficult and hard-to-work-with standards when it released its wetlands policy proposal.

I wholeheartedly support the Administration's recommendation to include an administrative appeals process and to assign the agricultural wetlands identification duties to the Soil Conservation Service. They are well positioned to work with the agricultural community in my district in ultimately hammering out a workable wetlands identification process.

I also support the administration in grandfathering in 53 million acres of wetlands that have already been converted to crop land. The Administration's codification of this sound policy is well received, albeit a long time in coming.

Since a large majority of the wetlands exist on private property, I am also concerned with the lack of recognition from the Administration in addressing this critical factor. I certainly look forward to working together so we can come out with some kind of a workable solution to address the private property concerns that are involved.

I do recognize the great importance of wetlands to this country's well being. Once thought of as a mere breeding ground for mosquitos, and coming from the delta, I can certainly attest to those mosquitos; wetlands have proven to be an essential environmental guardian. Wetlands act as a natural filtering system, as protective habitats for many diverse animal and plant species and a barrier against flood damage, as we have heard earlier.

Additionally, I support the concept of the mitigation banking. However, while I agree on the principle, I want to assure that sound science is the backbone of this policy. We must work to ensure that the artificial wetlands create the same type of environmental sanctuary and benefit that true wetlands provide.

I am confident that these hearings and investigations will supply the information I need to make final evaluation on the success of mitigation banking, and I look forward to the testimony given here today and to the continued continuing evaluation of the administration's wetlands policy. Thank you, Mr. Chairman.

Mr. STUDDS. The gentlewoman from California.

**STATEMENT OF HON. ANNA G. ESHOO, A U.S. REPRESENTATIVE
FROM CALIFORNIA**

Ms. ESHOO. Thank you, Mr. Chairman, for having this very important hearing, and to those who are here to represent the administration and the work that you have put into their issue in bringing it forward to us.

I want to be very brief. I served for 10 years before coming here on the Bay Conservation and Development Commission in the San Francisco Bay area which is really an extraordinary national model. Of course, one of our jurisdictions was wetlands.

Over this weekend, I went to a constituent's memorial service. As I expressed my sympathy to the widow, she said to me, "I didn't realize what I had, until he was gone."

If I might draw a correlation between that occasion and today, I think it is very important for us to formulate a new national policy so that we won't be looking over our shoulders and saying we regret what we lost and didn't appreciate it when we had it.

I applaud the administration, the leadership of our President on this issue. We need to move away from political definitions and move to a scientific one. Put in place a process that local and State governments will have regard for, policies that will engender appreciation for our wetlands in this Nation by everyone. I look forward to working with you to make this a reality.

Thank you.

Mr. STUDDS. The gentleman from Maryland.

**STATEMENT OF HON. WAYNE T. GILCHREST, A U.S.
REPRESENTATIVE FROM MARYLAND**

Mr. GILCHREST. Thank you very much. I want to welcome everyone here this morning. The opening statements, I think, have been very useful so far. I did not hear my colleague from North Carolina, but I am sure his statement was fine as well. I hope we can begin to understand the integration of the wetlands policy, the biological survey and the Clean Water Act and everything else. On that note, I look forward to your testimony. Thank you.

Mr. STUDDS. Without objection the statement of the distinguished gentleman from Texas will appear in the record.

[The statement of Mr. Fields follows.]

STATEMENT OF HON. JACK FIELDS, A U.S. REPRESENTATIVE FROM TEXAS, AND
RANKING MINORITY MEMBER, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. Chairman, I am pleased to join you as we learn more about the Administration's new wetlands policy. I commend you for holding this hearing on such a critically important subject.

In recent years, many Americans have become increasingly alarmed about the arbitrary implementation of the Clean Water Act, particularly the part of the Act which governs wetlands policy. I, too, am deeply concerned with the policy and the devastating effect its implementation has had on American landowners. In some cases, property owners have been denied their fundamental constitutional right to use their land, which for many is their only significant asset. It is past time for comprehensive change to wetlands policy.

There is little doubt that wetlands are an important habitat for many species whose protection is supported by Congress and the public. Regrettably, current Federal wetlands laws simply do not work; they neither improve our environment nor do they help our local communities. In short, our wetland protection system must be improved in a comprehensive manner.

Furthermore, since nearly 74 percent of all wetlands are privately owned, it is essential that we devise incentives to encourage individuals to develop wetland management plans for their property. We also need to compensate property owners if they lose the economic value of their property due to these regulations.

While I believe we need to address many of these concerns legislatively, I am pleased to see that some improvements are being made administratively. These include, an implementation of a deadline for decisions on permit applications; creation of an appeals process; and, that Federal employees will be certified and trained in delineation. These changes are steps in the right direction toward wetlands policy reform.

Again, thank you for holding this hearing today, Mr. Chairman. I look forward to learning more about the President's policy, and some of the steps that will be taken to ease one of the most controversial environmental dilemmas in the country.

Mr. STUDDS. We have five Federal agencies represented at the table—the Department of the Army, the Department of the Interior, the Environmental Protection Agency, the Department of Agriculture, and the Department of Commerce—at varying levels and with varying lengths of titles.

It is our understanding that there will be only one presentation and that will be made by Mr. Wayland who is with the Office of Wetlands at EPA, after which everyone will be prepared to handle or to dodge questions.

Mr. Wayland.

STATEMENTS OF G. EDWARD DICKEY, ACTING ASSISTANT SECRETARY FOR THE ARMY (CIVIL WORKS), DEPARTMENT OF THE ARMY; ROBERT DAVISON, DEPUTY ASSISTANT SECRETARY FOR FISH, WILDLIFE AND PARKS, DEPARTMENT OF THE INTERIOR; ROBERT H. WAYLAND, III, DIRECTOR, OFFICE OF WETLANDS, OCEANS & WATERSHEDS, ENVIRONMENTAL PROTECTION AGENCY; GALEN BRIDGE, ACTING CHIEF, SOIL CONSERVATION SERVICE, DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY BILLY TEELS, WETLANDS STAFF LEADER; AND GARY MATLOCK, ACTING ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

STATEMENT OF ROBERT H. WAYLAND, III, DIRECTOR, OFFICE OF WETLANDS, OCEANS & WATERSHEDS, ENVIRONMENTAL PROTECTION AGENCY

Mr. WAYLAND. Thank you, Mr. Chairman. We are very pleased to be here today to outline the Clinton administration's policy.

This statement is being presented on behalf of the Environmental Protection Agency, the Department of the Army Corps of Engineers, the Department of Agriculture, the Department of the Interior, and the National Oceanic and Atmospheric Administration within the Department of Commerce. This joint statement demonstrates the tremendous cooperation and coordination among the Federal agencies that participated in the Interagency Working Group on Federal Wetlands Policy that produced the administration's wetlands policy.

Last month the administration released a comprehensive package of improvements to Federal wetlands policy. This package reflects a broad-based consensus within the executive branch. It contains a balanced, common sense, workable set of initiatives that will make Federal wetlands policy fairer, better coordinated with State and local efforts, and more effective in protecting wetlands. We have attached the administration's full policy statement to this testimony.

We would like to begin by briefly describing why wetlands protection is important, and then provide some background on the process used to arrive at this consensus package. We will then highlight some of the main provisions of the administration's wetlands policy, noting in particular where Congressional action is recommended.

Wetlands are among our Nation's most critical and productive natural resources. Wetlands are the vital link between land and water. They provide a multitude of services to society, are the basis of thousands of jobs, and contribute billions of dollars to the economy. Wetlands fulfill vital functions within the ecosystem, such as wildlife and aquatic life habitat and food chain support, water quality improvement and flood storage, and shoreline erosion control.

In some areas, up to two-thirds of our commercial and recreational fisheries are dependent on wetlands in their life cycles. This means that wetlands protection may contribute over \$15 billion annually to our economy for fisheries alone. A high percentage of our endangered species rely directly or indirectly on wetlands for their survival.

Protecting wetlands is essential if we are to achieve the Clean Water Act's (CWA's) objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Coastal wetlands are vitally important to marine commercial and recreational fisheries, with up to 70 percent of marine fishery landings in some areas dependent on coastal wetlands. These wetlands continue to be lost at a rate of 20,000 acres per year, which has contributed significantly to declines in U.S. Fishery stocks.

Given the fact that wetlands are so important, it is tragic that we have lost over 50 percent of the wetlands that were present in the coterminous United States at the time of European settlement. Information available from the U.S. Fish and Wildlife Service shows a loss rate of 290,000 acres a year from the mid-1970's to the mid-1980's.

From the mid-1980's to the present, agricultural wetland losses have declined significantly due to the enactment of the Swampbuster provision in the 1985 Farm Bill. While this represents an im-

provement from the 450,000 acres we lost annually from the 1950's to 1970's, it is still far more than the Nation can afford.

The Interagency Working Group was formed in response to a specific request to President Clinton from seven Senators. In addition, the President had received a letter from 20 Members of the House, including five Members of this Committee, citing problems with Federal wetlands programs and calling on the administration to develop a "well thought-out and comprehensive proposal."

The purpose of the Working Group was to provide a forum to allow the appropriate Federal agencies to work together, with information from Members of the Congress and the public, to develop a consensus on wetlands policy issues. The group was convened by the White House Office on Environmental Policy in June and included nine agencies: The Environmental Protection Agency (EPA), the Army Corps of Engineer (Corps), the Office of Management and Budget (OMB), and the Departments of Agriculture (USDA), Commerce, Energy, Interior, Justice, and Transportation participated.

In addition to interagency discussion, the Working Group solicited the views of a broad range of stakeholders representing all perspectives in the wetlands debate, including Members of Congress, representatives of State and local government, environmental interests, the development community, agricultural interests, and scientists. With this information in mind, the group met intensively over many hours to develop a package of more than 40 specific initiatives. The result is a significantly revised Federal wetlands policy that provides fairness, flexibility, and predictability to landowners farmers and others, while also ensuring more effective protection of our Nation's wetlands.

The Clinton Plan includes both regulatory improvements and innovative, nonregulatory approaches to protect and restore wetlands. It includes administrative actions, some of which took effect immediately and others that will begin during the coming months. It also includes legislative recommendations for Congress to consider during reauthorization of the CWA.

At this time, we would like to highlight some specific elements of the policy. A guiding principle in formulating the policy was to exercise strong Federal leadership while empowering State and local action. The administration believes that the Federal Government should lead by example as well as by directive.

To this end, the existing Executive Order on wetlands will be revised to establish an interim goal of no overall net loss of wetlands and a long-term goal of increasing the quantity and quality of wetlands. The revised Executive Order will also direct Federal agencies to take a watershed or ecosystem approach to wetlands protection and restoration in working toward these goals.

The Clinton policy also identifies voluntary, nonregulatory wetlands restoration as an essential vehicle to achieve these goals. The Wetlands Reserve Program (WRP) is a crucial part of the administration's wetlands restoration efforts. The 1990 Farm Bill requires a minimum of 1 million acres to be enrolled in the Wetlands Reserve Program by the end of fiscal year 1995.

Under the policy, the administration will use this program in the Midwest in conjunction with emergency assistance programs to restore wetlands and assist farmers affected by the recent flooding.

The administration will seek to have this program fully funded and expanded in the fiscal year 1995 Farm Bill.

In addition, the administration is examining opportunities to expand existing Federal programs that seek to restore wetlands through cooperative, voluntary agreements with private and other non-Federal landowners.

To increase State and local roles in wetlands protection and to reduce duplication between wetland protection programs on different levels of government, the administration encourages Congress to adopt several measures.

The first is to authorize the development of State/Tribal watershed protection programs which should provide for local and regional involvement and Federal approval of State programs, including minimum requirements for wetlands protection and restoration planning.

In addition, the administration recommends that Congress provide EPA with the authority to use its Wetlands Grant program to fund both the development and implementation of State/Tribal Wetlands Conservation Plans. Congress should also authorize partial assumption of the Section 404 program by States and Tribes as an interim step toward full assumption.

Finally, the administration recommends that Congress amend Section 404(e) of the CWA to provide explicitly for the issuance of programmatic general permits with appropriate environmental safeguards for approved State, Tribal, regional, and local regulatory programs.

The administration policy is streamlining and clarifying wetlands programs affecting the agricultural community. At the heart of this effort is a commitment on the part of all Federal agencies to minimize duplication and reduce inconsistencies between the Swampbuster and Section 404 programs.

To that end, the Soil Conservation Service will be the lead Federal agency for wetlands determinations on agricultural lands for both programs, in consultation with the Fish and Wildlife Service and under the programmatic oversight of EPA and the Corps. The SCS will use agreed-upon methods that will be consistent with those used by EPA and the Corps, and will participate fully in an interagency training program to ensure that field personnel are properly trained.

The recent reorganization of USDA, providing a new emphasis on conservation programs, will enhance SCS's ability to fulfill the expanded wetland responsibility conferred by the President's plan.

In addition, the administration has issued a final rule that affirms the exclusion of an estimated 53 million acres of prior converted croplands from Clean Water Act jurisdiction. These are areas that, prior to December 1985, have been cropped and hydrologically manipulated to the extent that they no longer perform the functions they did in their natural condition.

The administration recommends corresponding Congressional action to define the term "waters of the United States" in the CWA to exclude prior converted croplands.

The administration policy also addresses landowner concerns regarding the Section 404 program. The Corps is developing, through rulemaking, an administrative appeals process under the regula-

tory program so that landowners, farmers, and others can seek review of jurisdictional determinations, administrative penalties, and permit denials without going to court.

The Corps will also modify its regulations to impose deadlines to ensure that permitting decisions are made in a timely fashion. The policy also endorses the use of mitigation banks for compensatory mitigation under the Section 404 program within environmentally sound limits. Mitigation banks developed within the context of a watershed planning effort can assist in integrating permit-by-permit mitigation of unavoidable wetland losses into an overall watershed restoration strategy.

The Clinton policy takes several steps to increase the predictability and public acceptance of efforts to identify areas as wetlands subject to jurisdiction under the Clean Water Act. Use of the 1987 wetlands delineation manual has provided a workable and broadly accepted delineation procedure over the past two years.

The administration supports continued use of the 1987 manual by all agencies pending completion and review of the National Academy of Sciences study, expected in September 1994. To increase public confidence in the Section 404 program, the administration also is recommending Congressional endorsement of continued use of the 1987 manual.

To put to rest the notion that Congress did not intend to protect wetlands under the CWA, the administration recommends that explicit definitions of the terms "wetlands" and "waters of the United States" be included in the statute, consistent with long-standing regulatory definitions. The current Act does indeed refer to "wetlands," but does not define the term.

Finally, the administration's policy revised the definitions of discharge of dredged and fill material to close regulatory loopholes that allowed wetlands to be drained, ditched, or cleared without a Section 404 permit. The Plan recommends that Congress affirm these definitional changes in legislation.

In conclusion, Mr. Chairman, we believe the administration's reform package represents a tremendous opportunity to move beyond the polarization that has characterized the wetlands policy debate in recent years. We look forward to working closely with the Committee to enact bipartisan legislation that will improve wetlands protection in the United States.

Thank you very much. My colleagues and I look forward to answering your questions.

[The statement of Mr. Wayland can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much. The Chair will announce that we are going to apply, for obvious reasons, the five-minute rule and the light system very strictly to ourselves, regardless of the size of the State we represent. Let's do something different here.

We obviously are now seized with a very major problem. A very complicated problem, and a very controversial matter. This has engendered a great deal of emotional rhetoric on all sides of the question.

Prior to someone's introducing the administration's bill or some variation on that theme before the House, there are a couple of

major bills, one by Mr. Edwards from California, which pleases many in the environmental community, one by Mr. Hayes of Louisiana, which pleases many of those, if there is such a thing, in the development—I hate the word “community,” it is overdone.

As I understand it, and as the administration’s approach generally concedes, you are coming down on something of a middle line between the two.

I am sure you would characterize that as a moderate, responsible middle ground. I assume in the process you have engendered something ranging from the anger to the suspicion of those on both sides, which is inevitable.

Let’s see if we can be real people. Take off your governmental hats. I will ask one of you to be an environmentalist, one of you to be a farmer, and one of you to be a Cape Cod cranberry grower. Now, we have the three major national issues here.

Mr. Davison, you be the environmentalist; Mr. Bridge, you be a farmer; and Mr. Wayland, you can be the cranberry grower. Now, as best you can, being a citizen in each category, tell us in English why it is that the President’s program speaks meaningfully to your concerns in this matter.

Let’s start with Mr. Davison and the environmentalist.

Mr. DAVISON. I think the first thing I would identify where the President’s program speaks meaningfully to things I am concerned about as an environmentalist would be the closing of existing loopholes. Right now the program only regulates the filling of wetlands. It doesn’t regulate draining and other activities that have the effect of destroying wetlands.

I think that would be the first and most significant thing that I would point to as something that environmentalists would be interested in.

There are other aspects, as well, in terms of making the permit program work more effectively. I think the benefits accrue to anyone who is interested in the program; permit deadlines, those types of things.

Mr. STUDDS. Mr. Bridge, you are a farmer, why do you support this program?

Mr. BRIDGE. First, I would support it because I can find the people who are going to make the wetland determinations on my land. They are local. They have offices at the county level. I can go in there and get answers as to both Swampbuster and 404 permitting.

I think the second thing that is really important to me is that they are no longer putting under jurisdiction land that I have continuously farmed and produced real crops on every year, a term called “prior converted cropland.” Now those would be removed from regulatory oversight.

Mr. STUDDS. Now, to the cosmic. Mr. Wayland, you are a Cape Cod cranberry grower, why do you like this?

Mr. WAYLAND. I did have an occasion a little over a week ago to visit some cranberry bogs in Massachusetts. One of the opportunities that is afforded here is for the expanded use of programatic permits by State government. Indeed Massachusetts is looking to supplement the Federal Program through the use of general permits.

Moreover, the agencies have already issued guidance acknowledging that there is and needs to be flexibility within the existing regulatory framework to treat wetland permits differently depending on the nature of the impact they have on the aquatic resource.

Indeed, cranberry operations do provide habitat and other advantages which are not found in some other activities that occur in wetlands, such as shopping centers.

Mr. STUDDS. You didn't get the accent right, but you got the answer right. Dr. Dickey, I did not give you fair warning. You are, of course, the developer. Maybe I should have given you a chance to think about it while everybody else was talking. As a developer, why do you support the program.

Dr. DICKEY. Certainly the thing that appeals to me most is the appeals process. If my permit is denied or I don't like the jurisdictional call or an administrative penalty has been imposed on me, the regulations call for an appeals process. I can have that reviewed by a higher level within the corps.

Now, the particular process for appeals has not yet been determined. In fact, we are going to go through a rulemaking process to outline that procedure. I would also be pleased that third parties under the proposed policy would not have an appeals opportunity. Thus, I needn't fear that my neighbor, who for one reason or another doesn't want my development to go forward, would not have the avenue to appeal a permit decision made by the court.

Mr. STUDDS. Now who would like to be Alaskan? Just kidding.

The gentleman from New Jersey.

Mr. SAXTON. Mr. Chairman, you used the term prior converted—what was the term?

Mr. BRIDGE [continuing] prior converted farmlands.

Mr. SAXTON. Is that a change from current law or what you are proposing here?

Mr. BRIDGE. Not a change from current policy except that it would codify it. We have had agreements with the Corps of Engineers over the last couple of years. Basically it was exempt. But this codifies it further.

Mr. SAXTON. Perhaps Mr. Davison would like to comment on this. In New Jersey, as I pointed out in my opening statement, we have had a land use management plan which is known as the Pine-lands Reserve, the master plan that was set out. That master plan, I believe, has in it some definition of wetlands. There has been use denied in the past of lands that were converted from wetlands to farmland.

Does the new policy definition supersede the pinelands regulation policy or other locally enacted policy?

Mr. DAVISON. Mr. Saxton, unless the State program or the Pine-lands program has been recognized by the Federal Government through partial assumption by the New Jersey program, or the issuance of a programmatic permit, it would not be disturbed. But otherwise, the decisions made there would not suffice for purposes of the Clean Water Act.

In other words, the Federal law does not preempt State and local controls, but State and local controls don't substitute for the Federal program unless they are expressly recognized to do that by one of two mechanisms.

Mr. SAXTON. Therefore, working through the Department of Interior which authorized through Federal law the plans for the Pine-lands management plan, if the Pinelands Council decides they are going to regulate wetlands in a different way, they have the right to do so under the new policy?

Mr. DAVISON. Yes, they would.

Mr. SAXTON. Are there minimum standards in the new policy that the local regulatory agency will be required to meet?

Mr. WAYLAND. The policy calls for legislative recognition of programmatic general permits. The Corps does intend to issue additional guidance and regulations on programmatic general permits. The law does not provide for assumptions of the program by a State except on an all-activities, all-State-waters basis.

We have suggested that Congress could allow States to ease their way into this somewhat controversial program by permitting them to assume jurisdiction from the Federal Government for only certain activities or certain waters. The safeguards, if you will, the requirements for Federal review and oversight of the 404 assumed program, are specified in Section 404(g) of the Clean Water Act.

Mr. SAXTON. Are you familiar with the assumption process that is currently ongoing in New Jersey?

Mr. WAYLAND. Mr. Saxton, I am somewhat familiar with it. EPA has been cooperating with New Jersey for a number of years to assist in the development of the program.

We have determined that New Jersey's application for assumption is complete. There is a notice and review opportunity afforded to the public and other Federal agencies. Because of some of the issues that you have mentioned, the State has asked us not to reach a final determination on whether or not assumptions should proceed until December.

The Fish and Wildlife Service has raised concerns which we are pursuing with the Fish and Wildlife Service.

Mr. SAXTON. Can you explain? I believe if I said it was creating controversy in New Jersey, it would be accurate. Can you tell me why that controversy exists?

Mr. WAYLAND. I will respond initially and then turn it over to Mr. Davison. I have read the statements of the field supervisor for the Fish and Wildlife Service of New Jersey and the accompanying report that has been prepared.

I think the gist of the concern is whether or not there will be sufficient protection of threatened and endangered species, for which Fish and Wildlife has responsibility under separate statute, and whether or not in fact wetlands protection in the State is better assured through the use of two programs running side by side and complementing one another rather than a State program operating in lieu of the Federal program.

Mr. SAXTON. So there is some limitation here on what States can do. Since States don't have carte blanche to develop their own program, their programs are subject to approval by the Federal agencies.

Mr. WAYLAND. If the program is to substitute for the Federal program, it is subject to a determination by EPA that it is adequate to fulfill the requirements of Section 404.

Mr. STUDDS. The gentleman from Alaska.

Mr. YOUNG. Mr. Davison, did the estimate of 345,000 acres of coastal wetlands come from the Fish and Wildlife Service?

Mr. DAVISON. Yes, sir. It is an estimate from the National Wetlands Inventory. It is an initial estimate of the number of acres of estuarine intertidal vegetated wetlands, basically salt marsh.

Mr. YOUNG. Could you provide me with the maps and the areas where it demonstrates where coastal wetlands are and how you determine where coastal wetlands end and the noncoastal contiguous wetlands begin?

Mr. DAVISON. We could certainly provide you with that information. The estimate was based on 1,000 sample plots, each four square miles in size.

Mr. YOUNG. Who did it?

Mr. DAVISON. The National Wetlands Inventory of the U.S. Fish and Wildlife Service.

Mr. YOUNG. When was it done?

Mr. DAVISON. I don't know when it was done. The results are scheduled to be published next year.

Mr. YOUNG. I want to know the dates, who did it, was it contracted out? I want to see the maps.

The main justification for the administration rejecting the classification system is that it would be extremely expensive, administratively unworkable, to classify the Nation's wetlands, especially in Alaska.

How is it too difficult to map and divide the low, medium and high 45 percent of the land mass in Alaska and approximately 5 percent of the land mass in the lower 48, but yet the Secretary claims that the Biological Survey map which came out of this Committee contains every ecosystem and species?

How can he do one and say it is not expensive and now it is expensive. That is your department. Do you see what I am saying?

I will just settle for Alaska, all right? I will just settle for that. On the one hand, you say in your report that it is too expensive. On the other hand, we are going to survey the whole United States for everything, wildlife species, endangered species, wetlands, watersheds.

Mr. DAVISON. I think it has to do with the level of the resolution. The National Wetlands Inventory maps are high altitude maps that are not detailed enough to draw property boundaries or delineate regulation wetland boundaries, and that is why they are identified as not for use for regulatory purposes.

Mr. YOUNG. But my question is: On the one hand, your boss is saying we can do it reasonably priced for everything and now he is saying it is too expensive. I don't understand that. I want to know where this report came from. Were you the brains behind the report on Alaska?

Mr. DAVISON. No, sir, I was not.

Mr. YOUNG. I would like to find the brain, unless it is in an institute somewhere.

Secondly, Mr. Wayland, what development model did you use to determine Alaska could fill all its remaining coastal wetlands under the 1 percent rule. What model did you use?

Mr. WAYLAND. Although I refreshed my memory with this last night, Congressman Young, I took the occasion after your opening

statement to look again at page 23 of the interagency working group report. The statement is that objections which were raised to the proposed rule——

Mr. YOUNG. By whom?

Mr. WAYLAND. Eighty-three percent of the respondents, 6,500 comments that were received were objections to the rule, but there are any number of objections to the rule. The report says "objections to the rule focused on several key considerations. An additional million and a half acres of Alaska's wetlands would be destroyed before the 1 percent threshold would be met including potentially all of the 345,000 acres of valuable coastal wetlands."

It is a comparison between the 1 percent threshold and the resource base.

Mr. YOUNG. Let's face it, my good friends on this Committee, those objections are organized objections from those who do not want an exemption or understand the uniqueness of Alaska. But you listened to them, Sierra Club, Trustees, 57 environmental organizations which are in bed with you, let's not kid ourselves. That is who you listen to.

Go back to that map again and look at that map. How can you arrive at a decision with all the protected land that we are going to lose, the land that you are suggesting in that report? I want to get back to where did this report come from?

Who wrote the record on Alaska? Did you, Dr. Dickey?

Dr. DICKEY. No, sir, I did not.

Mr. YOUNG. Did you, Mr. Davison?

Mr. DAVISON. No, sir.

Mr. YOUNG. Who wrote the section on Alaska?

Mr. WAYLAND. There was no single author. This was a group effort.

Mr. YOUNG. Oh, my God, this thing came out of the sky.

Mr. WAYLAND. I certainly reviewed a number of drafts of the report.

Mr. YOUNG. Have you ever been to Alaska?

Mr. WAYLAND. Yes, I have visited.

Mr. YOUNG. Have you been on the ground?

Mr. WAYLAND. Yes, I have.

Mr. YOUNG. Have you been in Bethel?

Mr. WAYLAND. No, I haven't.

Mr. YOUNG. Where were you in Alaska?

Mr. WAYLAND. Anchorage.

Mr. YOUNG. Oh boy, we have been in Alaska. You have been in the biggest city. You have not been in the wetlands or in any villages and you come down with a decision, this is the right way to go.

Mr. STUDDS. The gentleman is expiring.

Mr. YOUNG. Mr. Chairman, I will guarantee you in three and a half years, I know somebody else who is going to expire, too.

Mr. STUDDS. If the Chair could intervene, it occurs to me just as a possibility that there may be some reasonable substance to the concerns of the gentlemen from Alaska. I don't know whether anybody at the table is prepared to acknowledge that, but it might do wonders, if that is the case, if somebody did and vowed faithfully to work with the gentleman.

Mr. WAYLAND. May I seize on that opportunity, Mr. Chairman?

Mr. STUDDS. Go ahead.

Mr. WAYLAND. In fact, we did hear testimony from Congressman Young and his two Senate colleagues. There was a recognition, as the report itself reflects, that there are different climatological and physiologic and other conditions in Alaska.

With that in mind, the agency sent a team to Alaska last week. There were meetings with approximately 30 interest groups that occurred in a number of areas of the State to plan what specific actions could be taken outside of the context of this particular rule-making to respond to the particular needs and conditions there.

The specific dimensions of those responses have not been developed but we have set it in motion. The report called for doing this within 90 days. Within 30 days there has already been one trip to Alaska and meetings with a variety of people in order to try to follow up on some of the concerns the gentleman from Alaska mentioned.

Mr. YOUNG. Mr. Chairman, if you will yield. I want to know who you met with.

Mr. WAYLAND. I will be glad to submit a list to you right now. [The information can be found at the end of the hearing.]

Mr. STUDDS. In all seriousness, I think we can make this function. I was in Alaska last month and I was very, very wet.

Mr. YOUNG. Mr. Chairman, I am hostile. I thought we had a solution. I still think it is the appropriate solution. That is what I am thinking. If we can do this here, then I am all for it. If you look at 1330, that is what we are trying to do.

Mr. STUDDS. Only in this Committee. The gentleman from California.

Mr. HAMBURG. Thank you, Mr. Chairman.

