S. HRG. 106–389

CLEAN WATER ACTION PLAN

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

MAY 13, 1999

REVIEW OF A WATER POLLUTION CONTROL "BLUEPRINT" PROPOSED BY THE PRESIDENT

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ADDITIONAL MATERIAL

CLEAN WATER ACTION PLAN

THURSDAY, MAY 13, 1999

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

The committee met, pursuant to notice, at 10:05 a.m. in room 406, Senate Dirksen Building, Hon. John H. Chafee (chairman of the committee) presiding.

Present: Senators Chafee, Inhofe, Thomas, Baucus, Hutchison and Crapo.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good morning, everyone. We're delighted to have everyone here.

I want to thank the witnesses for also appearing before the committee this morning.

On February 19, 1998, in response to a directive from the Vice President, the Department of Agriculture and the Environmental Protection Agency unveiled the Clean Water Action Plan. The Plan is a combination of 111 ongoing and future actions aimed at improving our Nation's water quality. The purpose of today's hearing is to review and discuss this Clean Water Action Plan. I know that several of the members of this committee have questions and concerns.

Before we begin, I'd like to note the remarkable progress we have made under the Clean Water Act and the great challenges that lie ahead.

I think the Clean Water Action was passed in 1972. Before we passed the Clean Water Act, approximately two-thirds of our waters were neither fishable nor swimmable. Due to the hard work of local communities, States, the Federal Government and industry, we have reversed that statistic. Today, approximately two-thirds of our waters are now fishable and swimmable.

However, we lack basic data about the health of many water bodies and watersheds. The 1996 surveys conducted by the States examined only 6 percent of all ocean and shoreline miles and only 40 percent of all lakes and estuaries. We know that many watersheds are impacted by pollution, but 615 of the approximately 2,000 watersheds in the Nation lack the necessary data to make a reliable assessment.

We may not know everything but what we do know gives us cause for concern. According to the 1996 water quality inventory, 36 percent of the river miles surveyed, 39 percent of the lake acres

and 28 percent of the estuary square miles surveyed were too polluted to support basic uses such as fishing and swimming.

EPA's Index of Watershed Indicators lists 458 watersheds with aquatic conditions well below State and tribal water quality goals. An additional 708 watersheds are listed as being marginally impaired.

One of the primary causes of waterbody impairment is polluted runoff from residential areas, city streets, agricultural lands, forest pollutants and pollutants settling out of the air. EPA estimates that 75 percent of all water quality impairment is linked to nonpoint source pollution.

In contrast to point source pollution, which are relatively easy to locate, monitor and permit, non-point sources are diffuse, hard to locate and even harder to measure. Non-point source pollution control forces us to deal with local land use decisions and individual actions. Increasingly, the debate is centered on such questions of how we farm, where we build and who should make these decisions.

This committee has wrestled with non-point source pollution for a good number of years and that is really difficult.

The majority of the 111 different actions in the Plan address non-point source pollution. Some have voiced concern over the process by which this plan was developed and whether the agencies charged with carrying out these actions have the necessary authority under existing environmental law.

In addition to these procedural and legal issues, we need to examine whether the Federal Government and the States have the resources necessary to implement these 111 actions.

Finally, we should consider whether the actions in the Plan address the appropriate environmental priorities.

Senator Baucus isn't here, I know he's expected to be here very shortly. Senator Inhofe, do you have an opening statement?

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

Senator INHOFE. Yes, I do, Mr. Chairman.

I regret that we're marking up our defense authorization bill and I have a lot of provisions in that and will not be able to stay here. I'd like to stay here to be able to hear the testimony of Administrator Browner and also my neighbor.

To let you know how strange politics are, Secretary Glickman's godfather happens to be my campaign chairman. You figure that out.

This is very important. I've been hearing from my many ranchers in Oklahoma who have expressed concern over the EPA/USDA Unified National Strategy for Animal Feeding Operations. Generally, these comments criticize the Federal Government for coming into States and mandating a ''one-size-fits-all'' program that may or may not get to the heart of the problem.

In Oklahoma, we have already passed significant legislation that deals with issues relating to the swine and poultry industry. We have really a booming industry in our States of Kansas and Oklahoma.

I'd like to introduce a 1-page analysis of the bill that was passed last year by the Oklahoma legislature that outlines all new measures that poultry and swine operations must comply with. I received a letter from the Oklahoma Secretary of Environment, Bryan Griffin, that sums it up best. He states, "The Federal intervention is unnecessary and could, in fact, have a negative impact on our ability to adequately address the problem at hand."

We have also received comments that address specific sections of the strategy, including deregulation of multiple animal feeding operations in a single watershed and questions regarding the EPA's authority to regulate non-point source water pollution.

In section 4.5 of the strategy, you address significant contributors to water quality impairment and state that, "Even a collection of smaller AFOs that may cause impairment should be designated as CAFOs." You've elected to attack small, independent operators who may not have the resources and may not be a significant contributor in a particular watershed. Potentially, you could be punishing an operator based simply on his location.

Questions have also been raised about the EPA's authority to regulate non-point source issues under the Clean Water Act. Congress clearly meant for point source discharges to be regulated at the Federal level and non-point sources to be at the discretion of the States. Now you have potentially expanded your authority and are threatening to regulate some operators who would have never qualified as CAFOs prior to this plan. The EPA and USDA should pull back and let the States continue to do their good work that they've been doing on these problems.

Thank you for giving me the opportunity, Mr. Chairman, and for holding this hearing. A lot of Oklahomans are very interested in this.

[This attachment referenced by Senator Inhofe follows:]

ANALYSIS OF SENATE BILL 1175 ("HOG BILL")

OFFICE OF THE SECRETARY OF ENVIRONMENT

NEW MEASURES

- requires $0.80 per "animal unit capacity" for all LMFOs
- mandatory licensing for all swine and poultry liquid waste facilities > 1,000 animal units
- ten foot separation between bottom of lagoon and maximum groundwater elevation (unless ODA grants an exception down to 4 feet under certain conditions) for all LMFOs
- requires ODA building permits *prior to* LMFO construction/expansion
- education/training for all LMFO operators and animal waste personnel
- leak detection systems or monitoring wells for all LMFOs
- increases and standardizes setbacks for LMFOs with applications on file after March 9, 1998 or established after June 1, 1998:
  - 2 miles for operations > 4,000 AU
  - 1.25 miles for operations ≥ 2,000 AU
  - 0.75 mile for operations > 1,000 AU
  - 0.5 mile for operations > 600 AU
  - 0.25 mile for operations > 300 AU
  - 3 miles from non-profit camp/recreation site boundaries
  - 3 miles from Scenic Rivers
  - 3 miles from State-owned historic properties or museums
  - 3 miles from public drinking water wells
  - 1 mile from Outstanding Resource Waters listed in the standards
  - 3 miles from National Parks

- allows NRCS lagoon liner specifications only for facilities <1,000 AU
- annual lagoon liner evaluations conducted by a licensed P.E. or NRCS engineer for all LMFOs
- liner retrofitting for all LMFOs located in "nutrient-limited watersheds" or "nutrient-vulnerable groundwaters"
- allows ODA to deny licenses based on evidence that property values will be degraded
- any swine AFO that voluntarily obtains a license must meet all requirements of an "LMFO"
- expansion of "affected property owner" for LMFOs > 2,000 AU to 2 miles
- holds LMFOs liable for proper disposal of animal waste regardless of who disposes of it
- limits the facilities that must meet liner requirements and document "no hydrologic connection" to only those that house animals in a roof-covered structure (i.e., exempts most cattle)
- requires Odor Abatement Plans for all LMFOs
- OWRB annual report of swine facilities with ground water permits
- OWRB will define "nutrient-limited watersheds" and "nutrient-vulnerable aquifers" in WQS
- LMFO lagoons designed for odor abatement, groundwater protection, and nutrient conservation
- redefines rule advisory committee for more general public and environmental representation
- substantially increases fines and penalties for violations of the Act
- establishes a "Violation Points System"
- requires certain records to be kept as long as the facilities are in operation
- requires certain records to be kept of animal waste that is removed from the operation
- limits who can certify "no hydrologic connection" to licensed P.E.s or NRCS engineers
- 300 foot land application setback from "public or private drinking water wells" remains

Senator CHAFEE. Senator Thomas.

OPENING STATEMENT OF HON. CRAIG THOMAS, U.S. SENATOR FROM THE STATE OF WYOMING

Senator THOMAS. Thank you, Mr. Chairman, for holding this oversight hearing. As one of the members who requested the hearing, I appreciate the opportunity to examine the Clean Water Action Plan, especially since the initiative was created without the input of Congress, nor was it subject to assessments under the National Environmental Policy Act.

I'm especially pleased to have the Secretary of Agriculture and the Administrator of EPA with us today. I want to welcome the other witnesses of our second panel. Certainly having two witnesses from Wyoming emphasizes the importance of this issue to my State.

Mr. Chairman, none of us would disagree with the importance of improving our Nation's water resources. In Wyoming, the tourism industry depends on pristine environment. We have streams that boast world class trout fishing, so it's imperative that we protect our water.

Let me be very clear on this. I support the efforts to improve water quality, but I have substantial concerns with the Administration's approach to the problem. As many of you know, I strongly oppose the use of Executive orders to launch efforts as broad and overreaching as the Clean Water Action Plan. It is essentially 111 "key actions" affecting Federal agencies and State and local governments. Since the Clean Water Act leaves non-point source largely unregulated, I believe this committee needs to ensure that the Ac-

tion Plan does not become a mechanism for agencies to overstep statutory authority.