I am trying to get a better handle on how the responsibilities are going to be delineated. I understand that SCS will be the lead agency for overseeing of agricultural land. But we have planning responsibilities, regulatory responsibilities, enforcement responsibilities.

My experience in my own congressional district is that the SCS has a good deal of success in dealing with private landowners and working on projects that incorporate the concerns of the private landowners and particularly working through the resource conservation districts. There are many successful projects in my district.

I guess my question is whether separating the functions of planning as against enforcement and regulation, is part of the plan, if that is an approach that you would endorse.

Could you comment on that? Mr. Bridge, perhaps?

Mr. BRIDGE. Let me just clarify the process a little bit. Obviously the Soil Conservation Service, or at least the administration's proposal, is that we only be involved in the wetland determination process itself, which obviously, as it relates to agricultural land, is a very important step in the process.

If those wetlands, or those areas, are determined to be wetlands, then we will immediately move that individual to the Corps of Engineers for all further processing activities with 404 permitting and would not be participating in that process except in a collaborative way.

Mr. HAMBURG. So the Corps takes over at that point. Did you want to comment on that?

Mr. WAYLAND. I think one of the concerns we are attempting to reach with this statement of principles among the agencies was a concern on the part of people in the Department of Agriculture that a determination would be made by SCS under Swampbuster as to which lands within a farming operation were wetlands, which were prior converted croplands and which were croplands with no wetland characteristics.

Then at a later time, the farmer would attempt to rely on that information and undertake land manipulation development activities, perhaps even undertake development activities only to learn that another agency had determined that areas that were manipulated were wetlands when that was not SCS's original determination.

By working more closely with SCS to assure that a uniform method was used and those decisions made by someone who is accessible to the farmer, we hope to avoid that concern that I'll get one answer from one agency and a different answer from another agency.

If someone wants to build a shopping center on natural wetlands on their farmland, they will have to come to the Corps and have a review under the 404 program. That happens very rarely.

Mr. HAMBURG. Where does the planning component come in?

Mr. WAYLAND. I think the major opportunity for planning efforts is one we hope to engage States and local governments in, since in many instances, they are making planning and land use decisions with which these wetlands are involved.

Mr. HAMBURG. Can the Federal agency work with the local government entities to move these decisions forward in a way that is consistent with Federal law?

Mr. WAYLAND. That is something that EPA has been putting considerable effort into that.

Mr. HAMBURG. Since SCS has so much experience, at least from where I sit in northern California, I see SCS doing a lot of that work anyway. We have SCS people in the communities with offices. They are well-known. They are known by the private landowners. They are known by the government agencies. They are trusted in many cases.

Should they not be the ones more directly involved in the planning issues where EPA and the Corps would continue to have these regulatory enforcement responsibilities?

Mr. BRIDGE. Well, my quick reaction to that would be that there is a role there for the Soil Conservation Service to play, but I think we ought to do it in partnership with both the Corps and EPA.

If we can bring, for instance, the trust of the local people and organize around a lot of units we already work with out there, we ought to use that in a goodwill setting to work out some of these problems and certainly play a role as a consultant, people who can be sort of honest brokers out there among and between the people involved.

Mr. HAMBURG. One other quick question with respect to the wetlands mitigation banking. I understand that they may be eligible for funding through the State revolving loan funds.

My experience, especially since being here and understanding the pressure that the SRFs are under particularly with respect to waste water treatment funding, do you anticipate that there will be more money available to the revolving loan funds that are going to make them able to deal with wetlands issues?

Mr. WAYLAND. There is a high degree of variability State to State between the amount of capitalized State revolving funds and the traditional waste water treatment needs which have consumed most of the SRF uses around the country.

In fact, the waste water treatment needs in some States are largely met and there are opportunities under the current eligibilities in SRF to use those funds for nonpoint source control measures for wetlands mitigation banks, et cetera. So while there are States in which a mitigation bank might not reach the point on the priority list where it could be funded, there are other States where I think the prospects are more likely.

Mr. HAMBURG. I guess I am unfortunate to be from one of those States whose SRF is under tremendous pressure.

Mr. WAYLAND. One additional point, the ability of wetlands to remove nutrients and other pollutants from waste water is something which is a significant contribution to water quality improvement and in fact, in some instances, may be more cost-effective in terms of per pound nitrogen reduction removal than the construction of a waste water treatment plant.

Mr. HAMBURG. Thank you.

Mr. STUDDS. Mitigation banking is not numbers one through ten on the list in my State for SRF funds, as you might know.

The gentleman from South Carolina.

Mr. RAVENEL. Thank you, Mr. Chairman. I will address my question to Mr. Davison.

I represent coastal South Carolina. As you probably know, wetlands preservation down there enjoys broad active public support.

You said something that I found interesting. You said that under the President's policy, you get into the upland wetlands and where you get 30 or 40 miles inland, you run into those Carolina bays which are natural wetlands that have been there for years.

Currently, they can be drained. Of course, they cannot be filled, but certainly that changes the nature of the wetland. Under the President's policy, that would no longer be permitted. Is that correct?

Mr. DAVISON. Yes. I will let Dr. Dickey and Mr. Wayland address that. Under the President's plan, many activities, such as drainage, which involve discharges of fill material, even de minimis discharges of fill material in the course of drainage, would be regulated.

Mr. RAVENEL. An additional question is: Under the Coastal Zone Management Act, as you know, we established a coastal council down there many years ago which worked very successfully. We worked well with the Federal agencies. I know the Charleston Corps traditionally just signs off on permits issued by the coastal council. We don't have any problem.

I think the lesson we could all learn there is that State agencies or local agencies dedicated to wetland preservation is a good and helpful thing in working with Federal agencies.

We have had terrible problems in our district. Most of the problems that have risen are a result of interpretation. I know the problems which have been brought to my office which were only two in seven years, where as a result of misinterpretation we were able to negotiate them very promptly out.

I don't see my colleague from Georgia here today, but south of me in the First Congressional District of Georgia right across the Savannah River where they have not availed themselves of a coastal council and the Corps has been making the decisions. Their interpretation of the manual has been more severe and has caused them lots of problems.

The problems they encountered down in Georgia is right across the river into South Carolina and the concerns that have been voiced to us who represent our people there are problems not arising in our State, but arising because of the severe interpretation down in Georgia.

So, it seems to me that under the President's plan, hopefully, and together with the definition of the Academy of Sciences on exactly what a wetland is, that hopefully this Congress can find out what the right thing is to do and finally do it. It would certainly improve the situation nationwide.

Mr. DAVISON. I certainly agree with you about the importance of the States and their role in this process. The President's plan, as you know, seeks to provide means for the role of the States to be increased through State program general permits, through partial State assumptions, and through other avenues of wetlands conservation planning and watershed planning.

Mr. RAVENEL. Do you know right offhand how many States have a coastal council or its equivalent under Coastal Zone Management?

Mr. WAYLAND. I think there are 29 States with approved coastal programs. But in many instances, that Coastal Zone agency does not function as a wetlands permitting agency. In not all cases where it does have a wetlands protection role is that role recognized by the Federal Government through a programmatic general permit which is the mechanism which has been used in your State to recognize the Coastal Council's work.

Mr. RAVENEL. Well, I would advice all States that don't have them, or do have them to take a look at our very successful program. It certainly makes life a lot easier for Federal officials.

Thank you, Mr. Chairman.

Mr. STUDDS. The gentlewoman from Oregon.

Ms. FURSE. A question arose in my mind. In a situation such as the Columbia River where you have a whole number of States, you have inter-tribal organizations, how will the Federal Government under this plan be able to assist in planning?

You talk about State planning. What about regional planning, which I think is essential to pushing this program forward. How do you anticipate working with that?

Mr. WAYLAND. The administration has recommended that the Clean Water Act be amended to incorporate a more integrated planning and management structure for water quality generally including wetlands, a watershed approach.

We recognize that a number of watersheds, of course, do span State boundaries as we have heard. We would like to encourage those States to undertake that planning and management cooperatively where that is possible.

Depending on the scale at which watershed boundaries are determined, much of the management can occur within a single State. It has been problematic in some cases for States with a shared estuarine or riverine boundary to cooperate as we would like to have them do.

We certainly intend to encourage that interstate cooperation and intend to encourage watershed management generally.

Ms. FURSE. I think that is very essential in the whole issue of keeping watersheds intact. Thank you.

Mr. STUDDS. The gentleman from Maryland.

Mr. GILCHREST. Thank you, Mr. Chairman. I have a few quick questions.

Could you tell us how once the NAS—National Academy of Science—study is complete, how will that impact the present wetlands policy that the President has given us?

Mr. WAYLAND. Mr. Gilchrest, we have indicated that we would not intend to change wetland delineation procedures from those incorporated in the 1987 Corps manual until we have the NAS results in hand, which is probably going to be about a year.

It may be that the NAS indicates that current procedures are adequate and appropriate and scientifically justified, in which case we would not expect to make a change at all. We have to look at their recommendations and determine whether or not they warrant a change.

We have indicated that if we believe a change is warranted, we will do two things before implementing it: We would engage in a public notice and comment process so the outside world will generally have a chance to indicate views on it, and we would also attempt to field test any alternative recommended procedures.

One of the difficulties that arose with the 1989 manual was that there was no field testing before it was proposed. It was only after the field testing occurred that some of the glaring deficiencies really became apparent.

We believe that those two steps will assure that we are not going to jerk the steering wheel again on this program without being certain that it is appropriate and necessary to do so.

Mr. GILCHREST. If the NAS study does show a significant difference in the way in which a wetland is identified from the present 1987 procedure, will the administration, once it is scientifically, put quotes around that, assume that that is what a true wetlands is, or how would they put that in force?

For example, there are some pretty big differences between surface water seven days within 18 inches of the surface and 14 days within 18 inches of the surface. So there are some significant differences.

If the NAS study does find that the 1989 manual—let's just use that for a hypothetical purposes—was in fact correct, will those more strict guidelines for delineation be put into place?

Mr. WAYLAND. We certainly want to understand what this group of eminent scientists has to tell us about the appropriateness of the

existing procedures and any alternative procedures they might identify.

They will meet with others besides the Federal agencies. They will conduct their business independent of Army, EPA, and the other Federal agencies. So it is quite difficult to predict what their recommendations may be.

Mr. GILCHREST. I understand. That was a hypothetical question. But let's say the delineation is just as the 1989 manual, which was controversial for a number of reasons, was in fact correct, will they then, since the policy is not only no net loss but a net gain of wetlands, be the practice or the policy to be implemented and the Soil Conservation Service people who are here who are part of the delineation process and the Corps people who are part of the process, will there be a mechanism put in place, I think you should anticipate this as a possibility, so they can change their manner of delineation?

Mr. WAYLAND. Whatever direction their recommendations might take, I do not anticipate that there would be an abrupt change in the program. We need to field test any changes and have a comment process on any recommended changes. So I think there would be inevitably a delay between the recommended changes and the time any changes are implemented.

Mr. GILCHREST. I understand there would have to be a delay and certainly a learning process in that.

Another quick question. We hear a great deal and I agree with an understanding of putting in to our policy watershed management. Can watershed management, which I think is the way to go, be compatible with mitigation or artificial wetlands mitigation?

I suppose there needs to be integrated into this some incentive or justification for not using or not having jurisdiction over prior converted croplands. Can these three things be compatible?

Mr. WAYLAND. I think they clearly can. First of all, prior converted croplands do not exhibit and have not exhibited wetlands characteristics.

Mr. GILCHREST. But there is some understanding that after a few years they would return to a functioning wetland.

Mr. WAYLAND. If abandoned, and no longer manipulated--

Mr. GILCHREST. If they continued to be farmed--well, my time is up. I see a farm a heck of a lot better as far as open space and habitat for wildlife than a shopping plaza.

Mr. WAYLAND. Those prior converted croplands represent an important opportunity for wetlands restoration. The hydrology can be restored and they will come back. Wetlands mitigation and watershed planning offer you the opportunity to identify the best places to put wetlands restoration so that you are assured of realizing the full set of ecological values that a restored wetland can provide.

Mr. SRUDDS. It is sort of like a cranberry bog. The gentlewoman from Arkansas.

Ms. LAMBERT. Thank you, Mr. Chairman. Most of my questions really come on the heels of the questions my colleagues have presented. How do you really define the term "agricultural land" and will aquaculture and irrigation systems be included in that definition.

Mr. WAYLAND. Those terms have not been defined. They must be defined to realize the implementation of the new role for the Soil Conservation Service to which the four agencies have agreed in principle. So that is an important step yet to be taken and which has not yet been taken.

Ms. LAMBERT. So no previous definition will be assumed. It is simply what comes out of it?

Mr. WAYLAND. That is correct.

Ms. LAMBERT. The administration's efforts obviously are in hopes that they will eliminate the inconsistencies between wetlands delineation procedures with the SCS, Food Security Act manual and the 1987 Federal manual. Do we expect the SCS manual to be changed to comply with the 1987 Federal manual or do we anticipate the 1987 Federal manual to change to conform with the SCS manual?

Dr. TEELS. It is the policy of the government to use the 1987 manual. However, for agricultural areas where the vegetation is typically removed and we are faced with having to predict if hydrophytic vegetation would be there if it were not for the farming, we will use the procedures currently contained in the Food Security Act manual that the Department of Agriculture uses for wetland determinations.

Ms. LAMBERT. You are basically going to have two manuals?

Dr. TEELS. No. There will not be two manuals. There will be a single process. The Corps 1987 manual will be used for the nonagricultural wetlands and the Food Security Act manual that deals with agriculture lands will be used for the agriculture lands. So one technical procedure will be used by either the Corps or the Soil Conservation Service.

Ms. LAMBERT. But two manuals with regard to what ever we happen to come up with in the definition of agricultural lands?

Dr. TEELS. That is right.

Ms. LAMBERT. So it will be quite important.

Dr. DICKEY, under the current regulations, what is the time deadline for the Corps to decide on a permit application?

Dr. DICKEY. We have no deadlines established. We have goals which are used to measure our performance, but we do not have the deadlines envisioned in the administration's policy.

Ms. LAMBERT. The current?

Dr. DICKEY. The proposed policy to establish deadlines which are not there yet.

Ms. LAMBERT. I do understand that there is a proposed 90-day deadline. Does it include measures in the event that a deadline is not met?

Dr. DICKEY. Again, how the deadline process will work will be established through a rulemaking. We certainly don't envision a process that, if the 90 days is reached, the applicant would automatically get a permit or whatever. It is not that kind of a deadline. There is not going to be a default provision where if a decision is not reached, the permit is automatically granted.

Ms. LAMBERT. It just costs money. Time is money, I think, in most of those instances.

Dr. DICKEY. Indeed. What I see the deadline procedure serving is really a mechanism by which individual permit cases of a routine

nature, if you will, are forced. On average, the Corps does quite well in terms of its average performance.

What we are concerned about is the outliers, if you will, that are not being held up for a particular reason, the endangered species issue or NEPA, for example. The deadline process will serve the variance in permit time.

Ms. LAMBERT. Hopefully. But again, there is no alternative measure that would be included if in fact that deadline is not met?

Mr. DICKEY. Again, the process under which the permit deadline procedure will work is yet to be defined.

Ms. LAMBERT. Has there been any kind of a scientific study already done on how well mitigation banking would or could work in comparison to the association with wetlands.

Mr. WAYLAND. The question goes not so much to mitigation banking, but mitigation and how successful we are in replacing wetlands. There have been a number of studies and frankly the results are quite mixed.

All in all, I don't think we could say we have high confidence that efforts to restore or create wetlands have been, over the long-term, demonstrated to be successful in restoring the full range of values that exist in a natural wetland. We recognize that restoration is a partial solution. That is why it is not the approach of first choice.

Ms. LAMBERT. But there are several scientific studies?

Mr. WAYLAND. Yes.

Mr. STUDDS. The gentleman from North Carolina.

Mr. TAYLOR. Thank you, Mr. Chairman. You mentioned in your statement that the SCS would be the lead agency, but you say it will be in consultation with the Fish and Wildlife Service and under the programmatic oversight of EPA and the Corps.

Is that sort of the around about?

Mr. WAYLAND. Of saying you are going to have four agencies involved.

Mr. TAYLOR. Would I have to check my programmatic oversight before I plow?

Mr. WAYLAND. Congressman, that is the same arrangement that now exists between the Corps of Engineers and EPA. That means that a particular decision will not be revisited by EPA or the Corps when made by the SCS.

If, however, there is an indication of a pattern of problems within a particular SCS field office jurisdiction, EPA could declare a special case and from that point forward make the determinations until the necessary training or procedures are in place so that the judgments by the SCS are reliable. That is what the term "programmatic oversight" means. This is the mechanism that exists at present with jurisdictional determinations made by the Corps.

Mr. TAYLOR. I understand it is not as much reinventing as I thought it was. If I get agricultural approval for use of my farmland and I am plowing a field that might have been in question and then I decide to lease that field to the Boy Scouts to build a summer camp, do I come back and start the processes all over again through EPA or the Corps or anyone else? I detected that a moment ago in the gentlemen from California's question.

Mr. WAYLAND. If the land in question is a natural and not a prior converted cropland and the construction of the Boy Scout camp would entail placement of dredge material or fill material, that would be subject to permitting by the Army Corps of Engineers. If it was prior converted cropland it is not covered under the program because of that determination. In other words, it has been farmed and cropped and it is prior converted cropland, it can be filled or otherwise manipulated without getting a permit, whether it is by the farmer or the Boy Scouts.

Mr. TAYLOR. If I got a permit by the Soil Conservation Service, that gives me permission to do anything else with the lands as far as wetlands are concerned? Are you saying that?

Mr. WAYLAND. No, I don't mean to say that. It is possible that those farming activities could be taking place on farmed wetlands which are not prior converted wetlands under the Food Security Act. In that instance, that farming activity could continue, but filling those areas for commercial development would require a permit.

Mr. TAYLOR. We are simplifying it again, I see. Let me ask you about the manual that we are using or that you are planning to use, the 1987 one. Does that mean—and the gentleman from Maryland's question addressed it a minute ago—water will be necessary for a wetland now or may it be again soil type or plant type or any of two of the three that is usually determinative.

Mr. WAYLAND. The 1987 manual requires the presence of water, saturation or inundation sufficient to force the establishment of a predominantly wetland vegetative community and the presence of hydric soils.

Mr. TAYLOR. Thank you. Say I went into a tract of land and took up all of the old buildings, et cetera, and started excavating in an area that is now considered to be a wetland, say I dug up 100 acres of my land. What is the penalty to me now for that which is considered a wetland?

Mr. WAYLAND. If there is wetland on your property and you excavate it, you would most likely get a notification from one of the Federal agencies indicating that a permit is required for that activity. It may be that an after-the-fact permit could be issued, but there would be some hope and expectation that having avoided the permitting process in the first instance, that you would restore that area to its wetlands functions or obtain a permit for the activities.

Mr. TAYLOR. It is a violation of law for me to excavate without a permit, isn't it?

Mr. WAYLAND. Yes.

Mr. TAYLOR. And the penalty for violating that law is?

Mr. WAYLAND. The penalties provided in the Clean Water Act for a whole series of violations are up to \$25,000 a day. However, those penalties are rarely invoked.

Mr. TAYLOR. How about jail sentences or that sort of thing?

Mr. WAYLAND. Jail sentences are possible only if there is a willful or knowing violation. In other words, if you had ascertained that these were wetlands and that you could not manipulate them without a permit and you elected to anyway, there is a potential criminal liability.

Mr. TAYLOR. Mr. Chairman, the Fish and Wildlife Service back a few years ago in my State excavated 99 acres of wetlands without a permit. Surely they knew it was a wetland and that they were in violation of the law. I presume they have committed a criminal offense that would require jail punishment. Can we call in the police?

Mr. STUDDS. We will decide whether they should be hung or be sentenced to watch C-SPAN for a week.

Mr. TAYLOR. I have now concluded by saying there should be strong Federal leadership and the Federal Government should lead by example. The above example is one of the numerous times the Federal Government has engaged in draining what was clearly wetlands.

In one case, they got a permit, and in the other, they got a permit to drain where no one else would be draining. If you are going to wink at those sorts of things and then penalize farmers, we clearly have a double standard that it will be hard to understand in my area.

Mr. STUDDS. Thank you gentlemen for your presence. Now you have a better understanding of the lay of the land up here and the challenges we face. Those are the challenges that make our job as interesting as it is.

[Whereupon, at 11:53 a.m., the Subcommittee was adjourned, and the following was submitted for the record:

CRITIQUE OF THE CLINTON WETLANDS PLAN
for the record by
CONGRESSMAN DON YOUNG

Streamlining the Permitting system.

The average processing time for an individual permit in Alaska is about 180 days which means that most Alaskans who only want to build a driveway, lose a full construction season. In most cases it takes at least 18 months to two years from the time the permit is applied for until construction can begin. This adds greatly to the cost and does nothing for job creation or the environment.

Nationally 53% of individual permits are effectively denied (the number denied plus the number withdrawn since 1990.) And even of the permits that are technically granted, in my home state of Alaska, around half are never built because the cost of the onerous mitigation requirements. (According to NOAA in researching permits in the coastal zone which make up most of the permits in Alaska except Fairbanks and surrounding areas.) This means that the property owners are effectively only able to use the economic potential of their own property about one time in three.

What is wrong with the Clinton policy on streamlining the system?

While the Administration's plan makes a great deal out of implementing regulations that will lower permit processing times to 90 days in most cases, current regulations require that permits be processed in 60 days. These regulations are routinely ignored now, it is difficult to understand why anyone should believe that the new regulations will be of any more significance? Without the hammer of automatic approval or some other mechanism the 90 time line is meaningless.

The second area where the Administration's streamlining plans are grossly deficient is the area of how the agencies are permitted to start and stop the clock for processing time by simply requesting additional information. It is not uncommon for a small landowner to be held up for months with several separate requests for additional information. Frequently these requests appear to have little or no bearing on the permit application. While the agencies have the luxury of starting and stopping the clock in order to alter their permit processing time statistics, landowners don't have the luxury to start and stop mortgage payments the same way.

Takings

The current system totally ignores private property rights

The courts have traditionally required that 95% of the value of the property be lost in order to be a "taking." Even with this incredibly high burden of proof, the Federal government lost over 1/2 of the takings cases it was involved in last several years.

Unfortunately, past history teaches that the Justice Department will fight every wetlands taking case all the way to the Supreme Court if necessary to prevent paying compensation to landowners. The average cost of the legal expenses associated with a land owner protecting his or her rights under the 5th amendment is upwards of \$200,000. That is more money than most small landowners have total, let alone to spend on high priced lawyers to stop the government from abusing them. The effect of this high transaction cost is that small landowners have no effective way to keep the government from making their private land into a defacto wildlife refuge.

The Federal agencies know how much it costs to pursue a takings case in court and frequently use the threat of those costs to blackmail small landowners into not pursuing their projects by threatening to tie them up in court for years.

I think that great Democrats like Thomas Jefferson and Andrew Jackson would be rolling over in their graves if they knew what happens in some of these cases.

Some might say that paying for what we take will be expensive and we can't afford it. That's a little like the government saying to a store owner I can't afford to buy the shirt I want it so I am going to steal it and its going to cost you more than the property is worth to get it back. This is not American!

What's wrong with the Clinton plan on Takings.

The Administration plan leaves the current abusive system in place totally unchecked. The Administration's plan does absolutely nothing to correct the most objectionable aspect of the current system.

Classification

The current system treats all wetlands the same and provides no incentive for the private sector to restore and create true wetlands.

The current system treats a mud puddle in the middle of a farmers field the same as it does the Florida Everglades. This just doesn't make regulatory sense and is very burdensome on the owners of private property.

The current sequencing system is designed just to say no to all development on what ever the agencies want to call a wetland. There is no incentive for the private sector to restore or create wetlands. This needs to be corrected.

What's wrong with the Clinton plan on Classification?

The Clinton plan makes positive strides by recognizing, for purposes of watershed management plans, that classification might be appropriate and by attempting to provide some level of flexibility in the avoidance phase of sequencing. Unfortunately, the criteria used to "allow flexibility" in the sequencing process appears to be so narrowly crafted that only permits that would have probably qualified for general permits anyway can make use of the new flexibility.

The primary reason the Administration provides for not adopting a national Classification system is administrative expense. I find it fascinating that dividing five percent of the land mass of the continental United States into low, medium, and high is to difficult and expensive when we are being asked to create a Biological Survey that is going to map and evaluate every ecosystem and every species in the country. Yet the Secretary of Interior tells me the Biological survey can have its initial assessments done in the next several years. Why is the Biological Survey feasible and a wetlands classification system not?

The Administration should be commended for recognizing the importance of Non-regulatory approaches for encouraging landowners to protect and enhance wetlands. The plan also recognizes the importance of private sector initiatives through its commitment to mitigation banking. More private sector initiatives should be encouraged.

Appeals

The only way to appeal an adverse decision in this program is in court. To even get to court the permit applicant must get an outright permit denial. Then try to go to court under the 5th amendment of the constitutions "takings clause". This is terribly time consuming and unfair.

What's wrong with the Clinton Plan on Appeals?

The Administration should be commended for agreeing to set up an Administrative Appeals system for delineation challenges, permit denials, and enforcement actions. In order to properly address the shortcoming of the current system the plan must also allow the applicant to challenge onerous permit requirements which amount to a defacto denial of the permit. To do otherwise will continue the practice of not actually denying permits but putting such onerous mitigation requirements in place that every permit becomes economically impractical.

*JOINT TESTIMONY OF
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF THE ARMY
DEPARTMENT OF AGRICULTURE
DEPARTMENT OF THE INTERIOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
DEPARTMENT OF COMMERCE
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES
OF THE
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U. S. HOUSE OF REPRESENTATIVES*

September 28, 1993

Good morning Mr. Chairman and distinguished members of the Subcommittee.

We are pleased to appear before you today to outline the Clinton Administration's wetlands policy. This statement is being presented on behalf of the Environmental Protection Agency, the Department of the Army Corps of Engineers, the Department of Agriculture, the Department of the Interior, and the National Oceanic and Atmospheric Administration, Department of Commerce. This joint statement demonstrates the tremendous cooperation and coordination among the federal agencies that participated in the Interagency Working Group on Federal Wetlands Policy that produced the Administration's wetlands policy.

Last month the Administration released a comprehensive package of improvements to federal wetlands policy. This package reflects a broad-based consensus within the Executive Branch, and is a departure from the gridlock of the past. It contains a balanced, common sense, workable set of initiatives that will make federal wetlands policy fairer, better coordinated with State and local efforts, and

more effective in protecting wetlands. We have attached the Administration's full policy statement to this testimony.

We would like to begin by briefly describing why wetlands protection is important, and then provide some background on the process used to arrive at this consensus package. We will then highlight some of the main provisions of the Administration's wetlands policy, noting in particular where Congressional action is recommended.

Why Wetlands Are Important

Wetlands are among our Nation's most critical and productive natural resources. Wetlands are the vital link between land and water. They provide a multitude of services to society, are the basis of thousands of jobs, and contribute billions of dollars to the economy. Wetlands fulfill vital functions within the ecosystem, such as wildlife and aquatic life habitat and food chain support, water quality improvement and flood storage, and shoreline erosion control. In some areas, up to two-thirds of our commercial and recreational fisheries are dependent on wetlands in their life cycles. This means that wetlands protection may contribute over \$15 billion annually to our economy for fisheries alone. A high percentage of our endangered species rely directly or indirectly on wetlands for their survival. Protecting wetlands is essential if we are to achieve the Clean Water Act's (CWA's) objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Coastal wetlands are vitally important to marine commercial and recreational fisheries, with up to seventy percent of marine fishery landings in some areas dependent on coastal wetlands. These wetlands continue to be lost at a rate of 20,000 acres per year, which has contributed significantly to declines in U.S. fishery stocks.

Given the fact that wetlands are so important, it is a tragedy that we have lost over 50 percent of the wetlands that were present in the coterminous United States at the time of European settlement. Information available from the U.S. Fish and Wildlife Service shows a loss rate of 290,000 acres a year from the mid-1970's to the mid-1980's. From the mid-1980's to the present, agricultural wetland losses have declined significantly due to the enactment of the Swampbuster provision in the 1985 Farm Bill. While this represents an improvement from the 450,000 acres we lost annually from the 1950's to 1970's, it is still far more than the Nation can afford.

The Consensus-Building Process

The Interagency Working Group was formed in response to a specific request to President Clinton from seven Senators. In addition, the President had received a letter from twenty Members of the House, including five Members of this Committee, citing problems with federal wetlands programs and calling on the Administration to develop a "well thought-out and comprehensive proposal." The purpose of the Working Group was to provide a forum to allow the appropriate federal agencies to work together, with input from members of the Congress and the public, to develop

a consensus on wetlands policy issues. The group was convened by the White House Office on Environmental Policy in June and included nine agencies: the Environmental Protection Agency (EPA), the Army Corps of Engineer (Corps), the Office of Management and Budget (OMB), and the Departments of Agriculture (USDA), Commerce, Energy, Interior, Justice, and Transportation. In addition to interagency discussion, the Working Group solicited the views of a broad range of stakeholders representing all perspectives in the wetlands debate, including members of Congress, representatives of State and local government, environmental interests, the development community, agricultural interests, and scientists. With this information in mind, the group met intensively over many hours to develop a package of more than forty specific initiatives. The result is a significantly revised federal wetlands policy that provides fairness, flexibility, and predictability to landowners, farmers and others, while also ensuring more effective protection of our Nation's wetlands.

President Clinton's Plan

The Clinton Plan includes both regulatory improvements and innovative, non-regulatory approaches to protect and restore wetlands. It includes administrative actions, some of which took effect immediately and others that will begin during the coming months. It also includes legislative recommendations for Congress to consider during reauthorization of the CWA.

At this time, we would like to highlight some specific elements of the policy. A guiding principle in formulating the policy was to exercise strong federal leadership

while empowering State and local action. The Administration believes that the federal government should lead by example as well as by directive. To this end, the existing Executive Order on wetlands will be revised to establish an interim goal of no overall net loss of wetlands and a long term goal of increasing the quantity and quality of wetlands. The revised Executive Order will also direct federal agencies to take a watershed or ecosystem approach to wetlands protection and restoration in working toward these goals.

The Administration policy also identifies voluntary, non-regulatory wetlands restoration as an essential vehicle to achieve these goals. The Wetlands Reserve Program (WRP) is a crucial part of the Administration's wetlands restoration plans. The 1990 Farm Bill requires a minimum of one million acres to be enrolled in the WRP by the end of fiscal year 1995. The Reconciliation Act of 1993 amended the WRP acreage provisions to require not less than 330,000 acres be enrolled by the end of 1995, reduced the minimum acreage target to 975,000 acres, and extended the enrollment period from 1995 to 2000. In 1992, a 50,000-acre pilot of the WRP was very well received, with proposals from 2,300 farmers to restore 250,000 acres. The fiscal year 1994 Agriculture appropriations would provide for 75,000 new acres to be enrolled, and would more than double the number of States eligible for participation in the program. Under the policy, the Administration will use this program in the Midwest in conjunction with emergency assistance programs to restore wetlands and assist farmers affected by the recent flooding. The Administration will seek to have this program fully funded and expanded in the fiscal year 1995 Farm Bill.

In addition, the Administration will examine opportunities to expand existing federal programs that seek to restore wetlands through cooperative, voluntary agreements with private and other non-federal landowners. We have found that building partnerships with landowners, conservation groups, State agencies, and other interests is an extremely effective mechanism to pool financial and technical resources and expand wetlands restoration opportunities.

To increase State and local roles in the wetlands protection and to reduce duplication between wetland protection programs on different levels of government, the Administration encourages Congress to adopt several measures. The first is to authorize the development of State/Tribal watershed protection programs which should provide for local and regional involvement and federal approval of State programs, including minimum requirements for wetlands protection and restoration planning. In addition, the Administration recommends that Congress provide EPA with the authority to use its Wetlands Grant program to fund both the development and implementation of State/Tribal Wetlands Conservation Plans. Congress should also authorize partial assumption of the Section 404 program by States and Tribes as an interim step toward full assumption. Finally, the Administration recommends that Congress amend Section 404(e) of the CWA to provide explicitly for the issuance of programmatic general permits with appropriate environmental safeguards for approved State, Tribal, regional, and local regulatory programs.

The Administration policy will streamline and clarify wetlands programs affecting the agricultural community. At the heart of this effort is a commitment on

the part of all federal agencies to minimize duplication and reduce inconsistencies between the Swampbuster and Section 404 programs. To that end, the Soil Conservation Service (SCS) will be the lead federal agency for wetlands determinations on agricultural lands for both programs, in consultation with the Fish and Wildlife Service and under the programmatic oversight of EPA and the Corps. The SCS will use agreed-upon methods that will be consistent with those used by EPA and the Corps, and will participate fully in an interagency training program to ensure that field personnel are properly trained. Recent reorganization of USDA, providing a new emphasis on conservation programs, will enhance SCS ability to fulfill the expanded wetland responsibility. The possible need for additional budgetary and personnel resources to carry out these new responsibilities will ultimately depend upon the details of the final agreement established between SCS, FWS, the Corps, and EPA defining the scope of SCS involvement in Section 404, and will be addressed in the President's FY 1995 budget.

In addition, the Administration has issued a final rule that affirms the exclusion of an estimated 53 million acres of prior converted croplands from CWA jurisdiction. These are areas that, prior to December 1985, have been cropped and hydrologically manipulated to the extent that they no longer perform the functions they did in their natural condition. The Administration recommends corresponding Congressional action to define the term "waters of the United States" in the CWA to exclude prior converted croplands.

The Administration policy also addresses landowner concerns regarding the Section 404 program. The Corps will develop, through rulemaking, an administrative appeals process under the regulatory program so that landowners, farmers, and others can seek review of jurisdictional determinations, administrative penalties, and permit denials without going to court. The Corps will also modify its regulations to impose deadlines to ensure that permitting decisions are made in a timely fashion. The policy also endorses the use of mitigation banks for compensatory mitigation under the Section 404 program within environmentally sound limits. Mitigation banks developed within the context of a watershed planning effort can assist in integrating permit-by-permit mitigation of unavoidable wetland losses into an overall watershed restoration strategy.

The Clinton policy takes several steps to increase the predictability and public acceptance of efforts to identify areas as wetlands subject to jurisdiction under the CWA. Use of the 1987 wetlands delineation manual has provided a workable and broadly accepted delineation procedure over the past two years. The Administration supports continued use by all agencies of the 1987 manual pending completion and review of the National Academy of Sciences study, expected in September 1994. To increase public confidence in the Section 404 program, the Administration also is recommending Congressional endorsement of continued use of the 1987 manual.

To put to rest the notion that Congress did not intend to protect wetlands under the CWA, the Administration recommends that explicit definitions of the terms "wetlands" and "waters of the United States" be included in the statute, consistent

with longstanding regulatory definitions. The current Act refers to "wetlands" but does not define the term.

Finally, the Administration's policy revised the definitions of discharge of dredged and fill material to close regulatory loopholes that allowed wetlands to be drained, ditched, or cleared without a Section 404 permit. The Plan recommends that Congress affirm these definitional changes in legislation.

Conclusion

In conclusion, we believe the Administration's reform package represents a tremendous opportunity to move beyond the polarization that has characterized the wetlands policy debate in recent years. We look forward to working closely with the Committee to enact bipartisan legislation that will improve wetlands protection in the United States. Thank you. We will be happy to take any questions you may have at this time.

President's Wetlands Plan on Alaska

Meetings held on September 21-23, 1993, to Discuss Alaska Plan

State of Alaska

Office of the Governor, Division of Governmental Coordination
Department of Environmental Conservation
Department of Fish and Game
Department of Natural Resources

Native Representatives

Alaska Federation of Natives
Calista Corporation
Tanana Chiefs
Chugachmut
EPA Tribal Liaison

Environmental Organizations

National Wildlife Federation
Alaska Center for the Environment
Sierra Club
Southeast Alaska Conservation Council
Trustees for Alaska

Alaska Oil and Gas Association (AOGA)

AOGA staff
ARCO
BP
Texaco

Resource Development Council (RDC)

RDC staff
Alaska Wetlands Coalition
City of Anchorage
SeaAlaska
North Slope Borough
Northern Knowledge (Roger Herrera)
Koniag, Inc.
BP Exploration

*PROTECTING AMERICA'S WETLANDS:
A FAIR, FLEXIBLE,
AND EFFECTIVE APPROACH*

WHITE HOUSE OFFICE
ON ENVIRONMENTAL POLICY

August 24th, 1993

TABLE OF CONTENTS

I.	Introduction	2
II.	A Divisive Debate	2
III.	The Interagency Working Group on Federal Wetlands Policy	3
IV.	Five Principles for Federal Wetlands Policy	4
V.	A Comprehensive Package of Reforms	4
	A. Addressing Landowner Concerns	6
	B. Advance Planning and Watershed Management	7
	C. Agriculture	10
	D. Categorization	12
	E. Geographic Jurisdiction	14
	F. Mitigation and Mitigation Banking	16
	G. Restoration	18
	H. Roles of Federal Agencies	19
	I. Roles of State, Tribal, and Local Government	20
	J. Scope of Regulated Activities	22
	K. State of Alaska	22
	L. Takings	24
VI.	Conclusion	25
VII.	Postscript: Lessons From the Flood	26

I. INTRODUCTION

The Clinton Administration is proposing a comprehensive package of improvements to the Federal wetlands program that reflects a new broad-based consensus among Federal agencies. For years, many have argued that the Federal government badly needed to improve its wetlands program to make it fairer and more effective. But for too long, contradictory policies from feuding Federal agencies have blocked progress, creating uncertainty and confusion. This wetlands package reflects a sharp break through the past gridlock caused by warring Federal agencies and contains a balanced, common sense, workable set of improvements that will make the program simpler, fairer, better coordinated with state and local efforts and more effective at protecting wetlands.

The Nation's wetlands perform many functions that are important to society, such as improving water quality, recharging groundwater, providing natural flood control, and supporting a wide variety of fish, wildlife and plants. The economic importance of wetlands to commercial fisheries and recreational uses is also enormous. The Nation has lost nearly half of the wetland acreage that existed in the lower 48 States prior to European settlement. The Nation's wetlands continue to be lost at a rate of hundreds of thousands of acres per year due to both human activity and natural processes. This continued loss occurs at great cost to society.

Notwithstanding the importance of wetland resources, efforts to protect wetlands have caused considerable controversy. It is estimated that 75 percent of the Nation's wetlands in the lower 48 States are located on private property. It is, therefore, imperative to recognize and consider fully the impacts of wetlands protection policies on individuals who own wetland property. Statutory, regulatory, and policy objectives should be accomplished in a manner that avoids unnecessary impacts upon such landowners.

Given the environmental and economic significance of wetlands, the alarming rate of wetlands loss, and concerns for private landowners, the Interagency Working Group on Federal Wetlands Policy began developing a comprehensive package of initiatives in June. The policy positions contained in this paper strongly support the effective protection and restoration of the Nation's wetlands, while advocating much-needed reforms to increase the fairness and flexibility of Federal regulatory programs.

II. A DIVISIVE DEBATE

Federal programs to protect the Nation's wetlands have been the focus of considerable controversy in recent years. Much of the attention focused upon the 1989 Interagency Wetlands Delineation Manual (1989 Manual). The 1989 Manual was prepared jointly by the U.S. Army Corps of Engineers (the Corps), the Environmental Protection Agency (EPA), the Fish and Wildlife Service (FWS) of the Department of the Interior, and the Department of Agriculture's Soil Conservation Service (SCS). It was developed in response to criticism that Federal agencies

were not using a single set of common procedures to "delineate" -- or identify -- wetlands under the jurisdiction of programs administered by these agencies.

But rather than alleviating concerns about inconsistency, the 1989 Manual only further fueled the controversy. Critics claimed that the 1989 Manual represented a major expansion of regulatory jurisdiction without opportunity for public participation. In response, the Bush Administration embarked upon a closed-door effort to revise the 1989 Manual. This process resulted in the technically flawed 1991 Manual that would have dramatically and indefensibly reduced the amount of wetlands subject to protection. The proposed 1991 Manual generated even further controversy and resulted in even greater polarization of the debate on Federal wetlands policy.

In addition to assailing the 1989 Manual, critics of Federal wetlands regulatory programs effectively characterized those programs as unfair, inflexible, inconsistent, and confusing. Supporters of wetlands protection responded -- with equal effectiveness -- by emphasizing the environmental and economic benefits associated with protecting the Nation's wetlands.

As both sides voiced their strongly held opinions, the debate over Federal wetlands policy became increasingly divisive. The opposition that developed to both the 1989 and 1991 Manuals demonstrated the policy deadlock that had developed. Wetlands policy has become one of the most controversial environmental issues facing the Federal government, just as Congress embarks upon the reauthorization of the Clean Water Act.

III. THE INTERAGENCY WORKING GROUP ON FEDERAL WETLANDS POLICY

The Administration convened the Interagency Working Group on Federal Wetlands Policy in early June with the goal of developing a package of Clinton Administration initiatives to break the deadlock over Federal wetlands policy. The group has been chaired by the White House Office on Environmental Policy and has included the participation of the EPA, the Army (the Corps of Engineers), the Office of Management and Budget, and the Departments of Agriculture, Commerce, Energy, Interior, Justice, and Transportation.

The working group sought the views of a broad range of stakeholders representing all perspectives in the wetlands debate. For example, the working group has received presentations that have included: a bipartisan group of eight members of the U.S. Congress; representatives of State and local government; environmentalists; the development community; agricultural interests; scientists and others.

After listening to this broad range of interests, the working group began its policy deliberations by establishing the following five principles that serve as the framework for the Administration's comprehensive package of wetlands reform initiatives.

IV. FIVE PRINCIPLES FOR FEDERAL WETLANDS POLICY

- 1) The Clinton Administration supports the interim goal of no overall net loss of the Nation's remaining wetlands, and the long-term goal of increasing the quality and quantity of the Nation's wetlands resource base;
- 2) Regulatory programs must be efficient, fair, flexible, and predictable, and must be administered in a manner that avoids unnecessary impacts upon private property and the regulated public, and minimizes those effects that cannot be avoided, while providing effective protection for wetlands. Duplication among regulatory agencies must be avoided and the public must have a clear understanding of regulatory requirements and various agency roles;
- 3) Non-regulatory programs, such as advance planning; wetlands restoration, inventory, and research; and public/private cooperative efforts must be encouraged to reduce the Federal government's reliance upon regulatory programs as the primary means to protect wetlands resources and to accomplish long-term wetlands gains;
- 4) The Federal government should expand partnerships with State, Tribal, and local governments, the private sector and individual citizens and approach wetlands protection and restoration in an ecosystem/watershed context; and
- 5) Federal wetlands policy should be based upon the best scientific information available.

V. A COMPREHENSIVE PACKAGE OF REFORMS

Building upon these principles, the working group has developed a comprehensive package of initiatives that will significantly reform Federal wetlands policy, while maintaining protection of this vital natural resource. This package includes regulatory reforms and innovative, non-regulatory policy approaches; it includes administrative actions that will take effect immediately, and legislative recommendations for Congress to consider during the reauthorization of the Clean Water Act. The Clinton Administration looks forward to working closely with the Congress to implement this new approach to Federal wetlands policy. In addition, the Administration will establish an ongoing interagency working group, to be chaired by the Office on Environmental Policy, to monitor the implementation of the initiatives contained in the reform package.

The reform package includes the following initiatives:

- To affirm its commitment to conserving wetlands resources, the Administration will issue an Executive Order embracing the interim goal of no overall net loss of the Nation's remaining wetlands resource base, and a long-term goal of increasing the quality and quantity of the Nation's wetlands;

-
- To increase fairness in the wetlands permitting process, the Corps will establish an administrative appeals process so that landowners can seek recourse short of going to court;
 - To increase fairness and efficiency in the wetlands permitting process, the Corps will establish deadlines for wetlands permitting decisions under the Clean Water Act;
 - To reduce uncertainty for American farmers, yesterday the Corps and EPA issued a final regulation ensuring that approximately 53 million acres of prior converted cropland — areas which no longer exhibit wetlands characteristics — will not be subject to wetlands regulations;
 - To reduce duplication and inconsistency for American farmers, the Soil Conservation Service will be the lead Federal agency responsible for identifying wetlands on agricultural lands under both the Clean Water Act and the Food Security Act;
 - To close a loophole that has led to the degradation and destruction of wetlands, yesterday the Corps and EPA issued a final regulation to clarify the scope of activities regulated under the Clean Water Act;
 - To emphasize that all wetlands are not of equal value, yesterday EPA and the Corps issued guidance to field staff highlighting the flexibility that exists to apply less vigorous permit review to small projects with minor environmental impacts;
 - To ensure consistency and fairness, the Army Corps of Engineers, the Environmental Protection Agency, the Soil Conservation Service, and the Fish and Wildlife Service will all use the same procedures to identify wetland areas;
 - To increase the predictability and environmental effectiveness of the Clean Water Act regulatory program and to help attain the no overall net loss goal, the Administration endorses the use of mitigation banks;
 - To reduce the conflict that can result between wetlands protection and development when decisions are made on a permit-by-permit basis, the Administration strongly supports incentives for States and localities to engage in watershed planning;
 - To provide effective incentives for farmers to restore wetlands on their property, the Administration will continue to support increased funding for the USDA's Wetland Reserve Program; and

- To attain the long-term goal of increasing the quantity and quality of the Nation's wetlands, the Administration will promote the restoration of damaged wetland areas through voluntary, non-regulatory programs.

The complete package of reform initiatives follows. (Some initiatives are listed under more than one heading for the sake of clarity.) By proposing an approach based upon effective protection and restoration of the Nation's wetlands, while adopting much-needed reforms to increase the fairness and flexibility of regulatory programs, the Administration's reform package offers a tremendous opportunity to move beyond the divisiveness that has characterized the wetlands policy debate in recent years.

A. ADDRESSING LANDOWNER CONCERNS

Issue Definition: The program that regulates wetlands under Section 404 of the Clean Water Act has been criticized as being slow, unpredictable and unfair. For example, it has been claimed that permits take too long to obtain; that wetlands delineations are sometimes slow, inaccurate, and inconsistent; and that it is unfair that the Corps does not provide a process by which landowners can appeal a jurisdictional determination or the denial of a wetlands permit short of suffering the expense of going to court.

Administration Position: The Clinton Administration believes that the Federal government has a responsibility to the public to conduct such regulatory programs in a manner that is efficient, responsive and fair. Therefore, the Administration supports the following reforms that will reduce the impact of regulation on the public, while meeting our objectives to protect wetlands:

● **Deadlines for Permit Action** Within one year the Corps will modify its regulations, through a public rulemaking process, to establish regulatory deadlines for reaching decisions regarding permit applications. The regulations will generally require the Corps to reach permit decisions within 90 days from the date of issuance of the public notice, unless precluded by other laws, such as the National Environmental Policy Act. The Administration will strongly support the additional personnel and funding necessary to meet these deadlines for permit action.

● **The Adoption of an Appeals Process** Within one year, the Corps will develop an administrative appeals process under the Section 404 regulatory program. The process, which will be implemented after a public rulemaking, will be designed to allow for administrative appeals of the Corps' determination that it has regulatory jurisdiction over a particular parcel of property, permit denials, and administrative penalties. The process will allow third parties to participate in applicant appeals of permit denials and will require that applicants exercise their right to appeal before initiating judicial action. The Administration will strongly support the additional personnel and funding necessary to implement successfully the appeals process.

The USDA already has an appeals process in place and landowners will be able to appeal SCS wetlands delineations through that administrative process.

● *Delineation Training and Certification* All employees of Federal agencies who conduct wetlands delineations will be required to complete the interagency wetlands delineation training program to improve accuracy and consistency in delineation in Federal wetlands programs or have comparable training and experience. As appropriate, State and Tribal agencies will also be encouraged to participate in the Federal training program. In addition, by the end of 1993, the Corps will propose regulations for implementing a certification program for private sector delineators.

By requiring training of Federal delineators, jurisdictional determinations can be done more accurately and consistently across the country. By encouraging the growth of a pool of certified private sector wetlands consultants, jurisdictional determinations can be performed far more quickly than if the job is solely the responsibility of Federal agency personnel. In addition, the Corps will streamline the process by which it considers and accepts delineations performed by certified wetlands consultants.

● *Promote Voluntary, Cooperative Programs.* With 75 percent of the Nation's remaining wetlands in the lower 48 States located on privately owned property, it is clear that cooperation with the private sector in implementation of wetlands protection and restoration activities is critical. Advance planning (see next issue) offers an excellent opportunity to involve the public in general, and property owners in particular, in developing and implementing wetlands protection and restoration plans. The Administration will support planning activities that include cooperative activities with property owners, and will increase support for programs that assist landowners in the implementation of such plans through restoration, technical assistance and information programs.

B. ADVANCE PLANNING AND WATERSHED MANAGEMENT

Issue Definition: Typically, decisions affecting wetlands are made on a project-by-project, permit-by-permit basis. This often precludes the effective consideration of the cumulative effects of piecemeal wetlands loss and degradation. It also hampers the ability of State, Tribal, regional, and local governments to integrate wetlands conservation objectives into the planning, management, and regulatory tools they use to make decisions regarding development and other natural resource issues. This can often result in inconsistent and inefficient efforts among agencies at all levels of government, and frustration and confusion among the public.

In contrast, advance planning, particularly comprehensive planning conducted on a watershed basis, offers the opportunity to have strong participation by State, Tribal, and local governments and private citizens in designing and implementing specific solutions to the most pressing environmental problems of that watershed. Advance planning generally involves at least the

identification, mapping, and preliminary assessment of relative wetland functions within the planning area. More comprehensive advance planning may identify wetlands that merit a high level of protection and others that may be considered for development, and may also incorporate wetlands conservation into overall land use planning at the local level. Advance planning can provide greater predictability and certainty to property owners, developers, project planners, and local governments.

Administration Position: To encourage greater use of comprehensive advance planning, particularly with State, Tribal, regional, and local involvement, and to identify wetlands protection and restoration needs, opportunities, and concerns, the Administration supports the following actions:

● *Provide Incentives for States/Locals to Integrate Watershed and Wetlands Planning.* The Clean Water Act should authorize the development of State watershed protection programs, which should include local and regional involvement and Federal approval of the State programs. Wetlands should be incorporated into the overall watershed approach, with minimum standards for wetlands protection and restoration planning. Approved watershed plans would receive a high priority for technical and financial support for activities such as mitigation banking, advance identification, and watershed-based categorization under the Section 404 regulatory program. There would also be a high priority given to developing Programmatic General Permits that defer to local regulatory programs implementing approved watershed plans.

● *Endorse State/Tribal Wetlands Conservation Plans.* Congress should endorse the development of State/Tribal comprehensive wetland plans, with the goal of supporting State and Tribal efforts to protect and manage their wetlands resources. EPA is currently funding the development of 22 State Wetlands Conservation Plans; Congress should provide EPA the authority to use its Wetlands Grants program to fund both their development and implementation.

● *Provide for Greater Integration of Advance Planning Into the Section 404 Regulatory Program.* The Administration will support efforts to better integrate advance planning into the Section 404 regulatory program, including appropriate local or watershed-based categorization frameworks and regionalized improvements to implementation of the existing Nationwide Permit 26 in headwaters and isolated waters. Such opportunities are expected to grow as States, Tribes, and regional and local governments progress on watershed plans, State Wetlands Conservation Plans, and other wetlands-related planning processes. Where State, Tribal, regional, or local governments have approved watershed plans that address wetlands, EPA and the Corps will give high priority to assisting with the development of categorization of wetland resources for the purpose of Section 404. Categorization approaches should be local or regional in nature, and reflect the full range of impacts and functions that affect wetlands within the watershed or planning area.

- **Programmatic General Permits (PGPs) Under Section 404.** The Corps will issue guidance which specifies the circumstances under which State, Tribal, regional, and local governments with existing regulatory programs may assume a more active role in wetlands protection while reducing duplication with Federal programs. PGPs are extremely useful in reducing unnecessary duplication between Federal and non-Federal regulatory programs and in generally enhancing the role of State and local governments and of advance planning, in decisions regarding wetlands and other aquatic resources. The Administration recommends that Congress amend Section 404(e) of the Clean Water Act to provide explicitly for issuance of PGPs, with appropriate environmental safeguards, for approved State, Tribal, regional, and local regulatory programs.
- **Improve Nationwide Permit 26 Through Regionalization.** In order to improve the implementation of existing Nationwide Permit 26 (NWP 26) in isolated waters and in headwater areas, the Corps, in coordination with appropriate Federal, State, and Tribal agencies, and with the opportunity for public notice and comment, will undertake a field level review of NWP 26 to develop regional descriptions of the types of waters, and the nature of activities in those waters that will not be subject to authorization under NWP 26. Advance planning efforts that have assessed the functions and values of local isolated wetlands and headwaters, and have considered factors such as cumulative losses and scarcity of particular classes of waters, will be used to facilitate this effort.
- **Mitigation Banking.** Wetland mitigation banking refers to the restoration, creation, enhancement, and, in certain defined circumstances, preservation of wetlands expressly for the purpose of providing compensatory mitigation in advance of discharges into wetlands authorized under the Section 404 regulatory program. Advance planning can be used to identify appropriate locations for, and uses of, mitigation banks. EPA and the Corps have issued guidance to their field staff that clarifies the manner in which wetlands mitigation banking fits in the Section 404 regulatory program. Congress should endorse the appropriate use of banking, with environmental safeguards, as a compensatory mitigation option under the Section 404 regulatory program, and explicitly allow use of the State Revolving Fund to capitalize mitigation banks.
- **Promote Voluntary, Cooperative Programs.** With approximately 75 percent of the Nation's remaining wetlands in the lower 48 States located on privately owned property, it is clear that cooperation with the private sector in implementation of wetlands protection and restoration activities is critical. Advance planning offers an excellent opportunity to involve the public in general, and property owners in particular, in developing and implementing wetlands protection and restoration plans. The Administration will support planning activities that include cooperative activities with property owners, and will increase support for programs that assist landowners in the implementation of such plans through restoration, technical assistance, and education and information programs.

• *Revise the Executive Order on Wetlands.* The existing Executive Order on wetlands (E.O.11990) will be revised to direct the Federal agencies to take a watershed/ecosystem approach to wetlands protection and restoration. In addition, it will require Federal agencies that conduct or assist with multi-objective natural resource planning to incorporate wetlands protection into their programs to the extent practicable.

• *Provide Better and Coordinated Information and Technical Assistance on Wetland Issues.* The Federal agencies will coordinate efforts to provide States, Tribes, regional and local governments, and the public with timely, consistent information concerning wetlands programs. The agencies will develop a strategic plan for delivering information on regulatory programs, and encourage the development of innovative education and outreach materials and initiatives to assist the public in understanding wetlands issues.

The Administration will also direct the Wetlands Subcommittee of the Federal Geographic Data Committee to complete reconciliation and integration of all Federal agency wetland inventory activities. In addition, the Administration will coordinate wetlands restoration, research, inventory, monitoring, cooperative programs, and information and education activities.

C. AGRICULTURE

Issue Definition: Two Federal statutes regulate certain activities in wetlands on agricultural lands. The Food Security Act Wetlands Conservation provision, which is known as the Swampbuster program, is administered by the Soil Conservation Service (SCS) of the U.S. Department of Agriculture, in consultation with the Fish and Wildlife Service of the Department of the Interior. The Clean Water Act Section 404 program is administered jointly by the Department of the Army and the Environmental Protection Agency. American farmers have at times been subjected to needless duplication and frustrating inconsistency in the implementation of these two statutes.

Administration Position: The Administration recognizes the valuable contribution of agricultural producers to the Nation's economy and more generally to the American way of life. We also appreciate the challenges faced by farmers as they try to comply with wetlands regulations, as well as other environmental requirements affecting farm operations. As a result, the Administration is committed to ensuring that Federal wetlands programs do not place unnecessary restrictions or burdens on farmers and other landowners, while providing necessary environmental safeguards.

The Administration has identified a number of actions that can be taken to reduce the impact of these two wetlands protection programs on American agriculture. At the heart of this effort is a commitment on the part of all Federal agencies involved to work closely and cooperatively to coordinate their work under these two statutes so as to increase efficiency, minimize duplication, and reduce inconsistencies between the programs.

The following initiatives demonstrate our commitment to protect and restore the Nation's wetlands and eliminate unnecessary impacts on the farm community:

• *Prior Converted Cropland Rulemaking.* EPA and the Corps have just completed a rulemaking which assures American farmers that an estimated 53 million acres of prior converted cropland will not be subject to regulation under Section 404 of the Clean Water Act. These lands were converted from wetlands to croplands prior to the passage of the Food Security Act of 1985, which established the Swampbuster program, and no longer exhibit wetlands characteristics. The Administration is also recommending that Congress include in the Clean Water Act a definition of "waters of the United States" that explicitly excludes from Clean Water Act jurisdiction areas determined to be prior converted cropland.

• *A Package to Eliminate Duplication and Inconsistency*

The SCS, EPA, the Corps, and FWS signed an interagency agreement on August 23, 1993 that will reduce existing overlap and inconsistencies in the implementation of Federal wetlands programs affecting agricultural lands by undertaking, within 120 days, the following initiatives:

• *Make the SCS the Lead Agency on Agricultural Lands.* The SCS, the Corps, EPA, and FWS will develop procedures to provide that SCS wetland delineations will represent the final government position on the extent of Swampbuster and Clean Water Act jurisdiction on agricultural lands. Interagency training programs will be developed to ensure that agency field staff are properly trained, that standard, agreed-upon methods are utilized in making delineation and mitigation determinations, and that EPA and the Corps, consistent with their statutory authorities, have the ability to monitor SCS determinations on a programmatic basis. SCS, EPA and the Corps will also coordinate enforcement responsibilities on agricultural lands to ensure that the Federal government's activities are equitable, and consistent.