In addition, I question whether the Clean Water Action Plan truly targets the problem it is intended to solve, reducing non-point source pollution. The justification for the plan is based upon EPA's own National Water Quality Inventory, which is a summary of States' 305(b) reports. Scientific assessment by the U.S. Geological Survey have indicated the National Water Quality Inventory is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions. The problem with the Inventory is the States use different measures to determine water impairment, but yet data is compiled into one report, a report that is somehow supposed to summarize the status of the Nation's waters. To me this comparison makes little sense.

Earlier this year, GAO released a report that criticized EPA's assessment of non-point source pollution problems. Specifically, GAO highlighted concerns relating to No. 1, how the agency identifies waters polluted by non-point sources; No. 2, the need for more data to develop cost estimates; and No. 3, the extent to which the Federal Government contributes to water pollution. Further, GAO cautioned the methodology used in determining both water impairment levels and impacts from non-point source in that this study was underfunded and consequently the results are possibly inaccurate.

These findings trouble me greatly. I understand the challenge Federal entities have in allocating limited financial resources. However, it seems to me that if the goal is to improve water quality with the Clean Water Action Plan, they should first have accurately identified the cause of the problem. Without using sound, credible science to assess the health of our waters, how can we be sure the initiative and the taxpayers' dollars to support will reduce pollution. We already have programs in place such as the Clean Water State Revolving Fund that successfully reduced pollution problems and, in my view, the Administration's proposed budget cut does little to promote clean water.

What is the harm in wanting to know the scientific basis for an action plan and, more importantly, why is this request deemed somehow being opposed to cleaning up our environment.

After collecting scientific data, if non-point sources are found to be a significant obstacle to clean water, then I urge the Congress and the Administration to make funding for voluntary and incentive-based programs a priority, as was done with point source to assist landowners with pollution reduction efforts.

My interest in today's hearing also encompasses financial burdens being placed on the State and local communities, individual landowners. This issue is not unique, of course, to Wyoming. I'm concerned that States are spending their time and resources complying with the "key actions" called for in the Plan instead of protecting water resources.

Again, my belief is these types of problems are best dealt with at the local and State levels rather than federally mandated. Certainly we all have a responsibility to improve water quality. The question is the approach.

I hope we don't spend our time talking about the value of water quality. We all recognize that. The question is how do we best do it.

Thank you, Mr. Chairman. I look forward to hearing from the witnesses.

Senator CHAFEE. Thank you very much, Senator.

We welcome our two witnesses. It's my understanding that neither of you have time urgencies?

Mr. GLICKMAN. Mr. Chairman, I have a doctor's appointment and I need to leave about 11:15 a.m.

Senator CHAFEE. OK. We will definitely get you out of here by then.

I will start with Administrator Browner.

STATEMENT OF HON. CAROL BROWNER, ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Ms. BROWNER. Thank you, Mr. Chairman.

I want to thank you and the members of this committee for the opportunity to appear before you again.

The issue that we are here to discuss today is the Clean Water Action Plan announced by President Clinton and Vice President Gore in February of last year. This Action Plan is a comprehensive blueprint for restoring and protecting the Nation's water resources. It truly charts a course for fulfilling the original goal of the Clean Water Act, fishable and swimmable waters for all Americans.

Over the past quarter century, America has made tremendous strides in cleaning up its rivers, lakes and coastal waters. The Clean Water Act in particular has prevented literally billions of pounds of pollution from entering and fouling our Nation's waters and doubled the number of waterways that are today safe for fishing, swimming and recreation.

In addition to the environmental and health benefits that we have enjoyed because of the Clean Water Act, restoring these waters has also generated jobs and economic growth, growth in recreation, tourism, and the commercial fishing and shellfishing industries. The vast majority of Americans today choose for their vacation a water resource, bringing to those communities the kind of investments and economic prosperity that is so important to all Americans.

Despite all of our progress in addressing the water challenges of this country, about 40 percent of the Nation's waterways that have been assessed—I think it is important to recognize that not all have yet been assessed—but that have been assessed by the States are still unsafe for fishing and swimming.

I think it is fair to say that what we have done thus far are very big steps but in many ways it is the easier things which we have addressed. As you said, Mr. Chairman, finding the point source is far easier than finding and dealing with all of the polluted runoff or the non-point sources.

Pollutions from factories and sewage treatment plants have been dramatically reduced as we have gone about our business of focusing on point sources and we're doing a better job of protecting our wetlands from loss and our soil from erosion.

Now what we need to do, based on the work of the last 25–30 years, is to focus our attention on the runoff, runoff that comes from our city streets, our rural areas and other sources and that results in the continuing challenge of the pollution and the degradation to far too many rivers, lakes and coastal waters.

To fulfill the original goals of the Clean Water Act, we need to chart a new course to address these kinds of pollution problems and that is why the Administration put forward the Clean Water Action Plan. With this detailed plan, we give our States, tribes and communities the tools, the resources they need to strengthen public health protection, to aid community-based watershed protection efforts, and to provide new resources to control polluted runoff.

The Action Plan was developed through a cooperative effort—EPA, USDA, other agencies, the Department of Interior, the Army Corps of Engineers, NOAA and the list goes on and on. We also received extensive input from State and local governments as well as agriculture, environment, industry and other stakeholders. Together, we are working smarter, we are avoiding duplication and we are getting the most out of the programs and resources.

The pollution problems affecting our waters vary greatly from region to region and from watershed to watershed. A one-size-fits-all approach will not effectively address these issues, we agree. Therefore, a watershed approach to implementing the Clean Water programs is at the heart of this action plan. It literally puts in place the mechanisms and the tools to address the remaining water pollution problems, watershed by watershed.

The plan lays out a vision of local leadership in watershed restoration and protection. It calls on the Federal agencies, State, tribal, local governments as well as the private and the public sector, to target efforts to the particular needs of the individual watershed, to assess the full range of clean water problems and to identify the solutions that will work best for that specific watershed.

Successful models of public-private partnerships for watershed management can be found all over the country. This plan is literally built on successes across the country. In small places like the Guess River in Virginia, the Upper Salt River Basin in Missouri to the large watershed such as the Chesapeake Bay, the Great Lakes, and the Everglades.

Although we have completed only 1 year of this plan, already a great deal has been accomplished, if I might just quickly mention a few things.

Each of the 50 States, the territories, the District of Columbia and 76 tribes have now completed unified watershed assessments. They are now building on that and developing watershed restoration action strategies that will allow them to focus and guide their efforts and the efforts of all within their State to restore these waters. In addition, they are developing work plans to qualify for the new $100 million which Congress provided through section 319 funds to support watershed restoration action strategies.

To respond to environmental emergencies, we have created an Interagency Emergency Response Plan that can coordinate Federal assistance to State and local governments. We hope these things don't occur but for example, the outbreak of pfysteria, bringing to-

gether all of the Federal agencies with the expertise, with the know-how was extremely important to addressing that problem.

An action plan for beaches and recreational waters has been issued. It was issued just this last March by EPA. This plan complements legislation that was recently passed by the House of Representatives and I think is under consideration in this body and outlines the agency's multi-year strategy for reducing health risks to recreational water users through improved recreational water quality programs, pollution alerts and scientific research.

For the last year in which we have information, there were over 4,000 beach closures in the United States. Clearly focusing on this issue and focusing on these resources is an extremely important part of how we go about addressing the remaining water pollution problems that the people of this country face.

USDA and EPA have also cooperated in the development of the Animal Feeding Operations Strategy to control polluted runoff from cattle, dairy, poultry and pig farms. The Strategy is aimed at reducing pollution while ensuring the economic health of our farmers.

The Watershed Information Network is now up and running on the Internet and accessible to the public as a prototype. It can provide communities with the information they need to help them make the decisions about how best to protect and restore their local waterways.

This Plan, the Clinton-Gore administration's Clean Water Action Plan, provides a vision for a future of clean, healthy water and a map that shows us how we can best get there. By focusing on restoring and protecting watersheds, we can more effectively implement clean water programs. By continuing to support locally-led partnerships across all levels of government and the private sector, we can nurture a sense of shared stewardship of our Nation's waters.

Again, we appreciate the opportunity to be here today, to continue to work with you, Mr. Chairman, Senator Baucus and the members of this committee as we complete the task of providing to the American people clean, safe, healthy water.

Mr. Chairman, if I might just again thank you for the leadership you have provided for so many years and particularly the work that you have done going back to the Clean Water Act amendments of 1987 in terms of strengthening the Nation's public health and environmental laws.

Thank you.

Senator CHAFEE. Thank you very much, Administrator Browner.

I think we will reserve the questions until we have the testimony from both.

Senator Baucus, do you have any comments you'd like to make now?

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. Just very briefly, Mr. Chairman.

I very much appreciate both the Secretary and the Administrator being here.

Obviously it is a very important subject and we need to take a unified watershed approach. I hope that the Action Plan that is being contemplated does that.

We are also going to have to have a coordination among relevant agencies and I'd be interested to hear from the administration and their comments on how to make that happen. Obviously it's better to use existing resources rather than duplicate efforts.