• *Guarantee Consistency in Delineations on Agricultural Lands.* In order to ensure consistency in identifying wetlands on agricultural lands, the Corps, EPA, SCS, and FWS will all use the same procedures to delineate wetlands. The agencies will develop field guidance for implementing the 1987 Wetlands Delineation Manual to establish procedures for identifying wetlands in areas managed for agriculture. The agencies will also expedite current efforts to revise the SCS Food Security Act Manual to eliminate inconsistencies between wetlands delineation procedures in the FSA Manual and the 1987 Manual.

• *Greatly Increase Farmers' Certainty in Agency Decisions.* The Corps, in coordination with EPA, SCS, and FWS, will propose a Nationwide General Permit for discharges associated with "minimal effects" and "frequently cropped with mitigation" conversions determined by SCS and FWS to qualify for exemption

PROTECTING AMERICA'S WETLANDS:

from Swampbuster provisions. This will provide greater certainty to the Nation's farmers that they can rely on SCS/FWS mitigation determinations. While the Nationwide permit will include appropriate conditions to protect valuable wetlands, an individual review by the Corps and EPA will generally not be required.

- **Clarify that Certain Man-Made Wetlands Are Not Jurisdictional.** The Corps and EPA will incorporate examples of certain man-made wetlands, such as non-tidal drainage and irrigation ditches excavated on upland, and irrigated lands that would revert to upland if irrigation ceased, into their regulations to clarify the types of waters that are generally not subject to Clean Water Act jurisdiction because they are created out of upland.

- **Wetlands Reserve Program.** The Wetlands Reserve Program (WRP) offers a significant opportunity to assist farmers who are interested in restoring wetlands on their property. Response by farmers to the nine State pilot program was overwhelming, with proposals for 250,000 acres of restoration by over 2300 farmers. The 1994 Appropriations conference report provides for 75,000 new acres to be enrolled in the WRP. When passed this will more than double — to 20 — the number of states where producers can participate in the program. The recent Midwest flood has created a particularly pressing need to assist farmers in the voluntary restoration of wetlands that have historically provided valuable flood protection. Congress should fully fund the Administration's budget requests for the WRP in 1995, and should expand the program in the 1995 Farm Bill.

D. CATEGORIZATION

Issue Definition: A persistent criticism of the Section 404 regulatory program is that the permit process is inflexible to the extent that "all wetlands are treated the same" from a regulatory perspective. Such criticisms have led to calls for a nationwide categorization system to rank wetlands based upon their relative function and importance to society.

One proposed approach would require that all of the Nation's wetlands be mapped and categorized "up front" as either "high-", "medium-", or "low-value." The ranking based upon this *a priori* categorization would, in turn, govern the regulatory response at the time of a specific permit application.

Administration Position: While conceptually *a priori* categorization and ranking may seem attractive, its technical, fiscal and environmental implications make it unworkable. For example, simply mapping the lower 48 States at a scale suitable for detailed regulatory use would involve a mammoth undertaking yielding nearly 14 million maps and costing in excess of \$500 million. Assessing the functions of every wetland in the country would be a far larger and more complicated task and would require staffing and funding many times that necessary to complete mapping alone.

There is currently no scientific basis for a nationwide ranking of functionally distinct and diverse wetland types; any such scheme would be extremely difficult and require many years to develop. The suggestion contained in one legislative proposal that the Federal government buy all "high-value" wetlands would be infeasible from a budgetary standpoint. The Congressional Budget Office estimates the acquisition costs alone for the lower 48 States to range between \$10 billion and \$45 billion.

Finally, an *a priori* categorization and ranking approach would not provide for consideration of the individual impacts associated with specific projects. This makes little sense from the standpoint of either development or wetlands protection. For example, small projects with minor impacts would be arbitrarily prevented from proceeding in a "high-value" wetland area. At the same time, large and environmentally damaging projects would be automatically approved if they were located in "low-value" wetland areas. A nationwide *a priori* categorization scheme would further complicate the Section 404 program and would conflict with the Administration's goals of administering a scientifically sound regulatory program that is efficient, predictable and understandable.

In contrast to nationwide *a priori* categorization, opportunities exist to provide greater predictability and certainty in the regulatory process while increasing participation at the State and local levels. Local or regionally developed advance planning at the watershed level can provide a scientifically sound and workable framework for early consideration of variations in wetland functions within the Section 404 program. Appropriate functional assessment techniques can be applied to all wetlands within the boundaries of a particular watershed or planning area, and reasonably foreseeable development needs can be superimposed upon this inventory and assessment to identify appropriate regulatory responses in advance of specific permit applications. Highly functional and ecologically significant wetlands can be identified as deserving a very high standard of protection; conversely, wetlands with limited function and ecological significance, or activities that would cause minimal environmental harm, can be identified as appropriate for general permits or other regulatory streamlining methods.

In the context of individual permit reviews, the Section 404(b)(1) Guidelines currently provide the Corps and EPA with the flexibility to appropriately scale the regulatory response to reflect the relative function of the affected wetland, the character of the proposed discharge, and the probable environmental impact.

The Administration recognizes that "all wetlands are not the same" and that permit applicants deserve a timely and predictable regulatory response that is appropriate for the project being proposed. To this end, the Administration proposes the following actions:

- *Issue Section 404(b)(1) Guidelines Flexibility Guidance.* EPA and the Corps have issued guidance to their field staff to clarify and standardize implementation of the flexibility afforded by the 404(b)(1) Guidelines to make regulatory decisions regarding the analysis of project alternatives based on the relative severity of the environmental

impact of proposed discharges. This guidance clarifies that small projects with minor impacts are subject to less rigorous permit review than larger projects with more substantial environmental impacts.

- *Develop Improved Analytical Tools for Wetlands Functional Assessment.* The agencies will expedite development of a new approach for wetland functional assessment known as the Hydrogeomorphic Classification System (HGM). The HGM methodology is being developed by the agencies and the academic community as an improved analytical tool to make timely and accurate assessments of wetland functions. This tool will assist the agencies in assessing the relative severity of environmental impact of proposed discharges to determine an appropriate regulatory response consistent with the 404(b)(1) Guidelines flexibility guidance referenced above.

- *Encourage Advance Planning Efforts.* The agencies will provide technical assistance for advance planning efforts addressing wetlands conservation, and will counsel planning participants on methods to link local or regional planning with Section 404 regulatory decision making. Wetland categorization will be supported within the context of an approved advance plan to provide landowners with early identification and characterization of wetlands on their property, streamlined permit review, and more flexible mitigation sequencing where appropriate.

- *Regionalize General Permits for Activities in Defined Categories of Waters.* The Section 404 program already embodies a form of wetlands categorization through use of Nationwide Permit 26 (NWP 26), a "category of waters" general permit that authorizes discharges into isolated waters and headwaters. The Corps will undertake, in close coordination with relevant State and Federal agencies, a field level review and evaluation of NWP 26 for the purpose of regionalizing and improving its use. Congress should amend Section 404(e) to recognize the concept of regionalized "category of waters" general permits.

E. GEOGRAPHIC JURISDICTION

The term "geographic jurisdiction" encompasses a set of wetlands issues that concern the determination of which waters fall within the jurisdiction of the Section 404 program of the Clean Water Act. These issues include the delineation manual that specifies the methodology by which wetlands are identified; the definitions of "wetlands" and "waters of the United States;" "artificial" wetlands; and isolated waters. (For "Delineation Training and Certification" see ADDRESSING LANDOWNER CONCERNS.)

Issue Definition: Delineation Manual

As previously indicated, there has been a great deal of controversy surrounding the manuals that Federal agencies use in the field to delineate wetlands. The 1989 Manual was strongly criticized by some who claimed that it was an attempt by the bureaucracy to greatly *expand* the geographic

jurisdiction of wetlands regulation without opportunity for public involvement. The proposed 1991 Manual that followed was roundly criticized by those who claimed that it would greatly reduce the scope of geographic jurisdiction applied to wetlands. In an attempt to resolve this controversy, in the fall of 1992 the Congress directed EPA to fund a National Academy of Science (NAS) study of wetlands delineation. That study is expected to be completed in the Fall of 1994. Since January 1993, both the Corps and EPA have adopted the 1987 Manual, which was in use in some parts of the country prior to the issuance of the 1989 Manual.

Administration Position: The Clinton Administration supports the use of the 1987 Wetlands Delineation Manual by the Corps, EPA, SCS, and FWS pending the evaluation of the NAS study. (See "Guarantee Consistency in Delineations on Agricultural Lands" under AGRICULTURE.) The use of the 1987 Manual by the Corps and EPA has increased confidence and consistency in identifying wetlands and has diminished the controversy associated with the 1989 and 1991 manuals. If the Federal agencies jointly conclude that the 1987 Manual should be revised to respond to recommendations of the NAS, any proposed changes will be the subject of a process that will provide full opportunity for public comment. In addition, any proposed changes will be field tested by the agencies prior to final adoption to determine their impact in the real world.

To increase public confidence in the Section 404 regulatory program, the Administration recommends that the Congress endorse the continued use of the 1987 Manual in the reauthorization of the Clean Water Act, pending recommendations that may result from the NAS study.

Issue Definition: Defining "Waters of the U.S." and "Wetlands"

The Clean Water Act regulates discharges to "navigable waters," which are defined in the statute as "waters of the United States." However, the Act does not contain a definition of "waters of the United States." Similarly, while the Act refers to "wetlands," the statute does not define the term. Explicit definitions of these terms in the statute, consistent with longstanding regulatory definitions, would clarify Congressional intent with regard to the scope of geographic jurisdiction under the Act.

Administration Position: The Administration recommends that Congress incorporate the definition of "waters of the United States" contained in existing EPA and Corps implementing regulations. To provide additional consistency among Clean Water Act and Food Security Act programs, Congress should also incorporate the definition of "wetlands" contained in the Clean Water Act regulatory definitions, which is essentially identical to the wetlands definition in the 1990 Farm Bill. (The Clean Water Act regulatory definition of wetlands is preferable because some States have used the definition in State wetlands statutes. To adopt a different definition at Federal and State levels of government would only create further confusion in the regulatory program.)

The EPA/Corps definition of "waters of the United States" explicitly includes recently promulgated language clarifying that "prior converted croplands" are not waters of the

United States for purposes of the Clean Water Act. Congress should include this clarifying language in statute as well.

The Administration also recommends that Congress add examples of "isolated waters" (e.g., prairie potholes, vernal pools, and playa lakes) to the statutory definition of wetlands. From a scientific standpoint, isolated wetlands perform many of the same vital functions performed by other aquatic areas widely accepted as wetlands, such as flood control and groundwater recharge, as well as providing critical habitat for migratory waterfowl and other wildlife, and contribute to achieving the objectives of the Clean Water Act both individually and as a class.

Issue Definition: "Artificial" Wetlands

Neither the Clean Water Act nor its implementing regulations distinguishes between natural and created wetlands. However, certain "artificial" wetlands do not normally exhibit the values and functions typically attributed to natural wetlands. These artificial wetlands are created inadvertently from upland by human activity and would revert to upland if such activity ceased. The fact that these areas are not specifically excluded from the jurisdiction of the Clean Water Act in either statute or regulation has caused confusion.

Administration Position: The EPA and the Corps will incorporate examples of artificial wetlands, such as non-tidal drainage and irrigation ditches excavated on upland, into their regulations to clarify the types of waters that are generally not subject to Clean Water Act jurisdiction because they are created out of upland.

F. MITIGATION AND MITIGATION BANKING

Issue Definition: Mitigating the harmful effects of necessary development actions on the Nation's waters is a central premise of Federal wetland regulatory programs. The Section 404 regulatory program relies upon a sequential approach to mitigating these harmful effects by first avoiding unnecessary impacts, then minimizing environmental harm, and, finally, compensating for remaining unavoidable damage to wetlands and other waters through, for example, the restoration or creation of wetlands.

Mitigation banking refers to a wetland restoration, creation, or enhancement effort undertaken expressly for the purpose of compensating for unavoidable wetland losses in advance of development actions, when compensatory mitigation is not appropriate, practicable, or as environmentally beneficial at the development site. Units of restored or created wetland are expressed as "credits", and accumulated credits are subsequently withdrawn to offset "debits" incurred at the development site.

Administration Position: The sequential approach to mitigation provides a logical, predictable, and reasonable framework for mitigating impacts associated with proposed

development actions. The Administration supports the use of mitigation banking in appropriate circumstances as a means of compensating for authorized wetland impacts.

The Administration is proposing the following actions to ensure that mitigation of environmental impacts within the Section 404 program is effective, predictable, and consistent with a watershed management perspective:

● *Issue Mitigation Planning Guidance.* The Corps, in coordination with EPA, FWS, SCS, and the National Marine Fisheries Service (NMFS), will issue guidance to their field staff to clarify the requirements for developing compensatory mitigation conditions in Section 404 permits. This guidance is intended to increase the success of mitigation projects in offsetting impacts to wetlands and other waters resulting from permitted activities. This guidance will assist permit applicants by providing greater consistency and certainty with regard to how Section 404 mitigation requirements are applied.

● *Endorse the Use of Mitigation Banking Under the Section 404 Regulatory Program.* While a number of technical and procedural questions regarding the establishment and long term management of mitigation banks remain, conceptually mitigation banking, with appropriate environment safeguards, offers numerous advantages. Banking provides for greater certainty of successful compensatory mitigation in the permit process by requiring mitigation to be established before permits are issued. Banks are often ecologically advantageous because they consolidate fragmented wetland mitigation projects into one large contiguous parcel that can more effectively replace the lost wetland functions within the watershed. Mitigation banks also provide a framework for financial resources, planning and technical expertise to be brought together in a fashion often not possible with smaller mitigation projects.

Recognizing the advantages offered by mitigation banking to compensate for wetlands losses, Congress should endorse the appropriate use of banking as a compensatory mitigation option under the Section 404 regulatory program, within environmentally sound limits. Congress should also explicitly allow use of the State Revolving Fund by States to capitalize mitigation banks.

● *Issue Mitigation Banking Guidance.* EPA and the Corps, in coordination with FWS, NMFS, and SCS have issued guidance to their field staff to clarify the manner in which wetlands mitigation banking is appropriately used within the Section 404 regulatory program. This guidance provides interim direction pending the results of additional studies, but will encourage, within environmentally sound limits, the use of mitigation banks for compensatory mitigation under Section 404.

● *Develop Improved Analytical Tools.* The agencies will expedite current efforts being coordinated by the Corps Waterways Experiment Station to develop an improved wetland functional assessment tool, the Hydrogeomorphic Classification System, to assist in conducting impact analysis and determining appropriate and effective mitigation measures.

G. RESTORATION

Issue Definition: This Nation has lost nearly half of the wetland acreage that existed in the lower 48 States prior to European settlement. Much of this loss was due to Federal policies from an earlier era that encouraged the drainage of wetlands. The effect of this wetland loss is reflected in declining populations of fish, waterfowl, and other living things dependent upon the aquatic environment; in degraded water quality; and, most recently, in the extent of flooding in the Midwest.

The Section 404 regulatory program under the Clean Water Act and the Swampbuster provisions under the Food Security Act are attempts to stem this loss of wetlands. At best, the regulatory approach can ensure no further overall net loss. But to achieve a positive increase in the Nation's wetlands will require the restoration of some damaged wetlands.

Our ability to restore wetlands, particularly inland wetlands in agricultural areas, has been well-established over the last decade. A number of private and governmental entities have successfully restored degraded or lost wetlands to productive status. For example, the Fish and Wildlife Service, in cooperation with private landowners across the Nation, has implemented 9,500 restoration projects affecting 200,000 acres. Last year, a 50,000 acre pilot of the USDA Wetlands Reserve Program received proposals from 2,300 farmers to restore 500,000 acres.

Administration Position: Restoring some former wetlands that have been drained previously or otherwise destroyed to functioning wetlands is key to achieving the Administration's interim goal of no overall net loss of the Nation's remaining wetlands, and its long term goal to increase the quality and quantity of the Nation's wetlands base.

In support of a broad-based effort to restore a portion of the Nation's historic wetlands base that has been destroyed or degraded in the past, the Administration proposes to take the following actions:

- **Wetlands Reserve Program.** The fiscal year 1994 Agriculture Appropriations conference report provides for 75,000 new acres to be enrolled in the Wetlands Reserve Program. When passed this will also more than double - to 20 - the number of States eligible for participation in the program. The Administration will also use this program in the Midwest to restore wetlands in the course of providing financial assistance to farmers and improved flood protection for all those affected by the recent flooding. The Administration will also pursue full funding of the President's budget request for the Wetlands Reserve Program in FY 1995, and will seek to have this program expanded in the 1995 Farm Bill.

- **Promote Wetlands Restoration through Voluntary, Cooperative Programs and Outreach Activities.** Wetlands conservation efforts have historically focused largely on wetlands regulation and acquisition. These programs continue to be essential to a

comprehensive strategy for achieving the Administration's wetlands goals. However, stemming the net loss of the Nation's wetlands base and achieving a long-term increase in wetlands acreage is dependent upon restoring wetlands that have been drained, diked, or otherwise destroyed in the past.

The universe of restorable former wetlands is predominantly on private lands, and the Administration presently has in place a number of Federal programs that focus on or incorporate voluntary, cooperative efforts to restore wetlands on private lands (e.g., FWS's Partners for Wildlife program, Bay and Estuary program, and North American Waterfowl Management Plan Joint Ventures; USDA's Wetlands Reserve, Water Bank, Water Quality Incentives, Forestry Incentives, and Stewardship Incentives programs.) The Administration will review existing Federal programs that seek to restore wetlands through cooperative, voluntary agreements and outreach efforts with private and other non-Federal landowners, and will examine opportunities to expand such programs, including education and outreach activities.

- *Revise the Executive Order on Wetlands.* The existing executive order on wetlands will be revised to incorporate the Administration's interim and long term wetland goals and to establish wetlands restoration as an essential vehicle for Federal and quasi-Federal agencies to achieve those goals through a voluntary approach.

H. ROLES OF FEDERAL AGENCIES

Issue Definition: Public support for Federal wetlands protection programs, such as the Clean Water Act Section 404 regulatory program and the Food Security Act Swampbuster program, has suffered during recent years from a perception that multiple agency roles in the Administration of these programs has contributed to confusion, delays, overlap, and a general sense that no single agency is "in charge".

Administration Position: The Administration is initiating steps to streamline the implementation of Federal wetlands protection programs by reducing duplication, overlap, and delay. For example, a memorandum of agreement has recently been signed to give the Soil Conservation Service, in consultation with the Fish and Wildlife Service, the lead agency for making wetlands delineations and mitigation decisions on agricultural land (see AGRICULTURE).

The Administration is committed to providing for effective and timely participation by the agencies with roles in Federal programs affecting wetlands while emphasizing the ultimate role of a single Federal agency decisionmaker. This increased coordination among the relevant agencies will be accomplished through the following mechanism:

- *Continue Implementation of the 1992 Interagency Section 404(q) MOAs.* EPA, the Corps, FWS, and NMFS have issued guidance to their field staff to improve interagency

PROTECTING AMERICA'S WETLANDS:

coordination procedures established in the 1992 Memoranda of Agreement under Section 404. These MOAs define a process for expedited review and resolution of agency concerns regarding individual permit decisions. The MOAs also establish procedures for resolving concerns involving the implementation of Section 404 program policy that can be accomplished without delaying individual permit decisions.

The agencies will continue to use the 1992 MOAs and, based on this experience, determine whether additional guidance or revisions to the MOAs are necessary. It is critical to the ultimate effectiveness of the Section 404 program to preserve the responsibilities of Federal resource agencies such as the EPA, FWS and NMFS to reflect their relative expertise and authorities while reducing duplication, overlap, and delay. It is equally critical to recognize and understand the Corps' leadership and final decision-making role as "project manager" for the evaluation of permit applications under the Section 404 regulatory program.

I. ROLE OF STATE, TRIBAL, AND LOCAL GOVERNMENT

Issue Definition: Decisions on where and how to protect or restore wetlands can be often most appropriately made at State, Tribal, or local levels. However, the current Section 404 regulatory program is run at the Federal level, except for certain waters in one State (Michigan). Many States, Tribes, and local governments have their own wetlands programs, which often overlap, are inconsistent with, or are simply distinct from Federal programs. This has resulted in inefficiency, frustration by the regulated public, and significant confusion.

Administration Position: The Administration is committed to increasing State, Tribal, and local government roles in Federal wetlands protection and restoration efforts. To increase consistency and clarity and reduce the confusion generated by the current relationship between the Federal government and State, Tribal, and local governments in wetlands protection and restoration, and to bring decision making to more appropriate levels, the Administration is taking the following actions:

- **Assist States, Tribes, and Local Governments in Taking a Stronger Role in Wetlands Protection.** The Administration will provide technical and financial assistance and guidance to States, Tribes, and local governments to assist them in taking more of a leadership role in wetlands protection, e.g., through State/Tribal assumption of Section 404, development of comprehensive State/Tribal Wetland Conservation Plans, application of State/Tribal Section 401 Certification authority to wetlands, development of Programmatic General Permits under Section 404, and better coordination between State, Tribal, and local permit programs and the Section 404 program.

- **Provide Incentives for States, Tribes, and Regional and Local Governments to Integrate Watershed and Wetlands Planning.** The Clean Water Act should authorize the development of State/Tribal watershed protection programs, requiring local and regional

involvement and Federal approval of the State/Tribal programs. Wetlands should be incorporated into the overall watershed approach, with minimum requirements for wetlands protection and restoration planning. Approved watershed plans would receive a high priority for technical and financial support for activities such as mitigation banking, advance identification, and categorization under the Section 404 regulatory program. There would also be a high priority given to developing Programmatic General Permits that defer to local regulatory programs implementing approved watershed plans.

● *Increase Deference to State, Tribal, Regional, and Local Wetlands Decisionmaking.* The Corps will issue guidance which specifies the circumstances under which State, Tribal, regional, and local programs can effectively regulate Section 404 activities, through issuance of Programmatic General Permits (PGPs). The guidance will also clarify the safeguards required to ensure that these programs adequately protect wetlands and other waters.

The use of PGPs is designed to increase the roles of State, Tribal, regional, and local governments in wetlands protection, provide an incentive for watershed planning efforts, and reduce redundancy and overlap between these programs and the Federal Section 404 program. The Administration recommends that Congress amend Section 404(e) of the Clean Water Act to provide explicitly for issuance of PGPs with appropriate environmental safeguards for approved State, Tribal, regional, and local regulatory programs.

● *Endorse State/Tribal Wetlands Conservation Plans.* Congress should endorse the development of State/Tribal comprehensive wetland plans, with the goal of supporting State and Tribal efforts to protect and manage their wetlands resources. EPA is currently funding the development of 22 State Wetlands Conservation Plans; Congress should provide EPA the authority to use its Wetlands Grants program to fund both their development and implementation.

● *Encourage State/Tribal Assumption of Section 404.* Congress should provide EPA the authority to use its Wetlands Grants program to fund both development and implementation of State assumption of the Section 404 program. In addition, Congress should authorize partial assumption of the Section 404 program by States and Tribes as an interim step toward full assumption. By authorizing partial assumption of discrete areas within State or Tribal jurisdiction, the State/Tribe can get experience with the program as it develops full statutory equivalency, and the Federal government can defer to the State/Tribe as early as possible.

● *Provide States/Tribes with Access to Wetlands Delineation Training.* State and Tribal agencies will be encouraged to participate in the Federal interagency wetlands delineation training and certification programs to strengthen their abilities to conduct wetlands delineations, and to improve consistency in wetlands identification among State and Federal wetlands programs.

J. SCOPE OF REGULATED ACTIVITIES

Issue Definition: The Clean Water Act Section 404 program regulates "discharges" of dredged and fill material to wetlands and other waters of the United States. In the past, these terms have been interpreted in a way that created regulatory "loopholes" under which certain projects could be designed, using expensive and sophisticated methods, so that they did not require Section 404 authorization.

The environmental effects of these projects on wetlands are no different than less sophisticated projects involving discharges of dredged or fill material, which have been regulated under Section 404. Also, these loopholes have led to inconsistencies in how the Section 404 program has been implemented around the country.

Administration Position: The Administration has issued a final regulation, and is asking Congress to take corresponding legislative action, to close these regulatory loopholes by clarifying the types of activities that involve discharges of dredged or fill material subject to Section 404 review.

The following actions will result in better protection of wetlands, and improve the fairness, predictability, and consistency of the Section 404 program.

● **Clarify Definition of "Discharge of Dredged Material."** Under the final rule, this term is defined to ensure that discharges into wetlands and other waters of the United States will be consistently regulated when they are associated with excavation activities, such as ditching, channelization, or mechanized landclearing, that have environmental effects of concern. The rule explicitly excludes from Section 404 regulation discharges associated with activities that have only *de minimis*, or inconsequential, environmental effects. In an effort to reduce the impact of these changes on the regulation of minor activities with only minimal adverse environmental effects, the Corps will coordinate with EPA to develop additional general permits authorizing such minor activities. The revised definition does *not* affect the existing exemptions in Section 404(f) for ongoing farming, ranching, and silvicultural activities.

● **Clarify Definition of "Discharge of Fill Material."** The agencies also are clarifying the definition of "discharge of fill material" to ensure that activities in waters of the United States that involve the non-traditional use of pilings (e.g., shopping malls, parking garages) will require Clean Water Act authorization. In an effort to reduce the impact of these changes on the regulation of minor activities with only minimal adverse environmental effects, the Corps will coordinate with EPA to develop additional general permits that authorize such activities.

- *Legislative Clarification of Scope of Activities Regulated Under Section 404.* Congress should amend the Clean Water Act to make it consistent with the agencies' rulemaking.

K. STATE OF ALASKA

Issue Definition: The extent and nature of Alaska wetlands reflect, in part, climatological and physiographic conditions found in no other State. More than 99 percent of Alaska's wetlands remain, and much of the State's developable lands are wetlands. This abundance of wetlands in combination with Alaska's short building season, leads some to claim that the Section 404 program places a heavier burden on Alaskans than on the rest of the country.

The previous Administration attempted to address some of these concerns by proposing the "Alaska 1% rule" which would have exempted wetlands in Alaska from mitigation requirements until one percent of Alaska's wetland resources had been developed. The "Alaska 1% rule" was published for public comment in November 1992, and 83 percent of the over 6,500 comments received objected to the rule, raising concerns about its potential impact on the environment.

Objections to the proposed rule focused on several key considerations:

- An additional 1.5 million acres of Alaska's wetlands would be destroyed before the one percent threshold would be met, including potentially all of Alaska's 345,000 acres of extremely valuable coastal wetlands. Wetlands losses in Alaska have historically been greatest in coastal areas where the State's population is concentrated. For example, losses of high value coastal wetlands near the cities of Anchorage and Juneau are estimated to exceed 50 percent of their historic base.
- The proposed rule would hinder management efforts for several Federally listed or proposed threatened and endangered species that utilize Alaska's coastal wetlands, as well as hastening the listing of additional candidate species.
- Although full in-kind compensation is often not possible or practicable, opportunities do exist for restoration or rehabilitation of disturbed areas in proximity to a proposed development that have the potential to benefit affected fish and wildlife populations.
- There is enough flexibility in the existing Section 404 regulatory program to respond to Alaska's unique concerns administratively. During the last 20 years, of the approximately 4,000 permit applications received by the Corps' Alaska District, only 108 (2.7 percent) were denied; the remaining applications were either issued as individual or general permits, or withdrawn. Of the more than 3,000 individual permits issued, only 15 (0.5 percent) required compensatory mitigation.

Administration Position: Because of the significant adverse environmental consequences that it would allow, the "Alaska 1% rule" will be withdrawn. The best way to address Alaska-specific concerns regarding the Section 404 program is through targeting the specific areas where questions about program policies or implementation have been raised. Finalizing the proposed "Alaska 1% rule" would have far broader and avoidable adverse environmental consequences.

The EPA and the Corps will, within the next 90 days, initiate meetings with the Federal resource agencies, State and local government agencies, representatives of native villages, industry groups including oil and fishing interests, and environmental groups, to consider other environmentally appropriate means to assure regulatory flexibility and the feasibility of alternative permitting procedures in Alaska.

In addition, the Administration is proposing a number of actions to improve implementation of the Section 404 regulatory program nationwide (e.g., issuing guidance on flexibility in the Section 404(b)(1) Guidelines, mitigation banking, mitigation planning, advance planning, programmatic general permits; establishing an administrative appeals process; providing for more explicit consideration of wetland functions; and regionalizing Nationwide Permit number 26. See earlier discussion for details). These actions, in combination with any Alaska-specific proposals developed as a result of the process outlined above, should contribute significantly to addressing Alaska's concerns with implementation of the Section 404 regulatory program.

L. TAKINGS

Issue Definition: Some critics of the Section 404 regulatory program have asserted that Federal efforts to protect wetlands constitute a "taking" of private property and require compensation under the Fifth Amendment of the Constitution. Critics of the program have proposed legislation that would characterize permit denial decisions, and other Section 404 regulatory actions, as "takings" requiring compensation.

Administration Position: The Administration strongly supports private property rights. The equitable administration of any Federal regulatory program involves more than strict technical considerations and must include sensitivity to the rights and expectations of citizens. Implementation of the Section 404 program often requires a balancing of environmental protection, public interests, and individual interests.

Many activities undertaken on wetlands either are not regulated at all, are explicitly exempted from regulation, or are authorized by general permits. In situations where individual permits are required, the Federal agencies can work with permit applicants to design projects that meet the requirements of the law and protect the environment and public safety, while protecting the property rights of the applicant. However, in rare instances the public interest in conserving wetlands may substantially interfere with the rights of landowners. In such instances, Federal action will be based

on the proposition that restrictions on the actions of the property owners in question are called for in order to protect the property rights, safety, environmental or economic interests of other individuals or the community at large.

In those situations where the necessary restrictions on use amount to a taking of the property, the owner will, of course, be entitled to compensation. Moreover, where a property owner believes that government action amounts to a taking, the courts are available to review such claims and to determine whether compensation is due. Due to the unique nature of each situation, these issues must be considered on a case-by-case basis. Therefore, the Administration does not support a legislative approach to this issue.

The Administration is strongly committed to reducing the impact of the 404 program on landowners. Many of the Administration positions that have been described in this paper are designed to make the program as efficient, predictable, consistent, and equitable as possible (see ADDRESSING LANDOWNER CONCERNS, AGRICULTURE and CATEGORIZATION).

VI. CONCLUSION

This comprehensive reform package represents a tremendous opportunity to move beyond the unnecessary polarization that has characterized the wetlands policy debate in recent years. While divisive, that debate has not been without value.

The critics of the wetlands regulatory program have performed a service to the country by highlighting the need for meaningful reform in the administration of wetland regulatory programs. Many of the much-needed reforms contained in this package -- such as permit deadlines, an appeals process, the use of mitigation banks, and increasing the role of State and local government in wetlands regulation -- have been proposed by critics of the current regulatory program.

The supporters of wetlands protection have also performed a service by helping to inform the Nation of the environmental and economic importance of wetlands, a vital natural resource that was once routinely destroyed. Their strong commitment to protecting and restoring this vital resource is also reflected in this package.

There will, no doubt, be individuals on each side of this divisive debate who will not be entirely pleased with every element of this reform package. But our approach provides effective protection of an important natural resource in a manner that is both fair and flexible, thus recognizing both the value of wetland resources and the need to minimize regulatory burdens.

VII. POSTSCRIPT: LESSONS FROM THE FLOOD

The entire Nation shares the pain of those Americans experiencing the physical destruction and economic loss caused by the disastrous floods that have devastated the Nation's heartland. Many lives have been lost, and billions of dollars in damage have been caused to property and crops. In the short term, we must use the tools available to us to assist those struggling to deal with severe economic hardship due to the floods. We must concentrate our attention on helping people rebuild their lives by protecting our riverfront communities and providing assistance to businesses and the agricultural community adversely affected by the floods.

We must also look to the future, and learn from these floods how to more effectively protect human health and safety, property, and the environment. Many scientists have concluded that past manipulation of the rivers in the Midwest has contributed to the current level of devastation by separating the river channels from their natural floodplains, eliminating millions of acres of additional flood storage capacity. Wetlands within the floodplain and higher in the watershed reduce floods by absorbing rain, snow melt, and floodwaters and releasing it slowly, thereby reducing the severity of downstream flooding.

We must be cautious not to repeat policies and practices which may have added to the destruction caused by these floods. One way to assist landowners while alleviating some flood risks is through funding wetlands restoration and acquisition programs targeted to help those in flood-ravaged areas. Programs such as the USDA Wetlands Reserve Program provide farmers with much needed support and increase the quantity of flood-absorbing wetlands in this region.

Of course, we recognize that wetlands and river system restoration and protection alone will not suffice. It will be critically important that we quickly rebuild many of the flood control structures. However, we have learned the importance of also looking at alternative non-structural measures that may provide as much or better flood damage reduction at the same or lower cost. Such measures would include using more natural river corridor systems and wetlands. In the longer term, it is important that *all* potential flood control measures, both structural and non-structural, be considered and evaluated from a pragmatic and cost-benefit standpoint.

It is not a question of whether to protect cities and farms; it is a question of how best to protect them. In the case of riverfront communities, protective levees may be the only reasonable answer, but in other circumstances, non-structural measures may make more sense. We can identify ways to protect and restore our river and wetlands systems so that they work for us, integrated with structural flood control measures. Of course, wetlands that provide flood control generally will also provide other important functions, such as fish and wildlife habitat, water quality improvement, and recreational opportunities. In our response to this flood-borne tragedy, the Administration will pursue measures that are the most effective means to prevent this catastrophe from happening again. Doubtless this will involve a combination of repair and construction of flood control structures together with restoration of natural flood attenuating river and wetlands systems.

**STATEMENT OF AMERICAN FARM BUREAU FEDERATION
TO THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE
REGARDING WETLANDS PROVISIONS OF THE CLEAN WATER ACT
REAUTHORIZATION**

American Farm Bureau Federation

October 29, 1993

The American Farm Bureau Federation, the Nation's largest farm organization, appreciates the opportunity to provide comments about the reauthorization of the Clean Water Act and the Administration's proposed wetland provisions. From the perspective of farmers and ranchers, wetlands is one broad aspect of the Clean Water Act that needs your attention.

The Problem

From Farm Bureau's perspective, there are many problems with the current wetland regulations. The Clean Water Act was not designed to preserve wetlands-- it was designed to prevent discharge of toxic materials into waters of the United States. Current wetland regulations fail to respect private property rights. Wetland policy was developed through litigation and regulation, not through an open and public legislative debate. Even the bureaucratic expansion of federal control over farmed land did not allow for public review and comment. It is bad public policy if only professional government regulators can identify a wetland. And finally, many farmers' attempts at good-faith compliance have been frustrated and proven prohibitively costly to resolve, thus placing the viability of the farming or ranching operation in jeopardy.

In order to protect and enhance quality wetlands Congress must:

- Develop a clear definition of wetlands;
- Clearly identify which wetlands are important enough to be federally regulated;
- Compensate landowners for wetlands protection; and
- Provide adequate resources to make it work.

Private Property Rights

Central to the wetlands issue is the question of private property rights. More than 75 percent of wetlands are on private property. The 5th Amendment to

our Constitution provides that private property may not be taken for public use without just compensation. Historically, the landowner has borne the burden of protecting this resource, both in the form of direct cost, and restricted use of property. We strongly believe there is a public obligation to shoulder these costs, since the public at large is the beneficiary.

Farm Bureau supports the identification, protection and enhancement of quality wetlands, if private property rights are protected and economic growth is enhanced.

Farm Bureau recommends that Congress affirm that wetlands are located on private property, and if loss of any economic use or value results from regulatory restrictions, the private landowner should be compensated.

Declaration of Policies and Goals

Farm Bureau is very concerned about a national policy to achieve an interim goal of no overall net loss of wetlands and a long-term goal of increasing the quality and quantity of the nation's wetlands. The voting delegates of the American Farm Bureau Federation oppose a national goal of no-net-loss of wetlands because such policies protect wetlands above all other natural resource systems or public good.

We have the following questions about the Administration's proposals to achieve no-net-loss of remaining wetlands and increase the quantity and quality of wetlands in the United States.

- Does the Administration's proposal require a net gain in wetlands on private property?
- How many acres of wetlands does the Administration want restored?
- Does the Administration's no-net-loss policy reaffirm the policy of sequencing in which wetlands are avoided at all costs and protected above all other natural resource systems?
- Does the Administration's no-net-loss policy require the protection of wetlands regardless of their functions and values or the costs and benefits of wetlands alteration to society?
- What incentives would the Administration and Congress recommend to encourage wetland restoration?

- Who will be responsible for a consistent wetland inventory in order to monitor restoration, regulatory impacts on economic growth/development and land values?
- Will the Administration or Congress clarify when wetland restrictions become a "taking" of private property and therefore requires compensation?
- Will the Administration or Congress compensate landowners for the protection of wetlands, or are individual landowners responsible for the cost of protecting the national wetland resource base?
- Will the Administration and Congress support wetland regulations that require a cost/benefit approach to balance private property rights, environmental quality, economic growth, and public health and safety with the benefits of the wetland protection/alteration?

Farm Bureau recommends: The goal of wetland protection should be directly related to water quality standards in the Clean Water Act and based on the scientific contribution wetlands have in managing water quality for human health and safety. The Administration and Congress should recognize and differentiate functions and values of existing wetlands and protect existing wetlands through a strategy of permits, compensation and mitigation.

Furthermore, the goal of increasing the quantity and quality of wetlands should be achieved through a voluntary, non-regulatory strategy. Voluntary strategies and efforts to restore degraded wetlands, as well as previously drained wetlands, should focus on the quantity of wetlands necessary to achieve the water quality standards for human health and safety. Tying the desire for an increase in quantity of wetlands to water quality standards puts a scientifically supportable and potentially definable cap on the amount of increase, rather than leaving the amount of increase totally open-ended.

Classification of Wetlands

Changes to Section 404 should include a system of classifying wetlands, recognizing that not all wetlands share the same ecological value or perform the same functions. Those that are truly unique may be deserving of greater protection, whereas those that are marginal or only technically meet wetlands criteria should be subject to less stringent oversight.

Farm Bureau strongly recommends that the federal government adopt a standard method for inventorying wetlands which includes soil taxonomy as the basis for determining wetland soils, classifies wetlands on the basis of

function and value, and requires that all government agencies adhere to this single inventory methodology. We suggest that the Corps of Engineers be mandated to conduct and maintain the inventory of wetland functions and values in consultation with the Soil Conservation Service. Regulatory efforts should only offer a protection to the nation's most valuable and unique wetland areas.

Definition and Delineation of Wetlands

The temporary return to the 1987 wetland manual is an improvement over the 1989 manual, but it too contains some of the uncertainties that led to the original controversy. The conflict over wetland delineation stems from the lack of a clear public policy to apply good science. In that context, we look forward to the product of the National Academy of Sciences (NAS), but we do not view the NAS study as a panacea. As members of the House, you, not the NAS, must be the arbiter of that conflict, the source of the compromise for what constitutes a federally regulated wetland. Eighteen more months of study will not resolve it.

Ultimately, private landowners should not be required to bear the cost of protecting "wetlands" that are recognized by the Clean Water Act as being a "public resource." Congress should establish the concept in the Clean Water Act that certain types of wetlands may qualify technically as a wetland but should not be subject to federal regulation because they have no significant function or value.

Farm Bureau is very concerned that a definition with explicit reference to geological features such as potholes, playas, vernal pools and etc., could mean that all of these geographic locations are jurisdictional wetlands, regardless of the presence of any required wetland criteria. It also fails to differentiate between a wetland by definition and a jurisdictional wetland.

Farm Bureau recommends:

- "Normal circumstances"--defined in this legislation to mean current physical conditions and land use.
- Wetlands should be defined as naturally occurring areas of predominantly hydric soils, as determined by soil taxonomy, that support hydrophytic vegetation because of existing wetland hydrology. A hydric soil is a soil that in its natural state is saturated, flooded or ponded long enough during the active growing season to have predominant anaerobic conditions at the surface; and hydrophytic

vegetation means a predominance of obligate wetland plants and facultative wetland plants.

- Specific qualifications must be required for the individual making the delineation. Agencies administering delineation must recognize and be required to use the best available science in each of the individual scientific disciplines of soil science, plant science and hydrology.
- Congress should require the National Academy of Sciences report to be scientifically field tested and the results subject to both congressional and public scrutiny before it is released or integrated into legislation.

National Oversight and State Assumption of 404 Program

Farm Bureau recognizes there is currently too much oversight on a permit-by-permit basis.

Farm Bureau recommends Congress designate the Secretary of the Army, acting through the Corps of Engineers, as the sole federal authority for Section 404 permits. The veto power of EPA in Section 404(c) is no longer needed and should be removed. A streamlined process would give EPA, DOI and USDA general oversight, but not on a permit-by-permit basis.

Farm Bureau recommends streamlining the regulatory process for states to assume administration of the 404 program.

Coordination and Clarification of Program Concerning Agricultural Activities

Prior-Converted Cropland

The Environmental Protection Agency and Corps of Engineers have promulgated rules to exclude prior-converted cropland from the scope of Section 404. This was an important change but it is technically flawed and will likely cause further confusion. Specifically, if the production of annual crops is required to maintain this exemption, problems will arise when farmers plant hay, orchards and other perennial crops on this land. This has a huge potential for causing conflict between the farm community and government regulators.

We are pleased to see the exemption for prior-converted cropland and that the administration has registered its support for this provision being placed into

law, but it must address the annual/perennial crop dilemma. Congress should define prior-converted croplands as all lands that have been physically altered. Prior-converted croplands have been tilled, ditched, tiled, leveled or drained for the purpose of agricultural production. They no longer function as wetlands nor, as the Corps indicated in a regulatory guidance letter of September 26, 1990, do they "show important wetland values." Prior-converted cropland and farmed wetlands were not regulated until the development of the 1989 delineation manual.

Farm Bureau recommends that Congress specifically exclude prior-converted cropland from Section 404 regulation.

Farmed wetlands

The Administration and Congress should recognize that prior-converted croplands are no longer wetlands. They should also recognize that farmed wetlands no longer exhibit wetland characteristics and should not be regulated. **Prior-Converted Croplands** were once wetlands that were too wet to farm without drainage. **Farmed Wetlands**, on the other hand, are areas that are wet so infrequently that they can be farmed without drainage (Dry 6 out of 10 years). Farm Bureau strongly believes these areas should not be jurisdictional wetlands.

Farm Bureau recommends that Congress exclude cropland that is cropped six out of ten years and improved pasture from Section 404 jurisdiction.

Exempted Activities

Normal Farming Practices--Section 404(f) of the Clean Water Act intended for farms, ranches and forestry operations to continue "normal" farming, silviculture and ranching activities including, but not limited to plowing, seeding, cultivating, minor drainage, harvesting, ditch maintenance, tile maintenance, brush clearing, etc., without having to obtain individual permits. Despite that intent, many of the conflicts between farmers and regulators are due to attempts by field office regulators unfamiliar with agriculture to define what constitutes a normal farming practice. Congress must specifically state that Exempted Activities-Section 404 (f)(1), takes priority and applies notwithstanding any other provision within this law.

Farm Bureau recommends that Congress clarify that all farming activities are to be exempt from permit requirements. Because of the diversity of agriculture among commodities and regions of the country, Congress should

restate and further clarify its intent to include all land used in production agriculture for food, fiber, timber and biomass.

Farm Bureau recommends that the word "normal" be dropped from the law in Section 404(f)(1) because it has specific relation to the date the law was passed and thus inhibits the adoption of new or different farming practices at some future date. In addition it should be clarified that the normal farming exemption supersedes all other sections of the Clean Water Act. Congress should clarify that brush and land-clearing as part of farming, ranching and silviculture operations are also exempt in order to avoid confusion with the recent Tulloch ruling.

Farm Bureau recommends the specific recognition that ranch roads should be allowed to be constructed and maintained the same as farm and forest roads.

Soil Conservation Service

The USDA Soil Conservation Service (SCS) should be the coordinating agency delineating wetlands on agricultural land.

We strongly agree with the Administration's efforts to make SCS wetlands delineations the final government position on the extent of Swampbuster and Clean Water Act jurisdiction on agricultural lands. However, we believe this concept needs to be incorporated into legislation and enacted into law. It would provide much needed consistency and greatly reduce potential conflict.

There are several reasons why SCS is the appropriate agency to delineate all wetlands on agricultural lands. SCS has offices in nearly every county, making it much more cost-effective and timely for them to do delineations than it would be for any of the other agencies. SCS is a technical assistance agency. The U.S. Fish and Wildlife Service, EPA and Corps of Engineers are wildlife and land managers, regulators and, originally, bridge builders for the Armed Services, respectively. These three agencies already have little or no understanding of agriculture. Finally, SCS staff have a much better feel for the local landscape and climate than the other three and should be better able to recognize relict wetland situations where hydric soil is still present but hydrology has been removed.

Farm Bureau strongly recommends that authority for delineation of all wetlands on agricultural land be the sole responsibility of the Soil Conservation Service (SCS).

Exclusion of Man-Made Wetlands

Many wetlands are created, intentionally or unintentionally, as a result of human activities. Wetland vegetation that results from crop irrigation, saturation from broken drain tiles, flooding as a result of neglected stream maintenance, standing water from poorly designed public works projects, and the construction of farm and stock ponds are a few examples.

Farm Bureau recommends that artificially created wetlands should not fall under 404 jurisdiction because they are man-made and often unintentional.

Farm Bureau recommends Congress recognize, under certain circumstances, that some types of agricultural production are entirely compatible with conserving wetland functions and values. Forestry, cranberry and blueberry production, haying/grazing and some types of aquaculture are prime examples. Where such commodities can be produced in manner consistent with overall wetland functions, they should be encouraged and allowed to expand. Compatible activities such as cranberry production and aquaculture should be specifically mentioned along with stock watering, irrigation and rice production. Language exclusively limiting these artificial lakes and ponds to stock watering, irrigation and rice production should not limit the stocking of fish or seasonal efforts to provide waterfowl habitat.

Regulation of Activities-Discharge of Dredged Material

An example of wetland policy largely developed through litigation and regulation is the explicit inclusion of "excavation activities, such as ditching, channelization, or mechanized land-clearing" as regulated activities. Current law does not include these activities as being subject to the Section 404 requirements. Such explicit and substantial expansion of regulated activities violates the guarantee of due process of law in the U.S. Constitution.

Farm Bureau recommends this action be exposed to congressional debate. Regarding the explicit and substantial expansion of regulated activities, we oppose the restriction and/or elimination of the incidental soil movement or de minimis clause of past Clean Water Acts. We also strongly believe that Congress must explicitly clarify mechanized land-clearing so that it has no implementation for the planting and harvesting of trees.

Delineation Training, Certification and Outreach

The Administration has accurately characterized the situation by stating that "for too long, contradictory policies from feuding federal agencies have blocked progress, creating uncertainty and confusion." Farm Bureau is concerned this situation will continue unless Congress requires development of a strong delineator certification program. The goal should be to have anyone who delineates wetlands certified and reviewed for consistency.

Farm Bureau supports the Administration's efforts to have all federal agencies and private sector delineators trained and certified to improve accuracy and consistency in delineating jurisdictional wetlands. However, it fails to require an independent review board with explicit oversight and individual delineator performance evaluation.

Farm Bureau recommends: The goal should be to develop a national certification program that strives for consistency among all certified delineators.

Legislation should include a national certification program that requires:

- a) proficiency standards for delineators;
- b) 5-year certification duration;
- c) specific performance review and evaluation that would include:
 - 1) random field performance reviews;
 - 2) random data sheet performance reviews;
 - 3) emergency performance review based upon complaints; and
- d) continuing education.

Mitigation Banking

Farm Bureau supports proposals to provide for mitigation banking. Farm Bureau is concerned that this proposal provides no guidance on mitigation requirements (acreage), lacks specific guidelines in the replacement of functions and values and requires mitigation "in advance." Mitigation should not be tied to acreage, but rather to function and values.

Farm Bureau recommends mitigation requirements based on the replacement of wetland functions, but in no case should acreage replacements exceed one acre for one acre. We also recommend changing the "mitigation bank" definition to remove the requirement for advance mitigation when simultaneous efforts will be practicable.

Wetlands Conservation, Management and Restoration Plans

Farm Bureau is very concerned about the implication for a watershed/wetland management plan. Specifically, it provides no mechanism for compensation for the loss of private property rights, it could also add requirements for individual Section 404 permits for all activity within a watershed unit (land-use planning). If so, this requirement extends Section 404 permitting activity beyond jurisdictional wetlands.

Many farmers currently maintain as many as a dozen separate resource management plans. These management plans involve soil conservation, ground and surface water quality, animal waste, wetlands, and activities within coastal zones. These efforts, required by legislation, are very time consuming, confusing and redundant. We believe proposals mandating management plans for clean water, wetlands, coastal zone, conservation, etc., should be consolidated. However, Farm Bureau is concerned that such efforts will be interpreted by the administration and the courts as a congressional mandate for land-use planning and, therefore, result in the regulation of all activity within a watershed. Farm Bureau is opposed to central or national land-use planning.

Farm Bureau recommends Congress explore the proposal included in Vice President Gore's reinventing government report that calls for a consolidation of various environmental management plans into one farm plan. We believe one management plan, established from among affected private landowners within a specific watershed or management unit, will streamline and enhance agriculture's conservation and environmental quality efforts. We believe wetlands management should be part of the plan, but only as wetlands relate to water quality, not a separate and possibly conflicting document. Farm Bureau strongly recommends the development of this concept by the agricultural committees in conciliation with other appropriate environmental committees of Congress. These committees have an orientation in production agriculture and would be better equipped to balance economic growth in the farm sector with environmental improvement. Ultimately, efforts undertaken by Congress should endeavor to allow the proposed management plan to be voluntary and supported by financial incentives. Efforts to increase the quantity and quality of wetlands should remain voluntary and be based on their contribution to water quality standards and overall environmental quality as both relate to human health and safety.

Permit Processing Improvements

We agree with the Administration's proposal to provide decisions within a 90-day period. Farm Bureau strongly believes Congress should include an appeals process for wetland delineations, permit denials/restrictions and administration penalties.

Farm Bureau recommends Section 404 individual permit decision within a 90-day period. No more than one additional 90-day extension can be requested by any one agency or combination of agencies if additional data is required for an individual Section 404 permit. If a decision is not made by the end of these time frames the permit should be considered granted.

Farm Bureau recommends the following regarding Costs and Fees of Parties: In court cases where a party other than the United States prevails, the prevailing party should be awarded fees and other expenses in connection with the proceeding regardless of whether the proceeding is brought by the United States for violations of the Act or by the prevailing party for issuance or denial of a Section 404 permit. If the party is dissatisfied with the determination of fee and other expenses awarded, there should be an additional appeals process available.

Appeals Process

We are pleased to see the Administration has recognized the need for an appeals process and recommended limiting participation of people who are not directly affected by the decision.

Farm Bureau recommends Congress provide an equitable, efficient and inexpensive means for landowners to appeal 1) delineations, 2) permit applications, and 3) penalties and fines without going to court.

General Permit Improvements

Farm Bureau supports the concept of general permits. We believe Congress should allow state, regional or nationwide permits that will allow activities that cause only minimal adverse environmental effects. Farm Bureau questions proposals that will make individual and general permits contingent on the development of watershed/wetland management plans. We are also very concerned about what appears to be an added requirement to add mitigation requirements to general permits.

Farm Bureau recommends requiring the Corps to issue general permits for activities with minimal adverse environmental effects. We support general permits for activities impacting low value wetlands and oppose contingent mitigation requirements.

Summary

We believe that the suggestions contained above would greatly improve the wetland regulatory program and reduce many of the inequities and difficulties faced by landowners and small businesses.

We would encourage and assist any constructive and cooperative efforts to resolve the question of financing the conservation of true and valuable wetlands. We look forward to working with you in this effort.



October 6, 1993

The Honorable Gerry Studds
Chairman
Merchant Marine and Fisheries Committee
U.S. House of Representatives
1334 Longworth House Office Building
Washington, D.C. 20515

Dear Chairman Studds:

On behalf of the Associated Builders and Contractors, I would like to submit for the hearing record the following statement regarding the Administration's new wetlands policy.

Associated Builders and Contractors (ABC) represents some 16,000 contractors, subcontractors, material suppliers and related firms from across the country and from all specialties in the construction industry. Our diverse membership is bound by a commitment to the merit shop -- the most efficient construction technique in America. The merit shop philosophy of awarding construction contracts to the lowest responsible bidder, regardless of labor affiliation, through open and competitive bidding, assures taxpayers and consumers the most value for their construction dollar. With 75 percent of construction done today by merit shop contractors, ABC is proud to be their voice.

ABC looks forward to working with the Administration, the Merchant Marine and Fisheries Committee, as well as the various other committees that are working to develop a comprehensive wetlands policy for our nation. We recognize the environmental value of wetlands and are concerned by the recent estimates of significant wetland loss. ABC wholeheartedly supports efforts to protect legitimate wetlands but believes a more **streamlined and efficient process** is in order.

WETLANDS DELINEATION

ABC is pleased that the Administration's wetlands policy provides for the continued use of the 1987 Wetlands Delineation Manual until the National Academy of Sciences (NAS) report on wetlands is completed. ABC has advocated that any changes in the delineation guidelines be open to public comment, which the Administration plan allows for. When the delineation policy was last revised in 1989, the Federal Manual for Identifying and Delineating Jurisdictional Wetlands dramatically extended areas regulated as wetlands and expanded the jurisdiction of the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) over an already poorly functioning program. The manual went into effect without public notice, without an opportunity for

The Honorable Gerry Studds
October 6, 1993
page 2

public comment and without any grandfather provisions. The NAS report, expected to be complete in 1994, should be available for review and comment by the public and any changes in federal wetlands policy should be extensively field tested to ensure a sound and workable process.

CORPS

ABC believes all authority for wetland permits should be transferred to the Corps of Engineers with no EPA veto authority. Since the beginning of the wetlands program, it has been staffed and administered by the Corps. While the Administration plan names the U.S. Department of Agriculture Soil Conservation Service (SCS) as the lead agency for wetland determinations on agricultural lands, the Corps is instructed to function in a leadership role with other federal agencies acting in an advisory role. ABC supports the designation of the Corps as the authority on wetlands and believes that continued EPA veto authority of Corps decisions is inconsistent with other goals in the Administration's policy, such as streamlined permitting and expedited appeals procedures.

PERMITTING

Clearly, the layers of regulatory authority over wetland protection must be streamlined. While some large contractors have the capability to manage the permit process in house, most companies must hire expensive environmental consultants to wade through the complicated permitting process. ABC believes that establishing a clear permitting process with an outlined and enforceable timetable is critical for necessary planning functions. We are encouraged by the Administration's plan which calls for regulatory deadlines for permit application decisions. To further expedite the permit process, ABC believes the use of general permits should be expanded. The Administration plan does recognize the expanded use of general permits under section 404(e) and instructs the Corps to coordinate with EPA to develop additional general permits authorizing minor activities with only minimal adverse environmental effects.

Current wetlands law does not provide for administrative appeals. ABC is pleased that the Administration plan does provide grounds for appeal. The plan requires the Corps to develop an administrative appeals process--through public rulemaking--to allow for appeal of regulatory jurisdiction, permit denials and administrative penalties.

SEDIMENT PONDS

Contractors have expressed concern that temporary sediment basins or detention ponds used on construction sites to divert storm water run-off can over time develop wetland characteristics. To avoid improper delineations, ABC has asked that these man-made ponds (intended to temporarily divert storm water and prevent sediment from leaving the construction site) be excluded from wetland delineations so that they can be removed, as intended, when construction is completed. Under the Administration plan,

The Honorable Gerry Studds
October 6, 1993
page 3

"artificial wetlands," such as non-tidal drainage and irrigation ditches excavated on uplands, are excluded from wetland delineations. Areas created as wetlands incidental to construction, mining and other activities are excluded as well. ABC would like to ensure that man-made sediment ponds are indeed excluded under the Administration's plan.

PRIORITY RANKING

Recognizing all wetland areas are not equal, ABC supports a priority ranking system to classify wetland areas and appropriate use. Distinct definitions for wetland areas must be articulated and regional differences must be taken into account. The Administration plan does provide that variations in wetlands functions can be applied in connection with watershed planning, which seems to recognize at least regional differences in wetland functions.

In a wetlands classification system, the strict sequencing test (avoidance, minimization and mitigation) for obtaining permits should only apply to the highest valued wetlands. A more balanced approach, taking into account cost/benefit issues, should be utilized for less environmentally sensitive areas.

MITIGATION

ABC supports mitigation efforts to protect and compensate for the loss and degradation of wetland functions and values. We believe any effort to improve wetland management should consider the use of a mitigation banking system to restore, enhance or create wetlands when appropriate. The Administration plan does as well allow for mitigation as a function of restoration, enhancement, creation, and preservation of wetlands.

LANDOWNER COMPENSATION

ABC believes compensation must be made available to landowners whose land is significantly devalued or deemed unusable under wetland classification guidelines. With three quarters of the nation's wetland areas being privately owned, it is imperative to enact a rational and reasonable policy which balances protection of valuable wetlands with the rights of private property owners.