I also might say that some States are taking action on their own which has to be recognized. For example, in my State of Montana, we have a streamside management zone that is set up for timber harvest to address runoff from timber harvesting. I hope the Action Plan takes those State plans into consideration and allows States to have the flexibility that is needed and recognizes the actions States are taking.

Thank you, Mr. Chairman. I do look forward to hearing more about the Plan and the opportunity to probe it a little more deeply.

Senator CHAFEE. Thank you, Senator Baucus.

Senator Crapo, do you have any comments you'd like to make now?

OPENING STATEMENT OF HON. MICHAEL D. CRAPO, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. Thank you, Mr. Chairman.

I briefly wanted to thank the chairman for holding this hearing. We are finding that the implications of this plan and the actions that will be required under it are critical and potentially have far-reaching impacts in our State as well as in other States that I'm aware of.

We appreciate this opportunity today to closely review these issues and thank you for holding the hearing.

Senator CHAFEE. Good. I hope you will be able to stay for the balance of the hearing.

Mr. Secretary, we are delighted to have you here. We don't often have an Agriculture Secretary before us. I can't remember since I've been on this committee when we have had an Agriculture Secretary, so I can clearly say you're the best Agriculture Secretary that's appeared before us.

[Laughter.]

Mr. GLICKMAN. And you're the best chairman of this committee I've ever testified before.

[Laughter.]

Senator CHAFEE. Thank you very much.

With all those kudos, why don't you proceed?

STATEMENT OF HON. DAN GLICKMAN, SECRETARY, DEPARTMENT OF AGRICULTURE

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

I want to echo Carol's comments about your leadership on environmental issues. I want to thank Senator Baucus, Senator Thomas and Senator Crapo for their friendship and help as well.

I'm going to try to summarize my remarks because I assume my entire statement will appear in the record.

Let me first talk about coordination. Historically, the role of EPA and the role of USDA were often viewed as very serious adversar-

ies. There are an awful lot of folks out in the country who still to this day see agriculture and the environment as inconsistent with each other. I don't think there is any question that under this Administration, we have done I think an excellent job of coordinating our respective statutory responsibilities, recognizing that there is nothing inconsistent with good stewardship of the land and good environmental protection.

The economy and the environment are compatible, can work together. Largely under our programs, through voluntary efforts, we are doing that and it is much more comfortable than it was 10, 15 or 20 years ago about that cooperation that exists.

With respect to the Clean Water Action Plan, the President and Vice President instructed EPA, USDA and the other Federal agencies to work together to continue the progress in water quality. We have done that in the areas of our jurisdiction. We obviously have a great jurisdiction when it comes to the Forest Service because we manage the forestlands and most of the head waters of the country comes out of the U.S. Forest Service activities. So that is a key part of our efforts.

In addition, the Natural Resources Conservation Service, in coordination with all the conservation districts around this country, help to guide the stewardship of our private lands. I think 72 percent of the land in this country is held in private ownership, and helping folks deal the best they possibly can with the stewardship of their water is something that is very, very important to deal with in terms of the NRCS activities.

Sound environmental practices such as conservation buffers, conservation tillage, forest management, integrated pest management, health improved water quality, soil health, wildlife habitat, keeping our agricultural and forestlands economically productive, economically sustainable, and keeping our farmers globally competitive, our farmers, ranchers and foresters.

In addition, we have worked together with EPA and jointly held 11 national listening sessions to discuss the draft strategy concerning the animal feeding operations. Most of these sessions were cochaired by USDA Deputy Secretary Rich Rominger of California, Under Secretary Jim Lyons, who is sitting right behind me. We also managed a hotline for the public to receive clarification about the draft strategy. We received about 1,800 comments on the Animal Feeding Operation Strategy from the public, written comments, in addition to about 300 oral comments.

In addition to the Forest Service's present investment to improve watershed health on the national forests, the fiscal year 2000 budget includes refunds to accelerate maintenance of needed national forest roads, the obliteration of roads are no longer essential for rural commerce or administrative or recreational activities and the Forest Service will be central to developing a unified Federal policy for managing watersheds administered by all Federal land management agencies. A draft of this policy is currently being prepared for publication in the Federal Register.

NRCS provides extensive technical and financial assistance to farmers, ranchers and rural communities on water quality and quantity issues. It has an incredible field structure working with landowners providing technical assistance through the Small Wa-

tersheds Program, the EQIP Program, Environmental Quality Incentives Program, Wetland Reserve, RC&D Program, all of which are in your States. In addition to that, USDA has enrolled over 30 million acres in the CREP, the Conservation Reserve Program, which idles farm land for 10 to 15 years, creating valuable wildlife habitat among other amenities.

We have also established a new program called the Conservation Reserve Enhancement Program which establishes a Federal-State partnership to encourage farmers and ranchers to remove sensitive lands from agricultural use in Oregon and Washington. That plan is to provide streamside buffers critical to water quality and salmon protection.

In Maryland, we're focusing on the Chesapeake Bay. We focused on Illinois, Minnesota and in all there are seven CREP programs in place. Several others are under development.

With respect to the Clean Water Action Plan, first, let me mention as it applies to private lands, the Clean Water Action Plan emphasizes voluntary approaches to solving problems. A key component of the strategy we at USDA have used since the dust bowl era of the 1930's, to assist farmers and ranchers in conserving our natural resources.

When we vary very far from the voluntary approach, we usually get a lot of blood pressure out there in the countryside. We've talked about this over the years. I, myself, talked about it when I was on your side of the aisle when I used to deal with the Administration on a variety of issues. The fact is we're most effective at USDA when we pursue and promote voluntary practices. In fact, for that reason, generally speaking, the public believes very strongly that our cooperative conservation practices are of great, great help to them.

In addition, the Department's natural resource conservation and environmental protection activities will continue to involve the public through locally-led conservation including people at the local level to identify various private, local-State funding sources that would help them meet their goals.

For example, the community of Squaw and Baldwin Creeks, Wyoming, I know Senator Thomas is well aware of that, exemplifies the meaning of locally-led conservation. The Squaw and Baldwin Creeks contributed significant amounts of silt and nutrients to the Popo Agie River. Primarily due to the subdivision of large grazing areas into small ranchettes, the resulting concentration of livestock caused the stream banks to become badly eroded and storage capacity at the reservoir was greatly reduced by sedimentation and trout habitat was degraded.

Using locally-led conservation efforts, this watershed rehabilitation project began in 1990 installing erosion and sediment control conservation practices, restoring stream, repairing habitat and improving grazing practices. They have improved the irrigation and fishery capabilities in the watershed and the restored natural, meandering pattern of the creeks.

These experiences, and there are many others like them, when people were first very skeptical of this project but when they saw the water getting clearer, demonstrating the voluntary efforts of local people who understand the natural resource needs of their

communities, they liked the project. We believe these experiences can continue elsewhere in the country.

Mr. Chairman, I'd like to make a couple of other quick comments. In response a bit to Senator Thomas, we have made funding for voluntary programs a priority at USDA. For example, we have asked for $300 million for the EQIP Program in fiscal years 1999 and 2000. Congress did not provide the full amount that we requested, but provided about $174 million for EQIP which was a cut of $26 million from fiscal 1998.

I mention this because the EQIP Program is the heart of our technical assistance program to provide voluntary compliance to farmers and ranchers who need the help. The primary focus of the Clean Water Action Plan as it relates to USDA and EPA is voluntary nutrient management planning. The best way to do that is to have the technical resources and people out in the countryside who are able to help farmers and ranchers meet their needs.

Our key role in this area is providing technical and financial assistance to landowners based upon local conservation needs, with local leadership on a voluntary basis. I think because of that, we have become a lot more successful than we used to be in dealing with the problems.

Thank you very much, Mr. Chairman.

Senator CHAFEE. Thank you very much, Mr. Secretary.

Let me ask you the following. Whether we like it or not, the agricultural operations in the United States, it's my understanding, are becoming bigger and bigger and more concentrated, in other words mammoth swine herds and cattle and poultry operations. From these you get a farmer, I presume and you can help me out on all this, the manure that he recovers and seeks to spread on his fields is too great for what the fields can absorb. In other words, he's got so many swine or whatever they might be that the fields can't take it. What do we do in a situation like that? How do you handle that?

Mr. GLICKMAN. First of all, you are correct in your assumption. That is, we've seen, particularly in the livestock industry, a very rapid consolidation in beef, poultry and pork. There are significant, even monumental, environmental problems associated with this what some would call the industrialization of agriculture where you feed large, large numbers of animals in confined areas. This is not to say whether it's good or bad; it's a fact. It's happening and it's happening with respect to the raising of almost all animals in this country.

The States have created nutrient management programs and manure management and runoff programs both of water and waste and that's one of the reasons why the EPA has been designated as the lead to try to develop some national standards, hopefully voluntarily imposed in most cases—imposed is probably not a very good word—voluntarily encouraged, in order to deal with this problem.

In addition to that, our Agricultural Research Service is actively from a research perspective on ways to convert that waste into productive things, compost, fuels, all sorts of other things to deal with the fact that there may be other uses for these particular products.

You are talking about significant problems, runoff is significant and it's one of the reasons why the Clean Water Act has provided,

we believe, the authority for the Clean Water Action Plan to take place.