STATES

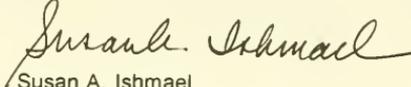
ABC believes it is vital for states to play an active role in developing and defining wetlands policy. The Administration has suggested the concept of state watershed and wetlands management plans to establish a greater state role in wetlands regulation. States should be encouraged to assume greater responsibility of the 404 program, and should also be allowed to tailor the categorization program to fit their individual circumstances. In cases where applicable, joint federal and state permit review should

The Honorable Gerry Studds
October 6, 1993
page 4

be considered. In all cases, however, the method of delineating wetlands should be consistent between state and federal programs.

On behalf of the Associated Builders and Contractors, I appreciate the opportunity to submit our comments to you and the members of the Committee.

Sincerely,

A handwritten signature in cursive script that reads "Susan A. Ishmael". The signature is written in dark ink and is positioned above the printed name.

Susan A. Ishmael
Legislative Representative



THE WILDLIFE SOCIETY

5410 Grosvenor Lane • Bethesda, MD 20814-2197
Tel: (301) 897-9770 • Fax: (301) 530-2471

27 September 1993

The Honorable Gerry E. Studds, Chairman
Merchant Marine and Fisheries Committee
Subcommittee on Environment and Natural Resources
U.S. House of Representatives
237 Cannon House Office Building
Washington, DC 20515-2110

Dear Mr. Chairman:

The Wildlife Society assembled a Wetlands Technical Committee to prepare the attached draft report, MITIGATION BANKING AND WETLANDS CATEGORIZATION: The Need for a National Policy on Wetlands, for your consideration in addressing wetlands conservation in the Clean Water Act. The Wildlife Society is the scientific and educational association of wildlife professionals dedicated to excellence in wildlife stewardship through science and education.

The Technical Committee consists of experts on wetlands from federal and state government agencies, academia, conservation organizations, industry, and private consulting. This diverse panel of professionals has developed this paper using the best biological information available on the key issues of MITIGATION BANKING and WETLANDS CATEGORIZATION.

The Society urges you to consider a NET GAIN or NET RECOVERY of wetlands policy in recognition of the enormous historical losses and the importance and array of wetland functions and their inherent values to society.

We would be pleased to meet with you and/or participate in hearings related to wetlands conservation. Please enter this draft Technical Committee report in the official record of the 28 September hearing on this subject. The Wildlife Society Council is considering the panel report for adoption, and we will provide you a copy of the final document when it becomes available.

Thank you for your consideration.

Sincerely,

Thomas M. Franklin
Wildlife Policy Director

MITIGATION BANKING AND WETLANDS CATEGORIZATION
THE NEED FOR A NATIONAL POLICY ON WETLANDS

A Report for

The Wildlife Society

prepared by:

The Committee on Mitigation Banking and Wetland Categorization

Richard D. Crawford
Ann Hodgson Huffman
Mary C. Landin
Joseph S. Larson
Joseph A. McGlincy
Douglas B. Inkley
Robert E. Smith, Jr.
Ronald Stromstad
Milton W. Weller
David E. Wesley
Donald A. Hammer, Chair

30 August 1993

SYNOPSIS

Wetlands represent a small fraction of our Nation's land area, but they harbor an unusually large percentage of our wildlife. Natural wetlands once occupied 11% of the 48 contiguous states and now occupy 5% - a loss of over 50%. Between the mid-1950's and mid-1970's, 700 miles² of wetland were altered and drained each year. The greatest losses were more or less equally balanced between the upper midwest (potholes) and the south (forested and coastal wetland).

An astonishingly rapid reversal of public attitudes and policy towards wetlands occurred during the last 20 years. Wetlands were considered wastelands and society encouraged wetland destruction and conversion with financial incentives. In the 1960's, Massachusetts passed protective legislation and many other states followed. On the national scale, incorporation in the 1972 Clean Water Act (CWA) was followed by the 1977 Executive Order leading to modifications in the Corps of Engineers (COE) regulations implementing provisions of the CWA, specifically Section 404. A number of states implemented similar regulations. Unfortunately, none of these efforts represent clearly defined national policy; hence, the confusion, controversy, costs and disenchantment with present approaches. In contrast to wetland drainage, we have not determined and codified a wetland protection/management policy.

Resolution of the present controversy is only possible through public discussion and consensus establishment of a national policy on wetland protection/management embodied in national legislation and unified implementing regulations. Anything less will simply perpetuate the current controversy and eventually undermine support for wetland protection. We need a broad national policy that reduces wetlands loss, restores drained or altered wetlands, protects wetlands through public or private ownership, and enhances wetland functions while accommodating desirable economic development.

The enormous historical losses and the importance and array of wetland functions, and their inherent values to our society, mandates that a national policy implement **NET GAIN** or **NET RECOVERY** of wetlands, until 25% of the original wetlands acreage has been restored and our combined wetland resource base is 75% of the original.

Natural wetlands are an ephemeral component of the landscape resulting from geological incidents and to a lesser extent, biological and human activities. Specific location, type and size of every wetland is dependent on a series of geophysical phenomena that created and maintain suitable hydrological and edaphic conditions at that site. Consequently, attempts to preserve every wetland or even to require on-site replacement are in fact attempts to maintain the status quo disregarding the series of unintentional events that created and maintain a wetland. This philosophy is inherent in rigid application of in-kind, on-site restoration/creation requirements of the COE/EPA MOA on mitigation signed in January 1990. In contrast, a strategic, landscape approach might well identify more suitable locations for certain types and sizes or even different types and sizes to enhance one or more functional values to society.

Unfortunately, fear of change has obscured serious consideration of arguments for strategic, landscape planning for wetland management that might increase values of wetlands through judicious location. It also has inhibited restoration of wetlands to their original form and function especially in the coastal regions where freshwater marshes have become saltwater marshes after the intra-coastal and associated canals permitted extensive salt water intrusion. Rigid attempts to maintain the status quo totally disregard historical conditions and man-induced changes, as well as the ever changing, dynamic nature of all wetlands.

Natural wetlands are interdependent and interact with terrestrial components of the landscape and with other wetlands, especially within a watershed or biotic region, such that meaningful management must incorporate a landscape, watershed or biotic region approach. Because of these strong interactions and interdependencies, it is not possible to evaluate, assess or categorize a wetland unit in isolation from other components in the watershed or biotic region. Wetlands management must also include temporal factors since age/successional stage, as well as geographical location, strongly influences both form and function of wetland resources.

The Committee believes that wetlands protective legislation should incorporate a philosophy that bases permit decisions on whether or not we can afford to lose a wetlands, not whether or not the wetlands can be replaced. This is an extension and endorsement of the current philosophy ("the sequencing rules") of:

- 1) encouraging wetland restoration whenever and wherever feasible and practical;
- 2) minimizing detrimental impacts to wetland form and function when avoidance is not feasible or practical; and
- 3) compensating detrimental impacts to wetland form and function when those occur.

We also recommend expanded planning level assessment by state and federal agencies to:

1. Improve and standardize application of current knowledge applicable to wetland evaluation;
2. Encourage multi-disciplinary approaches to wetland protection/management;
3. Encourage systems approaches to wetland protection/management;
4. Improve agency consistency in the wetland permit review process; and,
5. Provide advance warning of wetland areas that will require extended review and mitigation.

Because poor scientific understanding of wetlands and their functional values has been an important contributing factor to conflicting attitudes and ambiguous approaches, we are convinced that major new initiatives must be undertaken, requiring substantial funding from public and private partnerships, to develop adequate knowledge upon which appropriate policies and regulations will be founded. We simply lack the essential information to correctly place wetlands in the landscape and to formulate a sound protection policy and implementing regulations. Consequently, a national wetland policy must first provide financial resources to develop the requisite information base.

MITIGATION

Despite society's desire to protect remaining wetlands, some water-related projects are impossible without impacting wetlands. Therefore, regulations require compensatory mitigation of wetland impacts if the proposed development is approved. Compensatory mitigation has become a tool that expands the regulators' role from a simple yes or no to one of negotiated development.

Due to the broad scope and many interpretations of the term, we define mitigation as: replacement of the form and function of the wetland that will be detrimentally impacted.

Inclusion of function is important since current mitigation is largely based on replacement of wetland form, i.e., physical components of the impacted wetland. However, replacement of the major components may or may not replace wetland functions depending upon specific functions, wetland form, and spatial and temporal locations.

Numerous compensatory mitigation projects have failed, and these failures are commonly cited as reasons to deny the validity of the concept. Unfortunately, existing information is often not used in restoration, enhancement and creation projects. Failure of many projects lies with the lack of, or improper application of, existing knowledge. Too few developers employ experienced biologists in the design, construction and operation of wetland projects and subsequent failures are predictable.

Certain types of wetland - prairie potholes, midwestern marshes, salt marshes and some forested wetlands - have been successfully restored, enhanced and/or created, but our information on other wetland ecosystems is rudimentary. Similarly, our information on wetland functional values varies considerably. We have the ability to establish some life support functions - waterfowl, wetland mammal, fish and timber production - but only limited information on many other biological products, hydrologic buffering functions and water quality improvement functions. Our ability to replace functional values is limited because of our poor understanding of these functions.

Since compensatory mitigation projects attempting to create new wetlands have had widely varying success rates and because opportunities for wetland restoration or enhancement are finite, regulatory agencies should require natural wetland restoration or enhancement for mitigation rather

than creation of new wetland. In situations where restoration or enhancement are not feasible, mitigation in the form of created wetland may be acceptable if:

- 1) documentation is available on the success of projects creating similar types of wetland in that region; or,
- 2) the permittee provides funding for research on similar natural wetlands in the region that would identify means by which the form and function of the impacted wetland could be duplicated in a newly created wetland; and,
- 3) the permittee insures that development of the new wetland is conducted under the direction of competent biologists employing current information or information obtained from studies on the model natural wetland;
- 4) the permittee agrees to provide for long-term monitoring to insure the new wetland is functional and self-perpetuating; and,
- 5) the permittee agrees to provide for long-term financial support through an irrevocable trust to ensure funding for necessary management.

MITIGATION BANKING

Existing regulatory delays and the inability of some developments to avoid detrimentally impacting wetlands led to proposals for establishing wetland banks to facilitate compliance with replacement requirements. Various groups have proposed establishing specific areas where wetlands are protected/restored/created and cooperating parties could receive "credits" for wetlands in the bank that would be used to offset liability for detrimentally impacting wetlands in a new development.

Current delays and lengthy regulatory processes reflect:

- 1) the complexity of wetlands and our inability to adequately evaluate functional values and insure replacement of form and function through mitigation; and,
- 2) inability of regulatory agencies to agree on and implement standardized permit processing procedures.

The present regulatory quagmire serves neither to protect wetlands nor their functional values, accomplish no-net loss or net-gain, nor to accommodate economic development in an orderly, cost-effective manner. Present regulations, in some instances, may contravene society's goals to protect and restore wetlands, and current wetland regulations need to have more latitude to encourage and support wetland restoration/creation projects by various organizations. Increased regulatory flexibility must include pro-active acquisition and long-term management if compensatory mitigation and mitigation banking are to protect and restore our Nation's wetland resources.

Economics are part of natural resources management and are certainly no reason to oppose the concept of wetland mitigation banks. Furthermore, opposition is no longer timely. Mitigation banks and banking programs are increasing almost exponentially. Preliminary results from the COE mitigation banking survey indicate existing banks had increased from 13 in 1988 to 20 in 1991 with at least 100 in active or planning status in 1992.

What impact do mitigation banks have on the Nation's wetland and wildlife resources and can current rigid regulatory applications be modified to achieve the goal of minimizing loss, and maintaining and restoring wetland functions? Do we achieve better quality management for wetland resources within the structure of mitigation banking than without it? Mitigation banking gambles that focusing efforts on fewer and more significant wetlands will have positive results for the landscape, even though centralization of those elements, and loss of peripheral elements, may have some negative effects.

Mitigation banking may have many positive as well as negative impacts on wildlife, wetlands and society and a summary of each is included the report. Wildlife scientists and managers must initiate a pro-active approach to mitigation and mitigation banking and develop guidelines that will respond to the needs of developers and accomplish a net gain in wetland resources. More over, the policy must increase wetland form and functional values and concurrently reduce and standardize regulatory requirements.

CATEGORIZATION

Classification and categorization are useful tools in ordering chaos. Wetland classification generally represents groupings of wetlands on hydrologic, biologic and edaphic characteristics without including value judgments. Categorization, however, implies grouping wetlands based on a value regime.

Value is determined by society and is not an inherent characteristic. Value has socio-economic implications that go far beyond an assessment of presence or absence or even quantitative measurements. Valuation is also a function of time in that society's values change, and therefore the very same wetland could have a very different perceived value in the same society at a different point in time. If valuation schemes are employed to categorize wetlands, evaluators must be able to estimate future values, as well as adequately assess present values, of existing wetlands. Furthermore evaluation of a wetland is inevitably related to time of year and age of system. Wetlands are dynamic ecosystems undergoing seasonal and annual change as well as progressive change over time, as the wetland system ages. Time, techniques and location of data collection can have substantial impact on the result of a one-time evaluation.

We recognize the importance of evaluation of natural resources as an important basis for land use decision making. Regulatory agencies now engage in wetland assessment as they decide what level of review is necessary when permits are filed. But the basis for this decision is not clear, interpretable or available to the permit applicant in advance.

A method of evaluating wetlands to determine the appropriate category for each individual wetland must be a key element of any categorization proposal. We are familiar with widely used evaluation methods (technical assessment tools). We do not believe that any existing evaluation regime is adequate to measure the value of each function performed by the myriad of types of natural wetlands in the U.S. Consequently, any attempt to evaluate and subsequently categorize natural wetlands with existing methodologies would result in irretrievable harm to the Nation's wetland and wildlife resources.

For the vast majority of wetlands and even for most different types of wetland, we lack quantitative information even on the biologic productivity, much less adequate, comparable information on other important functional values. We are aware of the potential costs of assessing the functions of individual wetlands; however, it is also clear that careful and costly study of watersheds is a prerequisite to designing flood protection programs. Wetlands must be included in similarly comprehensive watershed planning. Wetlands are providing important functions in maintaining water quality, reducing flood damage and conserving biological diversity, and their management requires an appropriate public investment in data collection and functional assessment.

We are concerned that some categorization proposals would allow for valuation/categorization by non-wetland professionals, i.e., developers or engineers. We do not believe that other disciplines are competent to evaluate wetlands or wetland functional values and we disagree with these approaches.

The Committee is concerned that certain proposals for categorization do not distinguish among several functions of wetlands, and lump values, such as flood control and wildlife habitat that have different biological and physical bases, into a few simple "value" classes. Schemes to put wetlands into nation-wide value classes without providing for any process to distinguish between regional differences are similarly suspect. In addition, some categorization proposals appear to have a strong element of triage, i.e., if wetlands were assigned to high (Type A), medium (Type B) and low value (Type C) categories, the Committee is concerned that wetlands in the low value category would receive less protection than they currently are provided, allowing development and subsequent loss of "low value" wetlands when in fact, their value is largely unknown.

Finally, high priority must be given to funding research to develop improved techniques and methodologies to quantify the functional values of wetlands and effects of wetland alterations. This research should develop an objective, quantitative, evaluation process that can be coupled with the National Wetlands Inventory. Similar research is urgently needed to improve methods to create compensatory wetlands that provide important wetland functions.

INTRODUCTION

Natural wetlands once occupied 11% of the 48 contiguous states but now occupy only 5% - a loss of over 50%. Wetlands represent a very small fraction of our total land area, but they harbor an unusually large percentage of our nation's wildlife. For example, 900 species of wildlife in the United States require wetland habitats at some stage in their life cycle, with an even greater number using wetlands periodically. Representatives from almost all avian groups use wetland to some extent and one-third of North American bird species rely directly on wetlands for some resource (Feierabend, 1989).

Between the mid-1950's and mid-1970's, approximately 700 miles² of wetland were altered and drained nationwide each year according to the National Wetlands Inventory status and trends reports (Dahl and Johnson 1990). While losses were nationwide, most were more or less equally balanced between the upper midwest (potholes) and the south (forested wetland). Nineteen states lost over 50% of their wetlands and Ohio and California lost over 90%. A second status and trends report for the mid-1970's to the mid-1980's found a significant reduction in the loss rate, but losses continued at 300 miles² per year. During this period the largest losses occurred in the south (primarily forested but also coastal wetland). Most wetland losses were caused or induced by human activities.

The last 20 years have witnessed an astonishingly rapid reversal of public attitudes and policy towards wetlands. For over 100 years, public attitudes embodied in consensus policy, considered wetlands as "wastelands" and encouraged wetland destruction and conversion with financial incentives. But in the 1960's, Massachusetts passed legislation requiring a state permit for any alteration of wetland and many other states followed. On the national scale, growing public awareness of wetland values led to equivocal incorporation in the 1972 Clean Water Act (CWA) followed by the 1977 Executive Order but E.O.'s only apply to actions of Federal agencies. This however, led to modifications in the U.S.A. Corps of Engineers (COE) regulations implementing provisions of the CWA, specifically Section 404, see Appendix A. Later a number of states implemented similar regulations. Unfortunately, none of these represent clearly defined national policy; hence, the confusion, controversy, costs and disenchantment with present approaches. In contrast to wetland drainage, we have not determined and codified a wetland protection/management policy.

Reversing the drainage/conversion policy probably could not have been accomplished 20-30 years ago, but increasing public awareness and support are the basis for present concern over wetlands protection and the controversy surrounding wetland regulations. The Committee is convinced that resolution of the present controversy over wetland protection is only possible through adequate public discussion and consensus establishment of a national policy on wetland protection/management embodied in national legislation and unified implementing regulations. Anything less will simply perpetuate the current controversy and eventually undermine future support for wetland protection. We need a broad national policy that addresses regulations and incentives to reduce wetland loss, protects wetlands through public or private ownership, restores drained or altered wetland, and enhances wetland functions. Only a national wetland policy that repudiates previous conversion policies and encourages/compels wetland protection/restoration/creation/management will reverse continuing losses while accommodating desirable economic development.

The enormous historical losses of national wetlands and the importance and wide array of wetland functions and their inherent values to our society, mandates that we go beyond a national policy of **NO NET LOSS** of wetlands. We must implement a **NET GAIN** or **NET RECOVERY** of wetlands policy until such time as the combined wetland resource base approximates 75% of the original base. Since the present base is estimated at approximately 50% of the original, this would entail restoration of some 25% of the Nation's natural wetland acreages. And it will likely include creation of considerable wetland acreages since many former wetlands could be costly to restore. Many of our most important wildlife species are inextricably dependent on wetlands and diminished populations of these species are unlikely to be restored without restoration or creation of a significant portion of the wetland habitats they require.

Natural wetlands are an ephemeral component of the landscape that largely result from geological incidents and to a lesser extent, from biological and human activities. Specific location, type and size of every wetland is dependent on a series of geophysical phenomena that created and maintain suitable hydrological and edaphic conditions at that site. Consequently, attempts to preserve every wetland or even to require on-site replacement are in fact attempts to maintain the status quo disregarding the series of unintentional events that created and maintain a wetland on that specific site. This philosophy is inherent in rigid application of in-kind, on-site restoration/creation requirements of the COE/EPA MOA on mitigation signed in January 1990. In contrast, a strategic, landscape approach might well identify more suitable locations for certain types and sizes or even different types and sizes to enhance one or more of the functional values to society.

Unfortunately, fear of change has obscured serious consideration of arguments for strategic, landscape planning for wetland management that might increase the values of wetland through judicious location. It also has inhibited restoration of wetlands to their original form and function especially in the coastal regions where freshwater marshes have become saltwater marshes after the intra-coastal and associated canals permitted extensive salt water intrusion. For example, in Texaco's Bessy Height's field near Port Arthur, Texas, cypress stumps are still prominent in a saltwater marsh but the regulatory process discourages efforts to restore the original freshwater marshes. Required permitting contravenes the goal of restoring freshwater wetlands on sites where those wetlands previously existed despite the fact that salt water intrusion resulted from man-induced and not natural changes. Rigid attempts to maintain the status quo totally disregard historical conditions and man-induced changes, as well as the ever changing, dynamic nature of all wetlands.

Wetlands interactions and interdependencies in a watershed negate management approaches based on evaluating potential impacts to discrete wetland units. Current site specific approaches, especially regulatory measures, to wetland resources management are inadequate to conserve or restore the Nation's wetland and wildlife resources. Natural wetlands are interdependent and interact with terrestrial components of the landscape and with other wetlands, especially within a watershed or biotic region, such that meaningful management must incorporate a landscape, watershed or biotic region approach. Because of these strong interactions and interdependencies, it is not possible to evaluate, assess or categorize a wetland unit in isolation from other components in the watershed or biotic region. Wetlands management must also include temporal factors since age/successional stage as well as geographical location, strongly influences both form and function of wetland resources. For example, small isolated wetlands strategically located throughout a watershed may have considerably more value in terms of flood amelioration and water quality improvement than a single, large wetland at one position, even though it may be situated at the lower end of the watershed. Relatively, narrow bands of riparian vegetation may have inordinate importance as travel lanes for some species of wildlife. Consequently, wetland resource management must include the context of the surroundings on a watershed, landscape or biogeographical unit basis.

In recognizing the complex of hydrologic, biologic, and edaphic components and processes that combine to create and maintain viable wetland ecosystems, the Committee recommends that management efforts and programs employ multi-disciplinary and system analysis approaches to insure adequate representation and evaluation of all aspects of wetland ecosystems. Managers must also incorporate cumulative/multiple impact assessments to wetland resources (and other natural resources) within a hydrological or biogeographical unit since loss or damage to a single wetland could have serious repercussions to the functional values from remaining wetlands (and other resources) within the hydro/bio/geographical unit.

Because of the wide distribution and permeating impacts on world-wide public health, safety and welfare, wetland management must also adopt an international approach in developing a basic philosophy to reverse the loss of additional wetlands and instead, encourage restoration and replacement of previously lost wetlands throughout the world.

The Committee believes that wetlands protective legislation should incorporate a philosophy that bases permit decisions on whether or not we can afford to lose a wetland, not whether or not the wetlands can be replaced. This is an extension and endorsement of the current philosophy ("the sequencing rules") of:

- 1) encouraging wetland restoration whenever and wherever feasible and practical;
- 2) avoiding further loss or degradation of the Nation's wetland resources;

- 3) minimizing detrimental impacts to wetland form and function when avoidance is not feasible or practical; and
- 4) compensation of detrimental impacts to wetland form and function when those occur.

Wetland resource management must employ these approaches in descending order of priority, i.e., compensatory impact mitigation is the last resort, to be implemented only when avoidance and minimization of impacts are not feasible or practical. Restoration or creation must not be used to mitigate avoidable destruction unless it has been thoroughly demonstrated that the replacement wetlands have equal or better form and function.

Where compensatory mitigation is required, acquisition of previous or degraded wetland and restoration, should take precedence over attempts at creation of new wetland because of the indifferent history of creation projects. Certain types of wetland may be relatively easily created, but our knowledge of many other wetland types is inadequate and numerous attempts to create these wetlands have been less than successful. Granted, failure of many projects was due to the lack of, or poor application of, existing knowledge - the developers lacked proper expertise (Erwin, 1991; Landin 1992). And many other failures were related to overly ambitious goals or objectives, unrealistic time frames and/or inadequate resources. However, even successful creation projects will require continued maintenance/management for the foreseeable future. Unless responsibilities and resources are funded by long-term financial commitments, the end result may not be viable wetland ecosystems.

Changes in society's attitudes towards wetlands resulted from characterization and education on wetlands worth to the public, i.e., the quantitative and qualitative benefits that society derives simply because the wetland exists in that location. Benefits that result from the processes or functions carried out by the wetlands may have significant values. To create a direct linkage between wetland functions and value to society, we define functional values as: those products and effects resulting from the natural processes and functions of a wetland that have economic, educational, recreational and social impacts (positive and negative) on various segments of society.

Because poor scientific understanding of wetlands and their functional values has been an important contributing factor to conflicting attitudes and ambiguous approaches, the Committee is convinced that major new initiatives must be undertaken, requiring substantial funding from public and private partnerships, to develop adequate knowledge upon which appropriate policies and regulations will be founded. We reject arguments that it would be too costly to identify, categorize and classify all wetlands in order to implement wetland management policies. We believe that a complete understanding of all the functional values for each and every wetland regardless of size is unnecessary. None the less, our present knowledge base lacks the ability to evaluate important functional values for major wetland categories or to designate major interchange relationships within the landscape. We simply lack the essential ability to identify, describe, evaluate, and place wetlands in the landscape and to formulate a sound national policy and implementing regulations.

Previous failures to provide adequate funding for wetland inventory and research have been costly to society due to extensive loss of functional values and their economic benefits. For example, nonpoint source pollution is frequently cited as the largest remaining contributor to water quality problems, and improper resource management is identified as the culprit. Doubtless, poor land management is a factor, but rural land management is generally better today than 50 years ago when water pollution was less severe. Recently we have learned that 10-20 acres of constructed wetland can provide high level treatment for municipal wastewaters from 1000 residents for 10-50% of the \$3-4 million costs of conventional treatment systems (Hammer 1991). How much was the natural wetland worth before it was destroyed? And 100 year floods seem to occur at 10 or even 5 year intervals despite the fact that a much larger percentage of rural land is vegetated. Over harvest has been important in the depletion of fishery stocks but what has been the contribution of lost wetland nurseries? The critical element may well be natural wetlands that previously protected society from the ill effects of flooding and water contamination and provided the foundation for larger fish/food populations. Loss of natural wetlands has been costly to society and attempts to reverse those losses are unlikely to recover significant benefits without an adequate understanding of wetlands, their functional values and their importance in the landscape.

Significant increases in funding for:

- 1) research on functional values, including economic benefits;

- 2) landscape interchanges and interactions;
- 3) inventory;
- 4) classification and categorization; and,
- 5) wetland restoration/creation methods.

are critical to recovering financial losses to society caused by previous costly subsidies supporting drainage/conversion programs.

MITIGATION

Despite society's desire to protect remaining wetland resources through positive efforts to avoid and minimize wetland impacts (the sequencing rules), certain types of developments, such as water-related projects, are impossible without detrimentally impacting on-site wetlands. Therefore, protective regulations include a third category requiring compensatory mitigation of wetland impacts in cases where wetlands will inevitably be impacted if the proposed development is approved. Under current philosophies, compensatory mitigation must occur only after avoidance and minimization of impacts have been attempted. In its simplest form, compensatory mitigation allows the regulatory agency to say yes to development with a series of requirements. In that sense, mitigation is a tool that expands the regulators role from a simple yes or no to one of negotiated development. However, it is important to maintain our perspective. Mitigation banking is only applicable within the prescribed wetland regulatory process; at present non-regulatory wetlands (those built for other than mitigation purposes) account for 99% of all man-made wetland restoration and creation. Mitigation is **NOT** the cure to the wetland loss problem. It is only one tool, in a bag of tools, that we have to protect/manage the nation's wetland resources.

Due to the broad scope and many interpretations of the term, the Committee defines

mitigation as: replacement of the form and function of the wetland that will be detrimentally impacted.

This definition deliberately excludes the concept of minimizing harm from mitigation, though the latter often is included. We have deliberately avoided specifying locations, acreages, creation, restoration, enhancement, etc. in an effort to simplify the definition because we recognize that full replacement may be accomplished through a variety of means. Since our charge is to evaluate impacts of mitigation banks on wildlife and wetlands, we chose to restrict the definition and limit our discussion to the concept.

Our inclusion of function within the above definition is important since we believe that current mitigation is largely based on replacement of wetland form, i.e., the physical components of the impacted wetland. However, replacement of the major components may or may not replace the wetland functions depending upon the specific functions, the wetland form and spatial and temporal locations. However, given that definition, we must then examine the viability of the basic approach to replacement. Since mitigation assumes that the form and functions of the wetland can be replaced, a review of wetland functions may be useful.

Important functional values deriving to human societies from natural wetlands include:

ground-water recharge, ground-water discharge, floodwater alteration, sediment stabilization, sediment/toxicant retention, nutrient removal/transformation, production export, aquatic and wildlife diversity/abundance, storm buffering, recreation and uniqueness/heritage (Adamus, et al 1991).

This list may be grouped into four major categories:

- 1) life support;
- 2) hydrologic buffering;
- 3) water quality improvements; and,
- 4) historical/cultural significance.

Because wetland functions are controlled by physical, chemical and biological processes, wetland functions are strongly related to complexity, pristine (" diversity), size and location of the wetland as follows:

	Complexity	Pristine	Size	Location
<u>Life Support</u>	High	High	High	Mod
<u>Hydro Buff</u>	Low	Low	Mod	High
<u>W Q Improve</u>	Low	Low	Low	Mod
<u>Histor/Cult</u>	Low	High	Mod	High

Life support is largely biological though obviously dependent on physical and chemical processes. It has moderate site dependency with moderate to high size, complexity and pristine dependency. It includes production and maintenance of flora and fauna - forbs, grasses, shrubs, trees, fungi, invertebrates, birds, mammals, fishes, herptiles, and microbial populations that are valued for commercial products and recreation.