Senator CHAFEE. Ms. Browner, I'd like to address the issue of abandoned mines. It's my understanding that in some States, 50 percent of the water impairments are adversely affected by acid drainage from abandoned mines. The EPA has estimated the Federal liability for abandoned hardrock mines on Federal lands is a whopping $4 billion. What can we do about this? Obviously, in many Western States, the Federal land is a very significant portion of the total.

Ms. BROWNER. Mr. Chairman, you're exactly right. The issue of abandoned mines or improperly closed mines creates a number of problem, significantly water pollution problems. These mines can create an opening, if you will, that can contribute to groundwater contamination and even in some instances, because the groundwater connects to surface water, a river or lake contamination.

The numbers are quite large. We would certainly look forward to the opportunity to work with this committee or any other committees to develop legislation, perhaps good samaritan legislation, that would allow parties who are willing to take the steps to close these, to provide the safeguards, to do so without any kind of adverse liability.

I don't think this solves the entire problem by any means but I think it could be helpful in terms of encouraging people to take some reasonable steps that they are pretty much inclined to take but are worried about accepting liability when they take those steps.

Senator CHAFEE. It's my understanding Arizona and Oregon attribute 50 percent of their water quality problems to non-point source pollution from Federal lands?

Ms. BROWNER. I think that is an accurate figure. I'm sure it is. I don't think all of that is coming from mines but from other activities.

Senator CHAFEE. Probably not all from mines, no.

Senator Baucus.

Senator BAUCUS. I want to first underline the point you both made very well about the need and also the progress in coordination between the EPA and USDA. You well know that a lot of farmers and ranchers, USDA is OK but EPA is another matter. The more you can work together and EPA take some of the cues from USDA as to how they have good relations. One frankly, Ms. Browner, is something that you have a hard time solving and that's the number of personnel. There's a lot of USDA personnel on the ground and in the field. They are there, know the people and over time have built up relationships, have cups of coffee, their kids go to the same schools and that kind of thing. But there are so few EPA personnel on the ground, the perception is those are people out of State, that they are in Denver or Washington making these decisions rather as locals.

I really urge you to keep working on that and develop that trust. I commend you for the efforts you have made thus far.

How are the States going to pay for this? I don't understand how States are going to pay for it.

Ms. BROWNER. They are eligible, for example—all 50 States have completed their unified watershed assessments—that then makes them eligible for the new $100 million that Congress added to section 319. That program had previously been funded at $100 million and it is now at $200 million. We are asking Congress in this year's budget to continue that. That money will be available. It's a State formula and we do anticipate every State will qualify for those resources.

In addition to that, we provide other grant monies to the States and we are asking Congress to permit the States, if they so desire, to take up to 20 percent of their State Revolving Fund money and turn that into grants for local communities and for local efforts. In no way do we suggest that the challenge of wastewater sewage plants doesn't continue but when we look at the impacts on our rivers and lakes and the health of our rivers and lakes, we think it would be important to give States this additional funding flexibility. So we are asking for that in this year's budget.

Senator BAUCUS. Some of the witnesses on the second panel I think are going to voice their concern about inadequate information in determining what water bodies are impaired, that the data is not that reliable, that there is not enough out there really to know. Is there more money for the U.S. Geological Survey, for EPA or the States to conduct more monitoring to get better data?

Ms. BROWNER. Yes, there is.

Senator BAUCUS. How is that going to happen?

Ms. BROWNER. If I might say, it's important to remember that it is the States who make these determinations, who make these designations in terms of what is impaired or what is not impaired. For example, I'm sure Senator Thomas is keenly aware we worked very closely with Wyoming and in the initial review, looked much broader and in fact, now it's a smaller number of water bodies the State believes are impaired.

What we are trying to do is work with each of the States to make sure that they have the tools they think are important in terms of the kind of assessments of water bodies they need to do. There is funding available. Section 106 funds are available to States to do the kind of research and monitoring they need to do to make sure these reports are accurate.

Senator BAUCUS. Secretary Glickman, some of the cattle operators are concerned how all this will affect offsite manure management, that is many operators will sell the manure to a third party who hauls it away, uses it himself or sells it. They are concerned that they might be liable for how manure is used once it leaves their operation. How is that being handled?

Mr. GLICKMAN. I'm not aware there is any third party liability involved here. I'd have to think about that particular issue. Maybe that will come up in the next panel. That's one of the reasons why we need to look at this on a watershed basis, just on a ranch by ranch, farm by farm basis so there are some kind of general standards across the board.

One thing I'd like to mention quickly on the issue of funding is one of the things we find most in agriculture is that program funding is great but what folks really need is the technical assistance

as to how to comply, how to do the basics in terms of the practices, tillage practices and those kinds of things.

I want to put in another plug for those technical assistance dollars particularly in the NRCS budget. The supplemental that I think you were all dealing with last night, I think you did put in enough assistance so we could provide technical assistance for the CRP Program. We were having to cut back on the NRCS technical assistance on CRP. Having those human beings out there in the countryside, the ones you just mentioned, makes a big difference in peoples' lives in order to comply voluntarily. I hope we can keep those people out there.

Ms. BROWNER. If I might add to that, I think one of the great areas of agreement between EPA and USDA is the comprehensive nutrient management plans. This goes to the issue of manure application. We recognize at EPA that USDA has the relationships with the farmers, they have the technical expertise and they will be taking the leadership and working with farmers who do use the manure from these larger facilities to ensure that it is applied properly.

The issue for us from the EPA perspective is not the farmer who wants to enrich their soil and grow better crops with manure, it's these very large facilities. In the Delmarva Peninsula, the poultry operations now produce as much waste as the Washington, D.C., Virginia, Baltimore metropolitan area. We all would agree that waste from the sewer plants should be properly managed. When you look at the volume of wastes that are coming not from the small farmer but from the sort of industrial facilities, the issue is simply the appropriate management. It is not the farmer who rightly takes advantage of applying manure so they can grow.

Senator BAUCUS. I understand and I think people agree. I think most operators just want to make that clear.

Ms. BROWNER. That's why having USDA do the plans with the farmers I think actually is one of the real sensible things in this program. They have the expertise, they have the relationships. We know that.

Senator BAUCUS. Thank you.

Senator CHAFEE. Senator Thomas.

Senator THOMAS. Thank you, Mr. Chairman.

I thank both of you for your comments. If one just flew in from Mars and listened to you, they would think everybody was on board. That's not the case, as you know. There's substantial amount of concern in the country and I have a number of letters, you have a number of letters, I'm sure, and there indeed will be some lawsuits filed as a matter of fact.

Specifically, Secretary Glickman, you mentioned the one-on-one assistance which I certainly agree with, yet your budget for 2000 proposes substantial cuts in field services. This discrepancy between the field staff will be lost, between OMB numbers and NRCS calculations, is 200 from OMB and 1,000 staff members from NRCS. How do you reconcile those two things?

Mr. GLICKMAN. Part of this was because there is a cap under section 11 which funds the technical assistance programs like CRP. With that cap, we couldn't ask for additional money to provide

some of that technical assistance. Hopefully, working with you all and with OMB, we'll be able to.

Senator THOMAS. But you're reducing it, not just keeping the cap. Why would you reduce it when you tell us how important it is to have NRCS out there in person?

Mr. GLICKMAN. I'd like to eliminate the cap, myself.

Senator THOMAS. I'm not talking about the cap; I'm talking about reduction of 1,000 which is the number that comes from your agency.

Mr. GLICKMAN. One of the reasons is the cap but I would have to tell you we're talking about reductions across the board at USDA in FSA operating staff and everything else. When you come up with these budgets, we couldn't exempt one part of the group from the whole thing.

Senator THOMAS. I understand but this is part of the difficulty. You all come up and talk about these things and in the next paragraph, well, we're not going to do that because of caps and so on. Those things are difficult to take to the country.

Ms. Browner, you've indicated in the past that you thought there was sufficient authority for the action plan?

Ms. BROWNER. Yes.

Senator THOMAS. Yet I understand you went to the Subcommittee on Appropriations and asked that the subcommittee members provide authority in the 2000 appropriations bill to enable EPA to implement the projects?

Ms. BROWNER. That's not what I was seeking. I can explain. I just mentioned it previously which is we are asking the appropriators to allow the States to take 20 percent of the money they receive and transfer that from the Revolving Loan Fund Program into a grants program. It's not a question of legal authority; it's a question of giving the States greater flexibility in how they make use of their funds.

Senator THOMAS. That's not what it says in the "Inside EPA."

Ms. BROWNER. Inside EPA is a private publication; it is not owned by the Environmental Protection Agency.

Senator THOMAS. I understand that but they are wrong because they're private?

Ms. BROWNER. No. I know what I said. They're wrong because I know what I said.

Senator THOMAS. I see. Let's see what the committee says.

Tell me something else then, the Gore plan was put into place in 1997 and you've conducted apparently some listening sessions. Did you solicit public comment?

Ms. BROWNER. Are you referring to the Clean Water Action Plan discussed in February 1998?

Senator THOMAS. Yes. It stated in 1997, I believe. You were asked to put it together.

Ms. BROWNER. Yes. There were listening sessions.

Senator THOMAS. No, I'm not talking about listening sessions. I'm talking about NEPA kinds of—after your plan was out there did you solicit and have a time for public comment?

Ms. BROWNER. The keeper of the NEPA statute, the CEQ, Council on Environmental Quality, has responded I think to this com-

mittee's questions as to whether or not NEPA would apply to this plan. They do not believe that NEPA does cover this plan.

Senator THOMAS. You did not have a public comment period after the plan was announced?

Ms. BROWNER. This plan is not covered by NEPA. That is what CEQ has determined, it's not covered by NEPA.

Senator THOMAS. My question is, did you have a public comment period?

Ms. BROWNER. There's been a tremendous amount of public input in the creation of this document.

Senator THOMAS. You did not have a public comment period?

Ms. BROWNER. This plan is not covered by NEPA.

Senator THOMAS. That's not what I'm asking you, Administrator. I don't know that I accept that but even if you do, this is a pretty major Federal action. Did you have a comment period?

Ms. BROWNER. It's not a Federal action, with all due respect. It's a blueprint laying out a series of proposals and actions. Any one of those which will result in any "Federal action" in the legal sense is obviously subjected to all of the requirements, notice and comment, publication in the Federal Register.

So, for example, the work that we've all been doing on the CAFOs and AFOs, has been in keeping with all of those procedures, but this plan, in and of itself, is simply a blueprint that lists the Administration, in conjunction with lots of other peoples' best thinking on what are the steps that would need to be taken. Any individual step would have to play in accordance with all of the legal requirements.

Senator THOMAS. Thank you but you did not have a comment period then for the Plan? It's a pretty simple question. Did you have a comment period after the Plan was announced?

Ms. BROWNER. The Plan is the subject of extensive outreach.

Senator BAUCUS. If I might jump in here, at my peril, there have been at least 11 public hearings all over the country.

Senator CHAFEE. On the Plan, I think the question is kind of a yes or no.

Senator BAUCUS. People have commented to those public hearings.

Senator THOMAS. I understand that but I have a fairly simple question, whether or not there was a comment period when the Plan was issued. The answer is no.

Senator BAUCUS. I don't know.

Senator CHAFEE. Is that correct, Ms. Browner? You have a plan out there with 111 recommendations.

Ms. BROWNER. Yes.

Senator CHAFEE. Senator Thomas says did you have a hearing and what are you saying, you had a hearing on each one of the subjects, the 111?

Ms. BROWNER. As each of those would go forward into an implementation phase.

Senator CHAFEE. Will go forward in the future?

Ms. BROWNER. Yes, they would be subject to whatever requirements of the law there are. So for example, the best example right now would be the CAFOs and the AFOs for which there have been

hearings, there's been notifications. All of that has been done in accordance with the requirements.

I think what the Senator is attempting to suggest is that the Plan, in and of itself, is a ''Federal action, a rulemaking,'' and therefore should have been subjected to a set of procedural requirements. We do not believe that is the case. We believe that individual actions will be, in some instances, subject to all of that and we will follow all of that. Having said all of that, I want to be very clear, the amount of public involvement and public input in this document was extensive.

Senator CHAFEE. OK. Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman.

I'd like to follow up on that in one context. If I understand what you're saying, Administrator Browner, the Clean Water Action Plan has nothing new in it, there's no new binding regulatory authority involved?

Ms. BROWNER. Correct. It is not, in and of itself, self-executing. Any requirement that could be placed on any industry to reduce their pollution would be subject to all of the procedural requirements of the Act.

Senator CRAPO. So we have your assurance that if there are any new requirements that will result from the Plan——.

Ms. BROWNER. Any regulatory requirements, that's correct.

Senator CRAPO. [continuing.] . . . there will be complete NEPA compliance?

Ms. BROWNER. No. Clean Water Act compliance. That's a good question. I don't know, and I'll be honest with you, is there anything in here of the 111-plus steps that might, in and of themselves, be subject to NEPA. I think the question that was posed by the committee previously was, was the Plan itself subject to NEPA? In terms of the individual actions, I am happy to have CEQ respond to you with respect to that. I just don't know the answer to that.

Senator CRAPO. I'd appreciate that. I would expect that most of them, if they're going to be major new changes in regulatory policy, would require NEPA compliance. Would you not expect that?

Ms. BROWNER. No, NEPA doesn't cover all changes in regulatory policy. For example, in the work we're doing under the NPDES permit with respect to the large, industrial, agricultural facilities, I don't think anyone is of the opinion that would be subjected to a NEPA review. It will be done in accordance with the Clean Water Act requirements.

Senator CRAPO. I would like the CEQ to respond.

Ms. BROWNER. We can ask them that question for you, certainly.

Senator CRAPO. I'd also like to talk with you about the question of flexibility. In the first paragraph of your written testimony, you indicate that a one-size-fits-all approach is not the right approach. Both of you have testified today about the importance of flexibility, watershed approaches and so forth. That all sounds very good.

The concern that we are picking up from those out in the country who are dealing with this, whether at the State or private levels, is what they are seeing and what they are finding is the opposite, strong concerns about one-size-fits-all rules and the failure to take

into consideration as this proceeds, the various differences in geography that can impact dramatically.

I'm thinking myself right now about the CAFO and AFO situation where Idaho has 15 or 20 inches of rainfall and other States have much more rainfall, and you have a difference between arid climates and other types of climates which does not seem to be taken into account at all.

The question is, we can agree in this room and can all talk about the importance of flexibility and not having one-size-fits-all requirements, but how do you have a national standard that is developed that then has to be met in individual watersheds without having a one-size-fits-all approach?

Ms. BROWNER. The States will manage the permitting of the facilities and as is true under existing water quality permitting programs managed by the States, they will take into account the special needs of their State. You mentioned, for example, the geological formation. I'll give you a good example. An example might be that in one State, a facility can be constructed in such a way so that it is "zero discharge," but that exact same construction in another State, because they have different soil, would not be zero discharge. That is what the permitting process your State will manage is designed to speak to.

Senator CRAPO. So do I understand you to say that the States will be able to apply the standard as flexibly as they can or can the States design the standards?

Ms. BROWNER. Excuse me for 1 second. Because your State is in a slightly different situation, your State has never—as I understand it, most of the States here manage their water quality permitting, we have delegated that authority to them. I think there are seven where that has not occurred for any number of reasons. We just completed Texas, a very large State. Your State does not have it. We'd love to work with them on delegating it to them and then they would actually be the permitting agency.

However, we will, if we continue to be the permitting authority, as we are today in your State, obviously take into account the local concerns. We would work with the State agency even though they cannot actually legally issue the permit. The far better way to resolve this would be if we could work with your State to take control of the program.

Senator CRAPO. I'd like to see that move ahead as well and see Idaho given that delegation, so I'd like to do whatever I can to work with you in that regard.

When that arrives and in the other States when that is done the question still exists to me, if the State is simply being allowed to implement an already rigid, one-size-fits-all set of rules, that doesn't really get you flexibility just because you're allowing the State administrators to be the ones who make the decisions that are already predetermined or at least preguided by very rigid structures.

Ms. BROWNER. Let's go back to my example. I'll pick my home State of Florida. We have very different soil types than your State of Idaho. You could construct a facility, one of these large, industrial, agricultural facilities in your State and it would be zero discharge, it would not be required to have a permit for discharge be-

cause it is not discharging and that would in part be a function of both the engineering and geological formations in your State. That exact same construction project could move to Florida and because of their soils, would require a permit.

There are many examples but that I think is a relatively easy example of where State differences will come into play and should. We absolutely agree they should come into play.

Senator CRAPO. We're in an early enough stage of this where it's hard for me to give you specifics, they aren't there yet. I would like to work with you so that when we get to the final analysis, you and I can agree that in fact we have reached a point where the States are given that flexibility. It sounds good and I'm glad to hear you talking in this way because there is a lot of concern on my part and those who are dealing with this at its initial stages that that is not how it will evolve.

Senator CHAFEE. We have to move on to the questioner in a minute.

Ms. BROWNER. There are approximately, people estimate about 400,000 to 450,000 animal feeding operations. Working with USDA and the States, we estimate that 95 percent of those will simply work through best management practices on a voluntary basis and will not require permits. It is only the very large ones, 1,000 animal units, those that are located on impaired water bodies which your State makes a determination about, but the universe is not all of these facilities out there. It is much smaller, about 5 percent of the facilities.

Senator CRAPO. Thank you.

Senator CHAFEE. Thank you, Senator.

Senator Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman.

Administrator Browner, I have two areas of concern. The first is one you and I visited about on the stormwater regulations and the situation we have in my State where we have counties that basically use vegetative overland processes and they don't have ordinance-making power. They are very concerned; in fact, so concerned that they formed a coalition in Texas called the Stormwater Coalition because they are panicked really.

Ms. BROWNER. We met with them. Did you know that?

Senator HUTCHISON. Yes. I know you met with them and they said they took many of your people out to show them what they were doing, but they didn't get feedback, they didn't get any indication there was an understanding of their situation such that they would be able to have some relief from the one-size-fits-all regulations. If you have another view, I'd like to hear it.

Ms. BROWNER. I obviously was not a part of the meeting. Based on your request and your concerns and I'd also heard of the concerns, we did ask people to go meet with them. Our impression is that it was a helpful meeting.

One of the concerns you had raised to me was the question of urbanized versus rural. I think we've worked through that now and if there is any confusion left on that, Phase II is not about the rural activities, it's about the urbanized areas of a county not the rural areas of the county. I think that was a big concern.

We also talked about grading of roads; that was another issue that came up, sort of the maintenance grading of roads or not changing the slope or the curve of the road, just maintenance grading. That would be exempt which we think takes out a lot of the concerns.