Hydrologic buffering is largely a physical function that is extremely site dependent and highly size related. It includes flood amelioration such as flood water storage/retention, i.e., desynchronization and reductions in magnitude of downstream flows reducing flood water damages during unusual storm events. Conversely, delayed discharges of flood waters augment base flows in rivers and streams supporting diverse aquatic life in our waterways. In some instances wetlands can have an important groundwater recharge function, supplementing other mechanisms to increase total ground water resources. Natural wetlands protecting and supported by groundwater discharge can provide important surface water sources and of course, some wetlands have essentially flow-through groundwater patterns (Clark and Benforado 1981, Gosselink et al 1990, Gosselink and Turner 1978).

In the water quality improvement function, chemical and physical processes tend to dominate biological processes. This function has moderate site dependency and lower size, complexity and pristine dependency. It includes removal of pollutants/contaminants from inflowing waters - principally surface flows - but it can also include subsurface inflows - to purify natural water supplies. Principle actions include (Faulkner and Richardson 1989):

- 1) chemical - oxidation, reduction, cation exchange, adsorption, precipitation;
- 2) physical - sedimentation, filtration, precipitation; and,
- 3) biological - microbially mediated reactions, assimilation/uptake, nutrient recycling.

The historical/cultural preservation function is highly site specific and strongly related to natural condition but only moderately related to size and complexity of the wetland. It includes preservation of anthropological and historical resources.

Physical and chemical processes are much less dependent upon complex, diverse and perhaps pristine wetland. A very simple or severely degraded system may have important hydrologic buffering value and/or water quality improvement values but little or no life support value. Generally, life support values increase with increasing complexity and proximity to natural conditions. However, a simple wetland (low diversity/complexity) can have very high productivity for certain products. A small system (perhaps 0.1 ha) may have important water quality improvement values but little or no flood amelioration or life support value. Exceptions include very small systems that provide habitat for unusual or threatened or endangered species. Moderate size (> 2 ha) systems may have significant hydrologic and life support values and increasing size is related to increasing importance for these values. Obviously, location in the watershed is extremely important to the hydrologic buffering function and moderately important to water quality but may be much less important to the life support function. Location in a state, region, country or continent may be quite important to the life support function, however.

Numerous compensatory mitigation projects have failed, and these failures are commonly cited as reasons to deny the validity of the concept. Given the broad variety of wetland types, their geographic distribution, and diverse nature of wetland functional values, generalizations are fraught

with peril. This is especially true for smaller wetlands and unique types with isolated distributions. Furthermore, the interrelationships of wetland units within a geographic area and their interdependencies on associated terrestrial environments, make evaluations of replacement difficult at best. However, certain types of wetland have been restored, enhanced and/or created for many years. We have a considerable body of knowledge on restoration, enhancement, creation and management of marshes - especially the Prairie Potholes and other midwestern marshes. Similar though less extensive information is available for freshwater marshes in the interior valley of California, the Intermountain West and coastal marshes along the Atlantic and Gulf coasts. Some information is available for northern bogs, less for Coastal Plain bogs and very little for high elevation bogs. Our information on forested wetlands, especially the great river swamps of the Southeast is rudimentary at best and it's almost non-existent for unique systems such as pocosins, vernal pools, riparian bands, Carolina Bays, etc.

Similarly, our information base on wetland functional values varies considerably. We have the ability to accomplish certain life support functions - notably waterfowl, wetland mammal, fish and timber production but only limited information on the host of other biological products deriving from wetlands. Very few investigations have explored the hydrologic buffering functions and results have been multi-directional. The water quality improvement function has received considerable attention within the last few years but much of the information has derived from deliberately constructed wetlands and extrapolation to natural wetlands is largely unknown. Consequently, our ability to replace functional values, with a few exceptions, is limited because of our poor understanding of these functions. We do not believe that the state of the art for functional values is adequate to enable us to replace these functions in most newly created wetlands.

Unfortunately, existing information is often not used in restoration, enhancement and creation projects. Failure of many projects lies with the lack of, or improper application of, existing knowledge. In most cases, problems are caused in application not by the science. Too few developers employ experienced biologists in the design, construction and operation of wetland projects and subsequent failures are predictable.

Since compensatory mitigation projects that attempted to create new wetlands have had widely varying success rates and because opportunities for wetland restoration or enhancement are finite, regulatory agencies should require natural wetland restoration or enhancement for mitigation rather than creation of new wetland. Our emphasis on restoring former or prior-existing wetland is pragmatic in that, in many cases, restoration of damaged or degraded wetland is much more likely to succeed than attempts to create a wetland in a formerly terrestrial environment. Quite simply, the residual hydrology, edaphic and biological components in the previous wetland make it possible to restore the wetland simply by removing or modifying the factors causing degradation.

In situations where restoration or enhancement are not feasible, mitigation in the form of created wetland may be acceptable if:

- 1) documentation is available on the success of projects creating similar types of wetland in that region; or,
- 2) the permittee provides funding for research on similar natural wetlands in the region that would identify means by which the form and function of the impacted wetland could be duplicated in a newly created wetland; and,
- 3) the permittee insures that development of the new wetland is conducted under the direction of competent biologists employing current information or information obtained from studies on the model natural wetland; and
- 4) the permittee agrees to provide for long-term monitoring to insure the new wetland is functional and self-perpetuating.

Although various agencies and individual offices of these agencies have developed replacement acreage requirements, the Committee is reluctant to delve into that morass. Suffice it to say, that replacement of functions for an individual wetland could easily require replacement at ratios greater than 1:1 depending upon the functions and the time period during which the replacement is expected to be accomplished.

MITIGATION BANKING

The complex web of regulations and the inability of some developments to avoid detrimentally impacting wetlands has led to the concept of replacing wetland in various forms or systems. Costs for complying with current regulations and uncertainties over permit delays and/or approvals have encouraged proposals for establishing banks of protected/restored/created wetland that could facilitate compliance with the replacement requirements. In a further attempt to expedite regulatory reviews, various groups have proposed establishing specific areas where wetlands are protected/restored/created and cooperating parties could receive "credits" for wetlands in the bank that would be used to offset their liability for detrimentally impacting a wetland in a new development. Developers, often caught in a confusing, seemingly interminable web of unknowns related to potentially impacting a wetland as part of their overall development proposal, are leading advocates. And it is understandable that developers seek a simplified solution; many simply ask that they be told what it will cost and when a permit will be issued so they can factor the delay and cost into their project planning.

However, current delays and lengthy regulatory processes reflect:

- 1) the complexity of wetlands and our inability to adequately evaluate functional values and insure replacement of form and function through mitigation; and,
- 2) inability of regulatory agencies to agree on and implement standardized permit processing procedures.

The present regulatory quagmire serves neither to protect all wetlands or their functional values, accomplish no-net loss or net-gain, nor to accommodate economic development in an orderly, cost-effective manner. Some would say that the current regulatory approach fails to provide adequate protection while others fault the interminable, costly delays and inability to plan developments. Others cite the continued, often piecemeal, loss of thousands of acres of wetland and our failure to implement no-net loss on a local, regional, state or national basis much less accomplish any improvements in restoring wetlands and their functional values. Many examples of disparate implementation of regulations have also been articulated. Forceful arguments can doubtless be made for both sides of the issue. The present controversy regarding wetland protection is not surprising given the short time period for an almost complete reversal of a long established drainage policy. But our poor scientific understanding of wetlands has also been a contributing factor.

Economics are part of all natural resources management and are certainly no reason to oppose the concept of wetland mitigation banks. Furthermore, opposition is no longer timely. Mitigation banks and banking programs are increasing almost exponentially and developers are leading the efforts while environmentalists often find themselves on the outside in opposition. A progress report on the COE mitigation banking survey (IWR 1992) showed that existing banks had increased from 13 in 1988 to 20 in 1991 with at least 100 in active or planning status in 1992. The survey identified 37 existing banks with 64 planned banks that were expected to become active in 1992, and an additional 5 mitigation trusts. Of the existing banks, 38% are on the west coast, 27% in the northern plains, with 16% in each of the mid Atlantic and Gulf regions. Highway construction projects were involved in 60% of the banks and port (14%) and industrial development (11%) were the next most common. States exclusively own 50% of the banks, 20% are privately owned, and local public bodies and federal ownership account for another 20%. The largest was 7000 acres but only 15% were > 640 acres, while 51% were > 40 acres and only 5% were < 10 acres. Over two-thirds were located in the same hydrologic unit.

The relevant question now is what impact do mitigation banks have on the Nation's wetland and wildlife resources and can current rigid regulatory applications be modified to achieve the goal of minimizing loss, and maintaining and restoring wetland functions. Do we achieve better quality management for wetland resources within the structure of mitigation banking than without it? A mitigation bank, in its usual form, gambles that focusing efforts on fewer and more significant wetlands will have positive results for the landscape, even though centralization of those elements, and loss of peripheral elements may have some negative effects.

The effects of mitigation banking on wildlife, wetlands and society, have positive and negative aspects. Mitigation banking pluses include:

- 1) alternatives for improving quantity of high quality wetlands as well as acquisition and management opportunities;
- 2) opportunities for restoration of degraded wetlands;
- 3) increased diversity and isolation for wildlife species;
- 4) scale, size and location improvements if regulators and developers are required to employ a landscape approach;
- 5) preservation of existing habitats through acquisition and management;
- 6) better adherence to fish and wildlife needs;
- 7) exploits new management opportunities and approaches;
- 8) potential for a net gain of wetland if creation is successful;
- 9) better technical and professional expertise are likely to be available on larger projects;
- 10) greater involvement and possible cash flow for owners of lands that now have little market value.
- 11) facilitates conflict resolution;
- 12) reduced delays encountered by developers; could provide clear direction to developers and enhance their ability to estimate total project costs; gives developers a degree of certainty in terms of permit approvals and timing so they can deal with banks, other funding sources and planning agencies; could be seen as positive effort by environmentalists to work with developers; and, could positively influence developers attitudes towards wetlands and wildlife in general;
- 13) mitigation banking could create greater acceptance and understanding in the regulated community of wetland functions and values that might encourage deliberate use of created/constructed wetlands in development projects.

Mitigation banking negatives include:

- 1) converting to wetlands can cause loss of other habitats especially certain terrestrial habitats.
- 2) influencing the natural distribution of wetlands;
- 3) altering types of wetlands;
- 4) altering functions of wetlands;
- 5) impacting size (including sacrificing many small wetlands for one large wetland);
- 6) increasing regulatory requirements;
- 7) potential losses of wetland since enforcement in mitigation banks has been poor or lacking;
- 8) potential losses due to lack of long-term funding. Many projects lack provisions for management and funding in perpetuity; can guaranteed, long-term funding be provided and who will be responsible for long term management?

The Committee believes that wildlife scientists and managers must initiate a pro-active approach to mitigation and mitigation banking and develop guidelines for mitigation and mitigation banks that will respond to the needs of developers and accomplish a net gain in wetland resources. Developing and promoting a program/policy to enhance the positive resource aspects of banking while reducing the negative wetland impacts and improving regulatory conditions for developers could become a win-win situation. However, the policy must increase wetland form and functional values and concurrently reduce and standardize regulatory requirements. The Institute of Water Resources Survey currently underway is likely to provide additional information in the near future. However, in the interim, the mitigation banking policy should include:

- 1) recognition that the basic precepts of mitigation banking are:
 - economic and development driven
 - permit driven
 - not altruistic
 - must deal with areal scale
 - ownership (covenant codes and restrictions)
 - administration

- continuity
- 2) national guidelines and oversight as part of a national wetland policy;
 - 3) regional modifications/specifics;
 - 4) state or regional level decision making and implementation;
 - 5) administration by joint private/state/federal consortia established for that specific purpose. Mitigation banks must be established and managed by cooperative agreements among various organizations and not necessarily controlled by government agencies. COE and EPA are unlikely to actually manage banks, but will only regulate them. On the other hand, many existing private organizations could provide long-term management and new consortia of private and governmental organizations could be established for the specific purpose of providing funding and management in perpetuity. We must develop means to provide for permanent protection and management of wetlands in any mitigation bank
 - 6) compensatory mitigation should include ecological equivalency as a specific goal including replacement/increase of form and functions;
 - 7) compensatory mitigation should include landscape, watershed and hydro/bio/geographical evaluations;
 - 8) general guidelines on within-kind vs out-of-kind, within-site vs off-site, near- or far-site, in- or out-of biotic/hydro/geographic region that are designed to increase the acreages, form and functional values of wetland that will be refined at state or regional levels;
 - 9) establishment of escrow/trust funds or other means to ensure funding for full implementation and long term management; funding of the mitigation bank must not be susceptible to company failure/bankruptcy or re-organization;
 - 10) improved methods/means to provide, record and monitor mitigation credits, including guidelines for third party brokering of mitigation credits;
 - 11) less regulatory attention to the permit that leads to a decision of "yes, you may develop this wetland with the following mitigation stipulations," and more follow-up on what was actually done. Federal agencies have done a very poor job of monitoring wetland permit compliance once the permit was granted.
 - 12) reduced regulatory requirements to improve opportunities for net gain to wetlands and wetland resources.
 - 13) requirements for incorporation of wetland science with careful, conscientious planning and construction for any mitigation projects to reduce the amount of poor planning and execution.
 - 14) requirements that mitigation is in place and functioning, concurrent or a priori other aspects of the project. Current regulations are largely tied to the same time line as the developer's project. Regulations must have the flexibility to allow for accumulation of mitigation credits in banks prior to and/or concurrent with loss of the natural wetland. In to many instances, developer's cash flow problems have caused mitigation failures. In other cases, a priori mitigation may be necessary to insure that mitigation projects will succeed before the development is initiated.
 - 15) guidelines on locations, type, size and establishment of mitigation banks including how acreages/form/function are established/accepted in the banks;
 - 16) clear, quantifiable goals must be set for each of the mitigation banks; goals that have measurable outputs.
 - 17) each mitigation bank plan and program must contain a monitoring and evaluation plan and funding to achieve that plan.
 - 18) application of mitigation banking credits must be such that credits are not transferable from one project to another without adequate evaluation by qualified professionals. This seems to be occurring in the Upper Yazoo Basin Restudy Effort by the COE. Apparently, the COE has indicated that they have "over mitigated" in the Upper Steele Bayou project (located in the Mississippi Delta) by some 12% and plan to move these "excess" credits to the Upper Yazoo project (also Mississippi Delta) for mitigation application. While this may result in acceptable mitigation in these two comparable drainages, the practice certainly requires scrutiny.
 - 19) recognition that education is an important goal of mitigation not only for the public but for specific user groups and resource managers. Also recognition that

wetlands are not only important in terms of wildlife but for many other functional values.

Present regulations, in some instances, may contravene society's goals to protect and restore wetlands and current wetland regulations need to have more latitude to encourage and support wetland restoration/creation projects by various organizations. Increased regulatory flexibility must include pro-active acquisition and long-term management if compensatory mitigation and mitigation banking are to protect and restore our Nation's wetland resources.

An example of an active mitigation banking scheme - North Dakota's no net loss of wetland law - is described in Appendix B.

CATEGORIZATION

Classification and categorization are useful tools in ordering chaos whether the subjects are insects, stamps, job descriptions or wetlands. Wetlands classification is generally understood to represent groupings of wetlands based on their hydrologic, biologic and edaphic characteristics without any attempt to include a value judgment on one group or another. Categorization, however, implies grouping wetlands based on some form of assigned value regime.

Valuation or determining/assigning values by nature must include by whom, for whom, and for what purpose. The value of something is determined by society and is not an inherent characteristic, i.e., flood alteration function of a specific wetland could have significant value to a downstream community yet lack any value to an upstream community. Value has socio-economic implications that go far beyond an assessment of presence or absence or even quantitative measurements. Valuation is also a function of time in that society's values change, and therefore the very same wetland could have a very different perceived value in the same society at a different point in time.

The Committee recognizes the importance of evaluation of natural resources as an important basis for making decisions concerning land use. Mapping and scientific assessment of soils and forest stands has long been recognized as essential to prudent management of agricultural and forest resources. Wetlands resources likewise must have a similar level of assessment and hasty legislation to lump wetlands into categories without a sound science base will put health, safety and welfare at unwarranted risk.

We regularly put wetlands and other resources in different categories for management and protection without reducing the effectiveness of management programs. EPA makes advance designation of wetlands under the 404 program, the FWS designates wetlands for the RAMSAR list of Wetlands of International Importance and has identified high priority wetlands for each region of the country. Biosphere Reserves and Natural Heritage Sites are other well recognized categories that do not reduce the value of the basic resource.

The Committee also recognizes that wetlands regulatory agencies are already engaged in wetland valuation as they decide what level of review is necessary when permits are filed. Some permits receive a desk review and others require costly field data and expert consultants. However, in many cases, the basis for this decision is not clear, interpretable or available to the permit applicant in advance. Some agencies make these assessments in advance of the permit process. COE and EPA make advance designations to advise the public that certain wetland complexes will require more rigorous review. New Hampshire and Connecticut have adopted manuals to guide in identifying prime wetland that will require higher levels of review.

A key element of current categorization proposals must be a means of evaluating wetlands to determine the appropriate category for each individual wetland. The Committee is familiar with widely used evaluation methods (WET, HEP, etc.) most of which are technical assessment tools, see Appendix C. We do not believe that any existing evaluation regime is adequate to measure the true value of each function performed by the myriad of types of natural wetlands in the U.S. Consequently, any attempt to evaluate and subsequently categorize natural wetlands with existing methodologies for the purposes of determining those with lesser values, would result in irretrievable harm to the Nation's wetland and wildlife resources. Unfortunately, at the present state of the art,

evaluation is still largely subjective based on cursory examination or it requires detailed and costly investigations that attempt to characterize the form and function of an individual wetland system. In too many cases, cursory evaluations are highly dependent upon a few highly regarded functional values, with little avenue for encompassing the sum of the myriad functional values from even a small isolated wetland much less larger and/or multiple wetland units within hydro/bio/geographical units. Consequently, present valuation methods are likely to underestimate the value of even the highest priority wetland and could not hope to produce a realistic value for lesser wetland systems. The latter would likely include smaller systems, isolated/disjunct systems, disturbed or degraded systems, drier-end wetlands or transitional zones of wetlands, and ephemeral wetlands. Many of these could have significant but unmeasured functional values.

With a few exceptions, we lack quantitative data on many functions in most important types of natural wetlands. The exceptions (mostly in fresh or salt water marshes) include components of the life support function, i.e., production of avian and mammalian fauna, finfish, shellfish, a few instances of plant products and isolated cases of water purification. For the vast majority of wetlands and even for most different types of wetland, we lack quantitative information even on the biologic productivity, much less adequate, comparable information on other important functional values.

Historically wetlands were grossly undervalued but later, a few waterfowl hunters led efforts to protect and preserve certain types of wetlands. Recently, other life support functions along with hydrologic buffering and water quality improvement, have been identified as significant values. Major segments of society now place high value on wetlands and government policy is to protect rather than destroy our remaining wetlands. A complete reversal in society's valuation of wetlands has occurred in less than 60 years. In fact, the most significant change took place within the last 20 years. Who can estimate the functional values of wetlands to society or society's attitudes, in the 21st century? If valuation schemes are employed to categorize wetlands with certain categories subsequently receiving little or no protection, evaluators must have the ability to estimate future values as well as adequately assess present values of existing wetlands. Lacking an estimate or assumption of future values, evaluators could easily under-rate a significant portion of our existing wetland resources, resulting in the loss of that segment before it has been evaluated (valued) under the standards of a future society. It does not appear likely that a significant new category of functional value would emerge from future investigations but it would not be surprising to discover additional functions and values or a complete reordering of priorities with further understanding of "low" value wetland systems.

Furthermore evaluation of a wetland is inevitably related to time of year and age of system. Wetlands are dynamic ecosystems undergoing considerable seasonal and annual change as well as progressive change over time, as the wetland system ages. Time, techniques and location of data collection can have substantial impact on the result of a one-time evaluation.

While wetland science is limited in its ability to provide quick and inexpensive methods of quantifying all wetland functions, some means to predict wetland functions are available and being improved. The general functions of wetlands within regions of the U.S. and within local landscapes, i.e., bottomland hardwoods, estuaries, are well known. There is no longer any excuse for development, agricultural, forestry, transportation and other land use programs to fail to use current knowledge and assessment techniques to identify potential consequences of wetland loss with the intent of avoiding wetland and reducing impacts to those that, based on public values, are unavoidable. The Committee concludes that much of the past and current loss of wetlands, and the current controversy in legislative circles, is exacerbated by single-sector, land-use decisions that have not made use of available information on wetland functions and assessment techniques.

Project siting is a critical element in assessment of wetland functions. Placing monetary values on wetlands requires an economic assessment that is sensitive to the land values and economy of the locale within which the project is located. We are aware of the potential costs of assessing the functions of individual wetlands; however, it is also clear that careful and costly study of watersheds is a pre-requisite to designing flood protection programs. Farming practices are guided by professional surveys of regional and individual farm soil conditions. Forest management plans are based on detailed studies of stand composition, volume and growth. Wetlands must be included in similarly comprehensive watershed planning.

To the extent that wetlands are providing important functions in maintaining water quality, reducing flood damage and conserving biological diversity, their management requires an appropriate

public investment in data collection and functional assessment. Costs for these efforts can be contained if the functions of wetlands were given due consideration and incorporated in the course of current and future publicly funded flood control, water quality, soil and forest survey and natural heritage programs. Part of the reason that the nation has experienced massive loss of wetlands is that their functions and limitations have been poorly understood by engineers and agricultural land managers.

Those who would develop or drain wetlands search for a simple value system that requires no biological expertise and limited data collection or technical review. The Committee is concerned that some categorization proposals would allow for categorization by non-wetland professionals, i.e., developers or engineers. We do not believe that other disciplines are competent to evaluate wetlands or wetland functional values and at this stage in the development of the science, we are opposed to those efforts.

The Committee advocates expanded use of planning level assessment by state and federal agencies for the purpose of:

- a. Improving and standardizing application of current knowledge that is applicable to wetland evaluation;
- b. Encouraging a multi-disciplinary approach to wetland evaluation;
- c. Encouraging a systems approach to wetland evaluation;
- d. Improving agency consistency in the wetland permit review process, and
- e. Providing advance warning to the regulated community of wetland areas that will require more than a basic level of review.

The Committee is concerned that certain proposals for categorization for regulatory protection purposes do not distinguish among the several functions of wetlands, and lump values, such as flood control and wildlife habitat that have different biological and physical bases, into a few simple "value" classes. Schemes to put wetlands into nation-wide value classes without providing for any process to distinguish between regional differences are similarly suspect. In addition, some categorization proposals appear to have a strong element of triage, i.e., if wetlands were assigned to high (Type A), medium (Type B) and low value (Type C) categories, the Committee is concerned that wetlands in the low value category would receive less protection than they currently are provided. Low value wetlands could easily fall under a nationwide permit, allowing development and subsequent loss of these so-called low value wetlands when in fact, their value is largely unknown.

Finally, the Committee recommends that high priority be given to funding research to develop improved techniques and methodologies to quantify the functional values of wetlands and effects of wetland alterations. This research should develop an objective, quantitative, sound evaluation process that can be coupled with the National Wetlands Inventory and should be accomplished by joint private, state and federal action. Similar research is urgently needed to improve inadequate methods to create compensatory wetlands that provide all of the identified wetland functions.

Literature Cited

- Adamus, P.R., L. T. Stockwell, E. J. Clairain, Jr., M. E. Morrow, L. P. Rozas, and R. D. Smith. 1991. Wetlands Evaluation Technique (WET); Volume I: Literature review and evaluation rationale. U. S. Army Corps of Engineers, Waterways Experiment Station. Tech. Rep. WRP-DE-2. Nat. Tech. Info. Serv., Springfield, VA 22161.
- Adamus, P. R., E. J. Clairain, Jr., R. D. Smith, and R. E. Young. 1987. Wetlands Evaluation Technique (WET); Volume II: Methodology. Operational Draft Tech. Rep. Y-87. U. S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.
- Dahl, T. E. and C. E. Johnson. 1990. Status and Trends of Wetlands in the Conterminous United States, 1970's to 1980's. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D. C. 21 pp.
- Erwin, K. L. 1991. An Evaluation of Wetland Mitigation in the South Florida Water Management District, Vol. 1. S. FL. Water Management District, West Palm Beach, FL.
- Faulkner, S. P., and C. J. Richardson. 1989. Physical and Chemical Characteristics of Freshwater Wetlands Soils. In D. A. Hammer (ed.) Constructed Wetlands for Wastewater Treatment - Municipal, Industrial, Agricultural. 821 p. Lewis Publishers, Inc., Chelsea, MI.
- Feierabend, J. Scott. 1989. Wetlands: The Lifeblood of Wildlife. In D. A. Hammer (ed.) Constructed Wetlands for Wastewater Treatment - Municipal, Industrial, Agricultural. 821 p. Lewis Publishers, Inc., Chelsea, MI.
- Gosselink, J. G. and R. E. Turner. 1978. The Role of Hydrology in Freshwater Ecosystems. In Good, R. E., D. F. Whigham and R. L. Simpson (eds.) Freshwater Wetlands Ecological Processes and Management Potential. 378 p. Academic Press, Inc., N. Y.
- Hammer, D. A. 1991. Creating Freshwater Wetlands. 256 p. Lewis Publishers, Inc., Chelsea, MI.
- Landin, M. C. 1992. Achieving Success in Wetland Restoration, Protection, and Creation Projects. Pres. Fourth International Wetlands Conference INTERCOL IV, Columbus, Ohio, Sept. 1992.
- Larson, J. S. 1991. The Future of U. S. Wetlands. Forum for Applied Research and Public Policy Vol 6 (1): 66-72.
- Larson, J.S. 1992. Is "No Net Loss" a Useful Concept for Wetland Conservation? Pres. Intn'l Waterfowl & Wetlands Res. Bur., St. Petersburg, FL. 12-19 Nov. 1992.
- Ray, C. Washington Perspectives on Wetlands Mitigation Banking.
- Shabman, L., P. Riexinger and T. Brown. 1993. Clarifying Classification. National Wetlands Newsletter. Jan/Feb 1993.
- U.S. Army Engineer Institute for Water Resources. 1992. Preliminary Report on Mitigation Banks in the United States. Fort Belvoir, VA.

APPENDIX A LEGISLATIVE HISTORY OF WETLANDS PROTECTION IN THE UNITED STATES

Legislation

The Water Pollution Control Act of 1948 (PL 80-845) was the first comprehensive statement of federal interest in clean water programs. PL 80-845 was also the first statute to provide state and local governments with some of the funds needed to solve their water pollution problems.

There were no federally required goals, objectives, limits, or even guidelines. There were no mandatory indicators of whether pollution was indeed occurring. Nevertheless, the U.S. Surgeon General was charged with developing comprehensive programs to eliminate or reduce the pollution of interstate waters.

During the latter half of the 1950's and well into the 1960's, water pollution control programs were shaped by four statutes: the Federal Water Pollution Control Act of 1956 (PL 84-660); the 1961 amendments to that Act (PL 87-88); the Water Quality Act of 1965 (PL 89-234); and the Clean Water Restoration Act of 1966 (PL 89-753). All of these statutes dealt largely with federal assistance to municipal discharges and with federal enforcement programs for all discharges.

Water quality standards became a prominent feature of the law with the passage of PL 89-234, the Water Quality Act of 1965. That law created the Federal Water Pollution Control Administration (FWPCA) and required the development of state water quality standards for interstate waters.

In 1963, Massachusetts enacted a permit-based wetland regulation program, followed by Rhode Island, Connecticut and several other northeastern states.

The Federal Water Pollution Control Act Amendments of 1972--as the Clean Water Act is officially titled--was enacted October 18, 1972. It was the 500th public law passed by the 92nd Congress, hence its short title, PL 92-500. Local, state, and national water quality programs since 1972 have been more firmly shaped by the assumptions in PL 92-500 than by any other law. In more ways than most people realize, Congress changed "business as usual" when it passed PL 92-500. The statute has been amended 12 times since 1972.

The 1972 Federal Water Pollution Control Act Amendments added the section 402 National Pollution Discharge Elimination System (NPDES) permit program, 33 U.S.C. 1344(1988), to eliminate water quality problems by regulating the discharge of pollutants to the nation's waters.

The Coastal Zone Management Act of 1972, 16 U.S.C. 1451, (1972), requires applicants to obtain certification from the relevant state coastal resources agency that a permitted activity complies with the state's coastal zone management program. The state's program must be approved by the Commerce Department.

The Water Quality Act of 1987, emphasized technology-based standards for industrial dischargers; enhanced enforcement authority with increased civil, criminal, and administrative penalties; and recognized the critical pollution problems of non-point sources.