There were three issues. One was the geographic area covered and the grading.

Senator HUTCHISON. Tell me how you are handling the issue of urban versus rural?

Ms. BROWNER. I think that may have been, in part, a confusion. If we need to fix it in the rule, we will fix it in the rule. We are under the impression there was a misunderstanding. The intent is not to cover the rural areas and if there is an ambiguity, we're happy to go back and look at the final rule as we complete the work on that.

The third question is a question we are still working on and is a question very unique to Texas, and that is the structure of your local government. For those activities that would have to be taken pursuant to the Clean Water Act, the question is where the responsibility and authority will rest, and we are continuing to work on that.

Senator HUTCHISON. Yes, our counties don't have the ability to actually regulate in that area, but many of these counties don't use sewers, they use the vegetated ditches. One of their concerns was that was not going to be exempt or that you weren't going to take into account when that worked. Actually, it is their understanding that in many cases, that has been an acceptable process but under the rule, they were concerned they were not going to be allowed to have that as an acceptable process.

Ms. BROWNER. I think what they had sought, and maybe we misunderstood them, was a complete exemption for all of that. We don't disagree that there are instances where that is the preferred solution and it works well. I think the concern we have is simply exempting all of those. I think we have to continue to work with them to come to an agreement on how you would deal with those that we all could agree are working and serve and are the sensible solution and then for those which may not provide all of the pollution protection that is necessary.

We don't disagree that in some instances that may, quite frankly, be the right decision. I have to say I'm disappointed if your report of the meeting is that it didn't go well. I did check with people after our meeting. I asked them to go to the meeting and I checked with them to find out how the meeting went. They were under the impression that we had made some progress. So if we need to go back, we will go back.

Senator HUTCHISON. It may be that there just wasn't a communication of where they were going to have some relief from the kind of one-size-fits-all, everything has to be underground view of the regulations that they have. This is the comment period and hopefully, the overland route will be acceptable when it's acceptable.

Ms. BROWNER. If you can just convey to them, and we're happy to do it again, that we felt we learned a lot and that certainly reduced geographic coverage in terms of the rural versus urbanized areas of the county, the grading of roads, the maintenance grading

of roads, and we want to continue to work with people on the jurisdictional question.

Senator HUTCHISON. That's fairly rigid for us because we just don't have ordinance-making for counties and it's very jealously guarded by cities.

Ms. BROWNER. I think we would agree with you that obviously there can't be a requirement for a body to do something if they don't have the authority to do it. I think the issue we're trying to resolve with the State right now is would the State be the responsible entity.

Senator HUTCHISON. I'm sorry, it appears my time is up and I thank you. I didn't get to get into the Clean Water Action Plan and the issue of our feedlots and there are concerns both by our livestock feeders, but also by our TNRCC, our State regulatory agency about this plan. There is a feeling that maybe the action plan is being substituted for regulations and they are losing some of the emphasis on the Clean Water Act in favor of the action plan.

There's a lot of concern but I'm going to have to go to the mark-up of the supplemental appropriation, so I'm not going to be able to stay but I will submit some of these questions in writing, if you would permit me, to let you know of some of the concerns.

Senator CHAFEE. OK. We promised the Secretary he could be out of here by 11:15 a.m., so we have 5 minutes. We'll have rapid fire questions of him before he goes.

I want to follow up on what Senator Thomas was asking about the personnel. My records show that 10 years ago in conservation operations, technical assistance for just the thing we're talking about, you had 9,560 full-time equivalents. The figure for the next budget is not 9,560 with these added duties that would come on here but 8,769, a little less than a 1,000 drop. In watershed operations and small watershed authorities, you had 10 years ago, 1,400 full-time equivalents, now it's going down to 586.

I know you say that is due to the caps but yes, the caps have come down, we recognize that, so you presumably have less money overall. It seems to me, when you take some of these, going from 1,400 to 586, that's a whale of a drop, about 60 percent, something like that isn't it? So you've got to get in there and battle for these things.

Mr. GLICKMAN. Senator, I can't argue with your numbers. I was listening to Senator Thomas and the fact is that oftentimes in our Government, and this is a bipartisan issue, we tend to focus on program dollars rather than on people. When it comes to a lot of the things we do at USDA, particularly the conservation issues, these are not programs, these are human beings out there helping folks do their job.

For a lot of different reasons, overall budgeting at USDA, our total numbers are down as much as 15,000 people over the last 5 years at USDA across the board. Maybe the focus hasn't been enough on this particular aspect, which is the personnel side of the conservation operation. I'm saying to you I don't disagree with what you're saying.

Senator CHAFEE. Because it seems to me the programs that we're selling here, one-size-doesn't-fit-all, we're going to give the farmers

technical assistance as well as some financial assistance, and the technical assistance obviously is people.

Any other questions of the Secretary?

Senator Thomas.

Senator THOMAS. Just a quick one, the road moratorium on the Forest Service. You've had that, it's been in there by the Forest Service. Now the water plan mandates the decommissioning or obliteration of 5,000 per year by 2002. I don't understand how these two things work together and I don't understand why that's not some kind of a major action.

Mr. GLICKMAN. Perhaps Under Secretary Lyons may want to comment quickly on your question.

Senator CHAFEE. Why don't you identify yourself?

Mr. LYONS. My name is Jim Lyons. I'm Under Secretary for Natural Resources and Environment at USDA.

Senator Thomas, some goals were set in the Clean Water Action Plan and for it to be comprehensive in looking at the various issues that affected clean water, and one, of course, is roads and the issue of maintenance of roads. We set some goals toward the development of a plan for decommissioning roads that were no longer needed and also for maintaining the roads that are needed.

We're proceeding with the road rule of which you're aware that Chief Dombeck has put together and that will serve as a basis for providing guidance in terms of future road management and maintenance.

I'd say that the primary focus now really is in trying to develop a final rule that will allow us to determine, working with local communities, what roads we should maintain, which roads are no longer needed for public transportation, access or recreation use and then working to secure the funds to decommission.

Senator THOMAS. Does the water plan specifically as for 5,000 miles?

Mr. LYONS. The water plan I think set a goal of 5,000 miles based on the preliminary estimates we had then. I think it is probably fair to say, given the fact we have over 400,000 miles of road, that's a fairly reasonable goal to set in terms of decommissioning. The determinations are going to be made through a process that involves local communities and forest planning.

Senator THOMAS. We just went through a process. We've just had 18 months of moratorium and that was what it was for, wasn't it?

Mr. LYONS. No. That was related specifically to the construction of roads in roadless areas. We're in the process now of developing a final rule for managing the transportation system in the National Forest System. That will be finalized sometime next year.

Senator THOMAS. Will that be put out for public comment?

Mr. LYONS. Yes, sir.

Senator CHAFEE. Did you say you've got 400,000 miles in the Forest Service?

Mr. LYONS. We think 400,000-plus.

Senator CHAFEE. So you take 5,000 out per year?

Mr. LYONS. Our goal was to eliminate 5,000 per year. We actually lose more miles, Mr. Chairman, out of neglect and failure to maintain the roads than we actually lose through active——

Senator THOMAS. I'm not debating whether that is a good idea or not. This is a procedural question for most people. I remember the feedback when you had an 18-month moratorium, then you did a study, you had comments, people had their comments in. Now you've got a new action plan and you have a different set. These are the kinds of things that keep peoples' blood pressure up a little high.

Senator CHAFEE. Senator Crapo, do you have a question of Secretary Glickman?

Senator CRAPO. I have a bunch of them but since there's about 30 seconds left, I'll submit them to the Secretary.

Senator CHAFEE. And would you be good enough to respond to the questions that are submitted to you in writing?

Senator BAUCUS. I have some questions about wolves.

[Laughter.]

Senator CHAFEE. Thank you, Mr. Secretary.

Any other questions of Ms. Browner?

Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman.

Administrator Browner, has a cost analysis been done to calculate the requirements to implement the Clean Water Action Plan? What I'm getting is we talked about the need for EQIP funds and all the other different sources of help that we need to provide to achieve this, have we identified the cost that the plan would impose on State and local government, the private sector and so forth as we proceed, if it were implemented?

Ms. BROWNER. As each of the individual actions are developed—I'm not the keeper of the Forest but that probably is a good example, in the Action Plan, it's a goal and they then have to come through the entire regulatory process—public comment and notice—with all of the cost information that you're talking about. Another example would be in the AFO–CAFO work, those issues are being looked at.

So they are looked at in the context of the individual actions as those are developed beyond the basic plan which is really, I'll be honest with you, the best way to do it because it's when you get into all of the details of how to address the large industrial feeding operations that you can start to best understand that and to make sure that you are achieving an appropriate cost-benefit relationship.

Senator CRAPO. I've been out on the ground with some of these operations, the smaller ones.

Ms. BROWNER. Which are probably the ones that are not covered?

Senator CRAPO. I'm hoping I'm hearing you right, that I didn't need to be out on the ground working with them on this. As I was out on the ground with them, the issue that seemed to be the biggest, after getting past the questions of jurisdiction and whether the rules were going to result in anything positive rather than just work that didn't create an improvement for the water quality, the question was how are we going to find the financial ability to do what it appears we're going to be forced to do.

Again, we don't know what that is going to be yet, so there's a lot of concern being generated simply because of these questions, but it seems to me that one of the most important things we can

do here, if we're going to answer these questions about EQIP funding and all of the other resources that we can bring to bear, we'd better find out how much each of the individual components are going to cost so that we can build the case for providing the resources to solve these problems, so I would encourage a very aggressive focus on that.

One last comment because I know the chairman wants to move on quickly here. With regard to the question of flexibility that I started out visiting with you about, back in September of last year, the Idaho Department of Environmental Quality and the NRCS, as well as your EPA Assistant Administrator, wrote a letter to both Secretary Glickman and yourself indicating that Idaho is already using a form of the unified watershed assessment and that the TMDLs are being developed on a watershed basis in Idaho in consultation with the State and Federal Land Management Agency.

What I'm getting at is I think that Idaho can very clearly show that we are well underway in working out this problem.

Ms. BROWNER. We agree.

Senator CRAPO. I'm glad to hear your comments here today. I hope that when the dust settles and we see what really is going to happen here, that we do have the kind of watershed approach that allows State and local involvement in managing and actually developing the applicable standards. I appreciate your commitment to that.

Ms. BROWNER. We appreciate the work your State is doing and I think we feel it is a good and positive relationship, which is not to say we don't have moments of disagreement, but I think in terms of serving the needs of your citizens, we are working together in the way that this plan was designed to ensure. I think at this point in time that is a good example.

I think there was some concern when the unified watershed assessment work first began that every State had to do it exactly the same, but actually this is a good example of where we recognize that some of the work your State had done, which might be different from another State, still got to the same point and it made sense to rely on that, and things didn't need to be redone or duplicated.

Senator CRAPO. I look forward to working with you to help this happen.

Senator CHAFEE. Senator Thomas has a quick question and then we will move on.

Senator THOMAS. A little follow-up, Administrator, on that unified watershed assessment. Section 319 does not implement regulations that require it. How do you justify congressionally withholding appropriated funds from a State that did not complete it?

Ms. BROWNER. Every State has completed theirs. We signed off on your unified watershed assessment. The last time I was here before this committee, Senator Thomas, you were concerned that your State was the only one. Now all 50 States have unified watershed assessment plans and the next phase is to work on the section 319 funding.

Senator THOMAS. They completed it because you threatened not to pay if they didn't, isn't that correct?

Ms. BROWNER. No.

Senator THOMAS. It's funny, we get different information, Ms. Browner. We'll have to get together won't we?

Ms. BROWNER. We're working with your State now, as we are with every State, to provide the $100 million in additional funding and the back and forth process of determining how they can best use the money.

Senator THOMAS. I understand that. The key, however, to what Senator Crapo is talking about is when you have money, then you set the requirements for what you have to do to get the money and that kind of takes a little of the friendliness out of the partnerships.

Ms. BROWNER. The good news is, I think the last time we were here, you were correct that your State's plan was still not resolved. It is today resolved. We worked hard with your State to make sure that happened and now they are in exactly the same place as every other State which is, working on the funding mechanisms.

Senator CHAFEE. Thank you very much, Ms. Browner. We appreciate your coming here today.

Now we will go to the next panel: Mr. Gary Beach from Wyoming; Mr. John Godbee from International Paper; Mr. Dan Heilig of the Wyoming Outdoor Council; Mr. Ross Wilson of the Texas Cattle Feeder's Association; and Ms. Jane Nishida, Secretary, Department of Environment, Maryland. If each of you will take a seat, we'd like to move right along here.

We will start with Mr. Gary Beach. Senator Thomas, do you want to introduce Mr. Beech?

Senator THOMAS. Yes, sir. I'd like to do that. I could do two at one time, as a matter of fact.

Mr. Beach is from Wyoming and represents the DEQ there. Mr. Heilig, whose name is not in the right place, is also from Wyoming and represents the Outdoor Council. So we will have a little different point of view but I think that's helpful. I welcome both here and appreciate their making the effort to come.

Thank you, Mr. Chairman.

Senator CHAFEE. Mr. Beach, why don't you proceed? If you could restrict your testimony to 5 minutes, we'd appreciate it. All statements will go in the record anyway.

STATEMENT OF GARY BEACH, ADMINISTRATOR, WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. BEACH. Thank you, Mr. Chairman.

I will summarize my testimony and I'd like to draw to the last page of that with respect to recommendations but before I get there, let me share with you some thoughts.

I didn't fly in from Mars, I flew in from Wyoming. I sense there is kind of a lovefest going on here and I want to bring you a perspective from the netherlands. These are the people clear out, almost on the other side of the Nation that I'm talking about. We talk about locally-led partnerships and we all agree with that; we talk about existing resources, we ought to use what's working; and we all seem to agree with that. We talk about CAFOs, animal feeding operations and we're only going to capture 5 percent of them by regulation.

When I listen to these things, I'm confused because I'm not sure that we understand one another. I think what I want to try to leave you with is not a criticism of the Clean Water Action Plan. I realize my job on the panel here I think is to be against it but I want to talk more about how we deliver services in this Nation to our citizens. In my mind, that's the bottom line, the service we deliver to our citizens.

We're dealing with people, personalities and locations. Let me tell you, in Wyoming, when I go out to a community, I realize the first thing I do in that community will be different from what I do everywhere else in the State because they are different people. They don't want to be the same; they wanted to be treated unique and different.

What that tells you here is you have to be ready to look at all ways to skin the cat, that's more than nine ways, many ways, to skin the cat if I'm going to achieve my job on the front line of getting clean water for you. So I'm troubled when you say everything is locally-led partnerships. I can assure you the Clean Water Action Plan was not a locally-led document. I can assure you of that. I can assure you that when you say use existing resources, we have a wonderful TMDL program going on in Wyoming now. It took the encouragement of our friends from the environmental organizations to sue us to get us to realize we needed to do it, but we're doing it. We've gotten our stakeholders together and we've past their fear of what government is about to their willingness to accept responsibility and to do something about it. It took us 2 years to do that. That is a resource we have.

What happens? We just get this done and out comes this Clean Water Action Plan and it's broadcast across the Nation. Everybody has to do it and our people go ballistic then. Why couldn't we have rolled out a program that says we want clean water, we want to do it holistically, we want to coordinate, we want to communicate and we want to include people and use the things you've got going for you to do that. Then we would have maintained trust because fundamentally that's what we have to have in this country, if you're really going to achieve your goal of getting local people involved in solving their problems, and I think that's what you have to do in clean water. We have to do that because the non-point source program is a program where no longer do I just write a letter to industry corporations and say, hey, clean up your water and they hire attorneys and experts and put money into it and lo and behold, it's clean. That's an easy job. Now you're asking me to go visit with my grandmother and say grandma, I've got to convince you to get the cows off the creek. How do I do that? That's what we're dealing with today. Your message has to be different.

You talk about the CAFO document, confine animal feeding operations, but we talk about that's only going to touch a few people. It's nonsense. It will touch everyone. It will touch operators that don't even have a confined animal feeding operation because they're afraid now that when they put their cows on the creekbed in the winter for winter feeding, that's a confined animal feeding operation and EPA is going to be out one of these days to inspect me. It's nonsense. Once again, we've rolled out a message the wrong way.

All I'm really suggesting is that we need to rethink in this country how we achieve what we want. I know our Governor keeps talking national goals. Tell us what your goal is, leave it to neighborhood solutions. That's not State solutions, that's even a lower level. That's neighborhood solutions.

Before my time runs out, I'll take you to the last page of my testimony and there are three suggestions there. I'm sure the first one, you think, well, that's nonsense, withdraw the Clean Water Action Plan. Once a government puts something out, does it ever take it back. I would suggest to you that in Wyoming if you really want to come to the table and talk about how we achieve the results, not just process but results, be willing to pull it off the table and throw it on the floor. Then we can talk about how do we achieve results and we won't get all hung up in this document.

I suggest that we look at functionally equivalent programs. Allow a State to come in with a program that they think meets your goals and honestly consider it. Let me tell you, there may be 50 different programs, but you need to be willing to consider those personalities because they matter.

Finally, I talk about new regulatory programs. It seems like there's a rush to regulate. I think this is particularly the case in the large animal feeding operations. I would suggest to you that if you looked around this Nation at the hog industry, you would find that most States by now have a pretty good regulatory program in place. Why does the Federal Government need to adopt regulation on hog farms. Maybe there's one or two States that need the support of EPA and you can work individually with that State to help them beef up the program. We don't need to rush out a whole new set of regulations that captures all these animal feeding operations before we've even done the first analysis of do we need this. It's once again how you roll out your goal.

With that, I will end my suggestions and answer questions.

Senator CHAFEE. Thank you very much, Mr. Beach.

Mr. Godbee.

STATEMENT OF JOHN GODBEE, ENVIRONMENTAL MANAGER, FOREST RESOURCES, INTERNATIONAL PAPER CORP., ON BEHALF OF THE AMERICAN FOREST AND PAPER ASSOCIATION

Mr. GODBEE. Thank you, Mr. Chairman and members of the committee. I appreciate the opportunity to testify today for the American Forest and Paper Association on the President's Clean Water Action Plan.

The American Forest and Paper Association is the Nation's trade organization for the forest products industry. We represent about 90 percent of the industrial forest land ownership in this country, 50 percent of the solid wood manufacturing and 84 percent of the pulp and paper production. We also represent and work very closely with the over 9 million private, non-industrial landowners that own 56 percent of the Nation's productive forestland. In working with International Paper, we are the largest private forest landowner in this country with over 7.5 million acres of land and operations in 46 States. The Clean Water Action Plan is very important to us.