The federal government has adopted a number of policies aimed at reducing the direct effects of its activities on wetlands. Relevant authorities include the National Environmental Policy Act (NEPA), the Fish and Wildlife Coordination Act, Executive Order 11990 on the Protection of Wetlands, and the Water Resources Development Act of 1986, which includes requirements for mitigation of adverse effects on wetlands. In some coastal areas, the Coastal Barriers Resources Act (CBRA), which makes new development projects in designated areas ineligible for most federally financed assistance programs, is also important.

The Tax Reform Act of 1986 eliminated most of the special tax advantages that accrued to farmers and developers for new investments, particularly in wetland areas. The Food Security Act of 1985 included a "swampbuster" provision that makes farmers ineligible for agricultural income-support programs if they convert wetlands and plant commodity crops on them. The Coastal Barriers Resources Act of 1982 withdrew all federal subsidies for development on designated coastal barrier islands and beaches, where wetlands are a critical feature of the environment.

In 1986, the Congress enacted the Emergency Wetlands Resources Act to promote the conservation of our nation's wetland in order to maintain the public benefits they provide, as well as help fulfill international obligations contained in various migratory bird treaties and conventions. The intent was to protect, manage, and conserve wetlands by intensifying cooperative and acquisition efforts among private interests and local, state, and federal governments.

Regulation

The Clean Water Act (CWA) section 404 permit program regulates the discharge of dredged or fill material into "navigable waters of the United States," which includes adjacent wetlands. 33 U.S.C. 1344(1972). The program is jointly administered and enforced by the U.S. Army Corps of Engineers (Corps) and the United States Environmental Protection Agency (EPA). The Corps has the primary permit issuance authority. The CWA authorizes the Corps to issue individual and general permits.

The individual permit process under section 404(a) requires the Corps to apply a broad-based "public interest" review test. This test balances a variety of factors ranging from economic to energy considerations. The Corps must also ensure that the permit complies with EPA's detailed environmental criteria--the section 404(b)(1) guidelines. 40 C.F.R. 230(1991).

Section 404(b)(1) of the CWA requires the EPA to establish guidelines that specify where and under what conditions dredged or fill material can be discharge lawfully. 33 U.S.C. 1344 (b)(1). The practical alternatives test is one component of the section 404(b)(1) guidelines.

The practical alternatives test prohibits the discharge of dredged or fill materials to waters of the United States, including wetlands, if there is a "practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, provided that the alternative does not have other, more adverse environmental impacts." 40 C.F.R. 230.10(a)(1991).

Under section 404(c), Congress granted EPA the right to veto Corps permit actions if the discharge would result in "unacceptable" adverse effects on "municipal water supplies, shellfish, fishing areas, wildlife or recreation areas."

The second avenue for approval of discharges is authorized by section 404(e). 33 U.S.C. 1344(e) (1972). Here, a proposed discharge may fall under one of thirty-six general permits.

The federal wetland delineation manual is the Corps' primary resource in making wetland determinations. In the 1992 Energy and Water Development Appropriations Act, congress mandated that the Corps use the 1987 manual pending resolution of the proposed changes to the 1989 manual. Pub. L. No. 102-104, 105 Stat. 511 (1991).

MOAs/Executives Orders

Memorandum of Agreement (MOA) Between the Department of Army and the Environmental Protection Agency Concerning Federal Enforcement for the Section 404 program of the Clean Water Act (Jan. 19, 1989) (1989). Under this accord, the Corps retains primary responsibility for matters of jurisdiction, that is, determining whether wetland regulations apply.

The 1990 Memorandum of Agreement (MOA) on mitigation between the Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) provided new guidance for wetland mitigation 55 Fed. Reg. 9210 (1990).

The MOA is the first joint guidance issued. It is used by the Corps and EPA to determine the type and level of mitigation necessary for compliance with the guidelines.

The MOA gives wetland a higher priority than other aquatic areas. The Corps agreed that, as to wetland, it will seek to achieve a goal of "no overall net loss of values and functions."

In one of the most significant sections of the MOA, it adopted the Council on Environmental Quality's (CEQ) definition of mitigation, 40 C.F.R. 1508.20 (1991), which is avoiding, minimizing, and rectifying impacts; reducing impacts over time, and compensating for impacts, summarized in the MOA as avoidance, minimization, and compensatory mitigation. The MOA then went further than CEQ by requiring that mitigation measures be applied in the sequence set forth in the CEQ regulation.

Executive Order No. 11990, titled, "Protection of Wetlands," although not applying to private work done under federal permit with no federal funding or assistance, does direct that each agency shall take action "to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands." It further directs that work conducted or funded by a federal agency shall "to the extent permitted by law avoid undertaking or providing assistance for new construction located in wetlands" unless "there is no practicable alternative to such construction" and "the proposed action includes all practicable measures to minimize harm to wetlands."

Executive Order No. 11988, dealing with protection of floodplains, similarly requires written agency justification for a project proposed to be located in a floodplain; a statement indicating whether the action conforms to applicable state or local floodplain protection standards; and a list of alternatives considered. Unlike Executive Order No. 11990, this one reaches federal permit issuance as well as other federal activities.

Agency Policies

EPA

Section 404 authorizes a special permit program to control dredge and fill operations. It makes the Secretary of the Army responsible for issuing such permits. But the Secretary and the EPA Administrator are jointly responsible for setting the guidelines by which permits are to be judged.

EPA's guidelines are often considered the driving force in the Corps permit process. These guidelines, which were issued in 1980, state that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem" 40 C.F.R.230.10(a) (1980). EPA is involved in the 404 permit program in other important ways, too. For example, EPA controls what areas can be listed as suitable disposal sites and can prohibit certain materials from being discharged at an approved site on certain grounds. Permits issued under Section 404 expire at the end of five years.

The land use control trend becomes apparent particularly when reviewing EPA decisions made pursuant to its section 404(c) authority. To substantiate a veto under section 404(c), 33 U.S.C.1344(c)(1988), EPA must find unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas.

EPA first published rules implementing section 404(c) on October 9, 1979 - some seven years after passage of the Act. These rules included reference to a prior set of section 404(b)(1) guidelines, which EPA said set forth not only the criteria for permit issuance by the Corps, but also "the substantive criteria by which the acceptability of a proposed discharge is to be judged" for purposes of section 404(c). 44 Fed. Reg. 58,076(1979). Late the following year, EPA published new section 404(b)(1) guidelines without amending its section 404(c) regulations. 45 Fed. Reg. 85,336 (Dec. 24, 1980).

EPA has since interpreted section 404(c) and these guidelines to provide a single environmental imperative which is applied only after the Corps' "public interest" review has determined that the project is on balance, socially beneficial.

Under section 309(a) of the CWA, the EPA is empowered to issue administrative orders in response to wetland violations. 33 U.S.C. 1319(a) (1986).

Department of Interior

FWS

The Fish & Wildlife Service recognizes the definition of mitigation provided by the Council of Environmental Quality that includes a logical sequence of steps: (1) avoiding the impact, (2) minimizing the impact, (3) rectifying the impact, (4) reducing or eliminating the impact over time, and (5) compensating for the impact as a last resort action. Further, the Service's mitigation policy established a concept of Resource Categories with designation criteria for each category, and mitigation goals for each category.

COE

The Act gives the Corps permitting authority under section 404(a), 33 U.S.C.1344(a)(1988), with the obligation to consider the criteria promulgated by EPA pursuant to section 404(b), 33 U.S.C.1344(b)(1988).

To comply with the court ruling in *NRDS v. Callaway*, the Corps expanded the jurisdictional reach of the section 404 program from the traditional concept of navigable waters to one consistent with other CWA programs.

Department of Agriculture

SCS

The Soil Conservation Service is charged with delineating wetland under the swampbuster provision of the Farm Act. They use the 1987 Wetlands Delineation Manual during this process.

Department of Transportation

The Federal Highway Administration funded the development of the Wetland Evaluation Technique (WET) in 1982-83. This technique has since been refined and re-issued by the U.S. Army Corps of Engineers (WET II).

State Protection

As detailed above, state wetland regulations date from the Massachusetts legislation of 1963. Today, all coastal states have some form of regulation over alteration of marine wetlands, and 14 states have a freshwater wetland regulatory program.

Congressional response to the lack of success under CWA section 208 resulted in the addition of section 319, the Nonpoint Source Management Program, in 1987.

Under section 319, EPA funding grants encourage the states to voluntarily opt into the federal program. The states may identify and inventory nonpoint source problems affecting their waters, prioritize and develop strategies for addressing them, but no federal permit program is created under section 319.

CWA section 401(a) certification requirement is a power tool for state participation in CWA section 404 federal permitting of dredge and fill activities in wetland. The section 401(a) certification requirement is designed to insure that projects requiring a federal permit comply with certain CWA requirements including state water quality standards.

Few states have promulgated water quality criteria for wetlands. EPA as recommended that states develop water quality criteria for wetlands by using a two-phase approach. Phase I involves development of water quality standards for wetlands based upon existing information. EPA expects the states to accomplish phase I by the end of fiscal year 1993. Phase II involves further refinement of the water quality standards using new science and program developments.

Currently, about 10 states utilize some form of classification system in their regulation of activities affecting wetland.

Under section 401 of the CWA, 33U.S.C.1341(1988), and section 307(c)(3) of the Coastal Zone Management Act (CZMA), 16 U.S.C. 1456(c)(3)(1988), Congress has provided every state ample authority to "veto," or to impose virtually any condition it wants, in every federal section 404 permit and almost every federal permit under section 10 of the Rivers and Harbors Act (RHA).

Proposed Legislation

In October 1990, the Comprehensive Wetlands Conservation and Management Act of 1990 (H.R. 5968) was introduced. The bill, reintroduced as H.R. 1330 on March 7, 1991, would substantially modify the section 404 wetland permit process by establishing a federal wetland classification program.

Other bills regarding wetland classification and/or protection have been introduced into the House to moderate or offset the thrust of H.R. 1330, for example the Wetlands No Net Loss Act of 1991, H.R. 251, and the Wetlands Protection and Regulation Reform Act of 1991, H.R. 404.

Two bills have been introduced into the House of Representatives this year, H.R. 350 and H.R. 1330. Both bills address amendments to Section 404 of the CWA.

APPENDIX B NORTH DAKOTA'S NO NET LOSS OF WETLANDS LAW

North Dakota is located in the 300,000 sq. mi. area known as the Prairie Pothole Region, and it produces one-half of the ducks produced in the lower 48 states in an average water year. Prairie wetland exist in complexes of various types that are most easily defined by the degree of permanency of water. Of the estimated original 3 million acres of prairie wetland in the state, about 2 million acres remain.

In 1987, the North Dakota Legislature passed a law commonly referred to as the No-Net-Loss of Wetlands (NNLW) law. The final bill that was passed by the legislature was the result of intense negotiations between water development and wildlife interests in the State, where tradeoffs were made on both sides. Historically, wetland laws in North Dakota were permissive to the point of encouraging wetland drainage for agricultural purposes. Thus, the NNLW law was designed as a means of restricting wetland drainage to reduce the average annual loss of 20,000 acres per year. This law is by far the most significant piece of legislation affecting North Dakota's wetland ever passed by the State.

Legislature, and includes a policy which states, in part, "the legislative assembly therefore concludes that wetlands should be protected and preserved".

More recently, the law has been closely scrutinized and criticized for being a "wetland mitigation bank" with serious flaws by some conservation interests, yet attempts have been repeatedly made to repeal the law by pro-drainage interests saying the law is too restrictive. The original intent of the North Dakota law was to restrict and restrain wetland destruction. The law, as most true compromises, has areas which can be improved.

To accomplish NNLW, North Dakota law requires acre-for-acre replacement of all wetlands drained under permits authorized by the state. A state permit is required for all wetlands with a drainage area of 80 acres or more (note that is drainage area, not wetland acres). A statewide wetland banking system is used to track wetland losses and replacements within four biogeographical units (biotic areas) and individual counties. Only the acreage of restored and created wetland with "material wildlife values" as determined by the North Dakota Game and Fish Department are credited to the bank as replacement wetland. This system is used to target replacements so that at least 50 percent of the lost acreage is replaced in the same biotic area. The law ensures that statewide wetland losses do not exceed replacements by more than 2500 acres at any one time, and the banking system is divided into temporary and permanent replacements. Only permanent replacements are allowed to be credited against drainage acres in the bank.

A party draining a wetland under a state drainage permit may replace an equal wetland acreage at entirely their own expense or by using replacement credits in the wetland bank with payment of 10 percent of the replacement cost. Replacement costs are calculated by adding the average land value in the biotic area and the estimated construction costs to replace that acreage. The wetland bank cannot be used if replacements are not available. There is no direct requirement to replace wetlands which do not require a state drainage permit (less than 80 acre watershed), but those acres are registered as losses (debits) in the bank and reduce the available replacement acres (credits) in the area of drainage.

North Dakota enacted the nation's first no net loss of wetlands legislation in 1987. The concept embodied in this legislation, and the actual nuts and bolts of the system, may do more to protect wetlands, and guarantee the existence of a non-decreasing wetland base, than any other regulatory approach could possibly hope to achieve. In fact, the widely accepted Fish and Wildlife estimate of 20,000 acres of wetland lost per year has been eliminated, and the wetland bank currently shows a net increase of approximately 500 acres. Swampbuster is probably the main reason for halting the wetland drainage, but over the long-term, it is the no net loss program which will maintain the existing wetland base.

Unlike other regulatory programs, North Dakota's no net loss incorporates flexibility, management and balance. The key points of the program include:

1. **Wetland Policy.** This is essential, as it is opinions and attitudes which determine the support and actions of landowners.
2. **Drain Permit.** Only those wetlands with a watershed area of 80 acres or more require a state permit.
3. **Wetlands Bank.** All wetlands, regardless of size, are counted as debits in the bank if drained, and credits in the bank if restored or created (created wetland must have material wildlife values).
4. **Replacement Requirements.** All wetlands drained must be replaced with an equal acreage of replacement wetland. If a wetland has a watershed area of more than 80 acres, it must be replaced by the sponsor or landowner, using one of three options:
 - a. Replacement on-farm
 - b. Replacement off-farm arranged by the project sponsor
 - c. Replacement off-farm through application to the wetland bank.
5. **Replacement Costs.** The project sponsor, whether individual landowners or otherwise, is required to pay only 10% of the replacement costs if replacement is satisfied through wetland bank.
6. **Debit Limits.** The wetland bank cannot carry any more than 2500 acres as debit.
7. **Wetland Replacement Acquisition.** This must come from willing sellers, and cannot interfere with natural waterways or artificial channels.
8. **Replacement Tax Payments.** This law requires that land placed into federal ownership to meet replacement requirements must not diminish tax payments to local governments. Full replacement tax payments must be made.
9. **Wetlands Bank.** The wetland bank, for record purposes, is divided into four accounts:
 - a. Government agency account
 - b. Surface coal mining account

c. Temporary account

d. Permanent account. This account is for permanent credits and debits which comprise the true, usable bank balance.

10. **Location of Replacement Wetlands.** The replacement of wetland must come from the following areas:

a. Same or surrounding counties - 50%

b. Statewide - 50%

c. If not available from same county or surrounding counties, replacement wetland can come from same biotic area

11. **Administration.** The no net loss program is jointly administered by the State Engineer and the Game and Fish Director, to guarantee an equal balance of management and decision-making. All permits must have joint approval.

12. **Flexibility and Management.** The no net loss program requires that the existing wetland base be maintained, but allows flexibility and management.

The North Dakota no net loss of wetlands law, being the first ever developed, is certainly subject to improvement and refinement. The results achieved to date are remarkable. The support and approval of the state (Governor and State agencies) and local governments cannot be under-estimated for those who are seriously interested in protecting wetlands.

When these laws were developed, it was recognized that acre-for-acre replacement is a less than perfect method for conserving wetlands because it risks the loss of wetland values. An ecological equivalency method of replacement is obviously an ideal, though may be impossible due to lack of knowledge in some areas of wetland functions. It was also recognized, however, that a value based system such as in-kind replacement on a project-by-project basis would place unworkable demands on state agencies and individuals, and inherently lacks the flexibility to be acceptable and workable to North Dakota. There may also be an under-reporting of wetlands that have a watershed less than 80 acres that don't require a permit, but may be placed as a debit in the bank. Also, a recent review by the Corps of Engineers of the North Dakota wetland bank found that replacement credits weren't occurring in the biotic area of loss as desired.

Another topic of concern is that state and federal agency wetland restorations, as required by state law, are recorded as credits in the wetland bank. Some people conclude that state and federal agencies are restoring wetland in order to facilitate wetland drainage in other areas. A true mitigation bank would require those needing the mitigation credits to pay for them in entirety.

In summary, the no-net-loss of wetlands law for North Dakota was heralded by many conservation interests as a landmark in wetland protection for the state. Proponents of this legislation point out that the law needs refinement and improvement over time, but believe that this type of system can lead to balanced water management in prairie states.

OPERATION OF THE NORTH DAKOTA WETLANDS BANK

The Wetlands Bank in its most limited definition is simply the accounting system that records acreages of wetlands drained and wetlands created in North Dakota, pursuant to Chapter 61, NDCC. The accounting system maintains a net balance of wetland acres for each county, within contiguous counties, within each of the four biotic areas of the state, and statewide.

Operation of the Wetlands Bank is governed by a number of definitions and rules relative to how wetland acreages are determined, what is credited and what is debited, how the cost of replacement acreages are determined, and other functions necessary to maintain these wetland acreage accounts.

In operation, the Wetlands Bank is actually the system which performs the many functions necessary to monitor wetland drainage and replacements and ensures that there is essentially no net loss of wetland acres within North Dakota by maintaining a net balance above the established 2,500 acre deficit limit. By monitoring wetland acreage changes within individual counties, contiguous counties, and biotic areas, the Wetlands Bank also serves to target replacement efforts and ensure that 50 percent of the replacement acreage is located in the area of drainage.

Because of the nearly infinite variety of wetland drainage and replacement projects which the Bank must handle, the operational rules must be flexibly interpreted and applied. Judgments and determinations necessary to implement these rules and operate the Bank are jointly made by the state engineer and the Game and Fish Director. An interagency evaluation team comprised of one person from the state engineer's office and one from the North Dakota Game and Fish Department handle day-to-day debiting and crediting operations. If the team cannot reach agreement, then the state engineer and Director directly resolve the matter.

Credits to the Bank are made for all acreages of restored wetland and for acreages of man-made wetland that are determined by the commissioner and state engineer to have "material wildlife values". Guidelines for determining whether a man-made wetland has (or will have) material wildlife value requires the evaluation team to consider soil types, water depth and permanence, adjacent land use, the likelihood that desirable wetland vegetation will become established, the potential for wildlife use, and other factors pertinent to the wetland under consideration. In essence, the determination is the evaluation team's judgment that the man-made wetland will provide habitat comparable to a natural wetland in good condition. The evaluation team may determine that only a portion of a man-made wetland has material wildlife value and limit credits to that acreage.

Debits are made for all wetland acres drained. Although only drainage of wetlands with 80 acres or greater watersheds requires a state permit and is, therefore, easily tracked and accounted in the Bank, drainage of smaller wetlands is also subject to debiting.

Exceptions to the above credit and debit rules are made for wetlands replaced as required mitigation for federal projects, wetlands involved in active mining operations, and wetlands that are or may be only temporarily restored such as those under the Conservation Reserve Program. Separate accounts are kept for wetlands involved in mining operations and temporary restoration programs. These accounts will be reconciled and incorporated into the permanent banking system upon completion of the mining operation or a finalization of temporary wetland restoration programs.

The acreage of any wetlands which are drained or created is determined by the spring water level in years with typical amounts and rates of runoff during periods judged to be of normal precipitation. Aerial photographs, meteorological data, soil surveys, National Wetland Inventory maps, and watershed size, wetland basin size and watershed yield calculations, plus any other enlightening information may be used to arrive at the most accurate acreage determination possible.

Under North Dakota wetlands law, only projects that either store more than 12½ acre feet of water or drain wetland with greater than 80 acre watersheds require permits from the state engineer. All wetland drainage and wetland creations are, however, eligible for debiting and crediting to the Wetlands Bank. An additional function of the wetlands banking system is, therefore, to coordinate directly with the many public and private entities involved in small wetland projects to create a timely and efficient reporting network that allows debiting and crediting of unpermitted wetland drainage and development.

In both debiting and crediting operations, the state engineer's office assumes primary responsibility for developing technical information on water volumes, acreages, and depths. The Game and Fish Department is principally responsible for identifying the ecological limits of wetland and determining acreages with material wildlife values. With experience, members of the interagency evaluation team become well acquainted with technical aspects of determinations made by both agencies and the basis for judgments made by each. This results in some ability for critical review, productive discussion, and problem resolution by the team beyond what may be initially apparent.

Day to day operation of the Wetland Bank can perhaps be better understood by considering typical credit and debit situations and the major complexities associated with each.

Wetland Credits:

In credit determinations, the major challenge for the evaluation team is to agree on the size of the wetland that will be created and the acreage of the created wetland that will have material wildlife value. In other words, to determine the size of the credit that should be made to the Bank.

For projects requiring permits, the application received by the state engineer generally contains sufficient information relative to watershed and basic characteristics, the proposed water retention structure, and any proposed operational features or water management purposes so that the size and general characteristics of the wetland to be created can be reasonably determined. If all regulatory requirements external to the Wetlands Bank are met, a permit to construct is issued and all available project information is submitted to the interagency evaluation team's representative at the state engineer's office. Information relative to credit projects that do not require permits is submitted directly to the evaluation team at the state engineer's office.

A preliminary determination as to the amount of credit is made by the state engineer's office, a standardized wetland evaluation form is completed and this form along with other relevant project and watershed information is forwarded to the North Dakota Game and Fish Department of review and concurrence. If there is disagreement, the evaluation team representatives meet and attempt to resolve differences.

Upon agreement of both agencies, the Wetlands Bank evaluation form is co-signed, the credit acreage is entered into the proper account, and copies of the evaluation form are permanently filed at the state engineer's office.

Projects that attempt to restore natural wetland at or near their original water level through a simple ditch block are the most common credit project and are generally quite easy to agree on. Projects that involve increasing the size of an existing natural wetland and those which utilize mechanical structures to partially restore a basin or manipulate water levels for wetland enhancement or other water management purposes are more problematic. Determining a proper credit acreage for such projects is done case-by-case and often involves professional judgment to reach "best guess" as to the acreage that has material wildlife value and will be credited to the Bank.

Cases involving credits for man-made wetland are so variable that it is difficult to discuss a typical situation. Varying from easily evaluated small, shallow dams and stock ponds to very complex, large multipurpose reservoirs, each project must be considered separately, if not uniquely, by the evaluation team. Thus far few rules for crediting man-made projects have been developed. In general, full acreage credit is given for most small (less than 5 acres), shallow (less than 6' maximum water depth) man-made wetland that meet other regulatory guidelines for determining material wildlife value. For larger impoundments, only acreages covered by water less than 3 feet deep are considered for credit; again, pending application of other regulatory guidelines for determining material wildlife value.

Undoubtedly, with more experience, additional methods, and guidelines for crediting man-made wetland will be established. For the present, the evaluation team is very conservatively crediting man-made wetland to attempt to give credit for only those acreages which clearly provide material wildlife values.

Wetland Debits:

Debits to the Bank are similarly processed, but generally less problematic. In the case of debits, the team must first reach agreement on the acreage to be drained and then check the statewide account to determine whether or not the 2,500 acre debit limit will be exceeded. If the debit limit would be exceeded, a drainage permit cannot be issued and no debit is made. Projects not requiring permits are not subject to the 2,500 acre limit, but are debited to appropriate accounts.

In order to debit the Bank, the party proposing the drainage must agree to pay 10 percent of the cost of replacement. A final function of the debiting operations of the Wetlands Bank is, therefore, to determine wetland replacement costs.

Wetland replacement costs are annually determined for each of the four biotic areas. These costs are a composite of the average land value in each biotic area plus a statewide average construction cost for wetland restoration projects. These per acre costs are jointly determined by the commissioner and state engineer based on land values annually published by North Dakota State University and actual construction costs obtained from the U.S. Fish and Wildlife Service, Ducks Unlimited, and others involved in wetland restorations and developments.

Although debits are generally less problematic to process, determination of the acreage of a wetland to be drained is not always as simple as it may sound and certainly not immune from debate or external criticism. The potential for disagreement over debit wetland acreage determinations arises largely because of the 10 percent replacement cost-share that is required of the party desiring to drain. This cost is a per acre figure within each biotic area of the state and so obviously the larger the debit determination (wetland size), the greater the amount payable. The highly variable and often difficult to determine boundaries of many wetlands offers considerable room for debate and criticism. As outlined in Section 81-02-03-11 of the drainage rules, the evaluation team is required to consider virtually all available information in determining wetland acreages. The final determination may be arrived at as a compromise or "best guess" of the team.

APPENDIX C HABITAT EVALUATION TECHNIQUES

Several approaches to wetland evaluation for various community functions are in use, the Habitat Evaluation Procedure (HEP) of the Fish & Wildlife Service, the Corps of Engineer's Wetland Evaluation Technique (WET), and a less widely known, community-oriented, Guild Matrix Analysis (GMA). The three differ markedly in approach and merits. Although all include habitat assessment, they do so in quite different levels and for different reasons. Accuracy of all systems is reduced by minimal data bases, but different goals may be more important than precision.

The Habitat Evaluation Procedure (HEP) is wildlife species-oriented (Flood et al. 1977), although several species have been pooled in some studies to provide an assemblage or community-level treatment. The key feature of this analysis is the Habitat Suitability Index (HSI with a maximum value of 1.0) based on the best-available-data on habitat use by a particular species. This index is calculated for a specific area and is multiplied by acreage to produce Habitat Units (HU). The logic of

the calculation is that habitat lost or replaced should be estimated on the basis of quality rather than acreage. Thus, the technique can be applied to two areas for current comparison or to a before-and-after setting to measure loss (as in habitat damage) or improvement (as in restoration projects). It is limited by the fact that HSI models are not available for all species or areas, and often are based on few variables and minimal data.

WET is a broader system used to estimate all wetland functions, using a rating of high, moderate or low, and including functions such as hydrology, water purification, food production and export, fish and wildlife habitat, and values such as esthetic, historic and passive recreation (Adamus, et al. 1987). A major advantage is that of a landscape approach which considers topography, wetland connectivity, and other geomorphic parameters. Although WET uses waterfowl and waders as biological indicators, groups rather than species are assessed, and habitat associations are not very specific. Moreover, rare species are immediate "red flags" that outweigh other considerations.

Partly an outgrowth of attempting to broaden HEP to assemblages or communities rather than species, Short & Burnham (1982) devised a guild analysis using a resource matrix for bird species. As a community or habitat-oriented approach, GMA allows assessment at various scales, and attempts to assess habitat resource availability in relation to behavioral characteristics of the guilds that limit them to certain habitats. The overall advantage is that it deals with large- and mid-scale issues using simple measures like presence and absence, meaning that general information can be used when detailed data are not available. Additionally, the scale can be modified to more detailed habitat units or by species selection, but the focus remains on availability of habitat resources such as food, nest-sites, rest areas, etc. for a guild of species rather than on detailed knowledge of a single species or taxonomic group.

Any of these systems can be used to compare two or more wetlands, to compare a single wetland before and after impact or enhancement (as in mitigation banking), or to assess quality of a replacement wetland. Greater precision is required to measure enhancements than to measure restoration success (because they tend to improve habitat less dramatically than those actions that start from near-zero), which itself is more demanding than measuring the success of wetland creation. Hence, different goals demand different levels of precision.

References

- Adamus, P. R., E. J. Clairain, Jr., R. D. Smith, and R. E. Young. 1987. Wetland Evaluation Technique (WET); Volume II: Methodology. Operational Draft Tech. Rep. Y-87. U.S. Army Corps of Engineers, Waterways Experiment Stat., Vicksburg, MS.
- Flood, B. S., M. E. Sangster, R. D. Sparrowe, and T. S. Baskett. 1977. A handbook for habitat evaluation procedures. U.S. Dept. Int. Fish Wildl. Serv., Resour. Publ. 132. 77 p.
- Short, H. L. and K. P. Burnham. 1982. Technique for structuring wildlife guilds to evaluate impacts on wildlife communities. U. S. Fish and Wildl. Serv. Spec. Sci. Rpt. (Wildl.) No. 22. 34 pp.

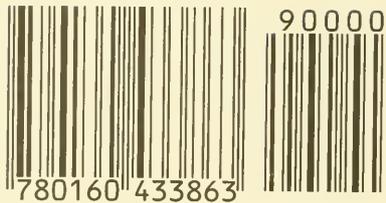


BOSTON PUBLIC LIBRARY



3 9999 05982 695 6

ISBN 0-16-043386-X



9 780160 433863