Upon release of the plan, our first effort was to look at the plan and see if it was consistent with the private sector initiatives that are underway. After reviewing this, we, unfortunately, came to the conclusion that it was too proscriptive, that it failed to recognize and promote the private sector initiatives that are aggressively underway to meet and obtain the goals of protecting clean water in this country.

Back in 1994, our members committed to the Sustainable Forestry Initiative as an example of a program that's working, a comprehensive set of principles and guidelines that are underway that combine the growing and harvesting of trees with the protection of soil, air, wildlife and water quality. This program is a condition of membership within our trade association and unfortunately, we have lost a few members because of this commitment but we've gained others. We believe in what we're doing. Members are required to meet or exceed all established best management practices that are developed and applied at the State level—our objective is and can be no less than 100 percent compliance—to establish and implement additional riparian protection measures, work with the States and to provide funding for water quality research.

In 1997, we rolled out a report and began to look at what we're doing on the numbers of acres committed to voluntary plans and conservation agreements with State and Federal regulatory agencies and conservation groups. Almost 11 million acres, or approximately 20 percent of the industrial forest ownership, has been enrolled in plans, voluntary conservation plans, to protect soil, water and wildlife. Over 4,300 miles of streams are also included in these plans.

As you can tell from these commitments, we believe the forest products industry has our own clean water action plan and we're very proud of it and feel like it's working. It's from being a program based in Washington; it's about on the ground application of forest management and water quality protection.

State implementation committees have been established in 32 States. American Forest and Paper Association members have committed to funding logger education and landowner education assistance programs. We've spent over $3.1 million in doing so. Over 20,000 foresters and loggers have been trained in sustainable forestry and implementation of best management practices in these programs, and more than 86,000 private, non-industrial landowners have been reached and provided information and professional assistance.

We hope the Federal agencies, as they look at their clean water action plan, will recognize what we're doing and will step up and help us to identify those areas that will complement these actions that are already underway. We believe that the implementation of forestry best management practices represents the solution for obtaining water quality. Eighteen States have recently reported that in assessing the compliance with best management practices across all ownerships, compliance rates were 85 percent and we can do better. As I said, we can't accept any less than 100 percent. These results are encouraging.

We strongly support funding for the States to conduct additional monitoring and to audit the effectiveness of these programs. Nu-

merous studies show that when these practices are implemented, they are effective in protecting water quality.

At this point, I'd like to shift to two issues that are within the plan with which we have some concerns. First, EPA is preparing rules for the TMDL, Total Maximum Daily Load Program. While we await issuance of these proposed rules, we're concerned about the lack of sufficient data that is used to classify many of the over 21,000 streams that are listed in this country. We are also concerned with the methods that are used to determine what sources of impairment have caused these listings. We believe any plan must include more scientific data, better data to understand water quality monitoring samples conducted over time and space, not just a one time, point in time sampling. The determination of actual maximum daily loads and allocation to stream segments is a very complex process and this process is generally impractical for addressing non-point source pollution.

I have one final point regarding EPA's request for additional authority and money to run a non-point source control program. We believe approved best management practice programs tailored specifically to the conditions and forest types of the States are the way we must go. As I said earlier, the results are impressive. BMP and compliance rates are very high. We don't need a Federal agency prescribing forest management practices from Washington. What we do need is a compliance standard evaluation program where States are auditing and monitoring and conducting research to help us in an ongoing process of continuous improvement.

As EPA proceeds to implement the actions related to the forest management in the Clean Water Action Plan, we hope the agency will recognize the ongoing efforts that are out there in the private sector and we ask them to join with us in protecting water quality.

With that, Mr. Chairman, I appreciate the opportunity to speak and will be glad to answer any questions.

Senator CHAFEE. We will reserve the questions until everyone has testified.

Mr. Dan Heilig, Wyoming Outdoor Council.

Mr. Heilig.

STATEMENT OF DAN HEILIG, EXECUTIVE DIRECTOR, WYOMING OUTDOOR COUNCIL, ON BEHALF OF THE CLEAN WATER NETWORK

Mr. HEILIG. Thank you very much, Mr. Chairman, Senator Thomas and Senator Crapo, for having me here today. I appreciate the opportunity to testify on behalf of the Wyoming Outdoor Council.

Wyoming Outdoor Council is Wyoming's oldest and largest independent conservation organization. We were established in 1967 and today have about 1,600 members in Wyoming and many other States across the Nation. WOC is also an active member of the Clean Water Network, an alliance of over 1,000 public interest groups representing environmentalists, family farmers, anglers, commercial fishermen, civil associations, rural policy and consumer advocacy groups, working together to implement and strengthen the Federal clean water policies. I am testifying today on behalf of both the Clean Water Network and the Wyoming Outdoor Council.

Wyoming is known better by its official motto as the equality State but it's also the Nation's headwaters State. The Snake River, Green, Madison, Yellowstone, Big Horn and North Platte Rivers all originate in my State high in the Rocky Mountains.

Our organizations support the Clean Water Action Plan because it focuses significant Federal resources on the most pervasive cause of water quality impairment to Wyoming, surface waters, polluted surface runoff. The Plan's emphasis on watersheds rather than discrete stream segments makes sense given that surface polluted runoff comes from many different and often diffuse sources spread out over large areas.

A key feature of the Plan is the $100 million increase in funding under section 319 of the Clean Water Act for fiscal year 1999 for locally-led restoration efforts in watersheds that do not meet clean water or other natural resource goals.

Unfortunately, not everyone in Wyoming shares my enthusiasm and my group's enthusiasm about the Plan. In February of this year, the Wyoming Association of Conservation Districts and several other parties filed a 60-day notice of intent to sue the EPA and the U.S. Department of Agriculture. They claim in their notice, among other things, that the Plan violates the National Environmental Policy Act, the Unfunded Mandates Act, the Federal Administrative Procedures Act, and constitutes a taking of private property.

For the benefit of the committee, I would like to provide a brief overview of the situation in Wyoming from my vantage point vis-a-vis the Clean Water Act and the efforts to implement it. I hope and expect that you will conclude from my testimony that a stronger Federal presence is needed in Wyoming, more oversight, more enforcement, more technical and financial assistance.

In 1996, using information provided by a variety of sources, including many Wyoming conservation districts, the Wyoming DEQ listed over 360 stream segments as water quality limited, therefore requiring watershed restoration strategies or TMDLs. However, the Conservation Districts concerned about the implications of such a large number of listed streams, began to take action and has focused its attention and resources on strategies to block the creation and implementation of TMDLs. This strategy involves removing as many segments as possible from the 303(d) list without taking corrective action and efforts to reclassify surface waters to a lesser standard to obviate the need for pollution limits.

As a result, citizens in Wyoming today are involved in a pitched battle to prevent the further weakening of water quality standards and efforts to circumvent other important provisions of the Act.

The Unified Watershed Assessment is the centerpiece of the Clean Water Action Plan. Wyoming was the only State in the Nation to miss the initial deadline for submitting a unified watershed assessment. As correctly pointed out earlier, they have in fact submitted an assessment which I believe was approved by EPA and has received some 20 percent of the incremental funding made available through section 319.

Wyoming was also the only State in the Nation that failed to identify any watersheds requiring restoration efforts. The absence of such watersheds should not be construed as evidence we have

no water quality problems in Wyoming. Rather, it reflects a concern that identifying damaged watersheds could trigger a regulatory response that includes restrictions on land use or mandatory imposition of best management practices.

Wyoming's triennial review of its surface water standards is nearly a decade behind schedule. Last completed in 1990, this 3-year review is required by section 303(c) of the Clean Water Act. As a result of the nearly 10-year delay and due to inadequate oversight by EPA, many of Wyoming's surface waters do not meet minimum Federal requirements. For example, all of Wyoming's Class IV waters, which are classified for industrial, agriculture and wildlife water uses, do not comply with the Act because they are not supported by use attainability analyses. A use attainability analysis is required by the Federal regulations before agencies can set a standard that is not protective of the basic fishable, swimmable uses prescribed in the Act.

Although the antidegradation provisions are a critical element of the Clean Water Act, Wyoming's water quality standards still lack 27 years after the passage of the Act this mandatory provision. As a result, many of its high quality, so-called Tier II waters have been unlawfully degraded by point and non-point source pollution. In some cases single point sources lacking proper effluent controls have consumed substantially all of the water bodies' assimilative capacity.

Recent legislative enactments in Wyoming block attainment of clean water goals and threaten Wyoming's primacy to administer environmental laws. Earlier this year, the Wyoming State Legislature passed Senate File 27 which requires the use of credible data to find scientifically valid, chemical, physical and biological monitoring data collected under an accepted sampling and analysis plan, including quality control, quality assurance procedures and available historical data to designate uses and to establish water quality impairment.

Because the law requires that designated uses assigned by the DEQ be backed by credible data, it frustrates the water quality enhancement goals of the Clean Water Act. Under the Clean Water, designated uses must reflect potential water quality.

Senator CHAFEE. Mr. Heilig, you'll have to wind up now fairly close.

Mr. HEILIG. You see in my written testimony a litany of problems that we're confronting in Wyoming. Before I conclude my remarks, I want to inform the committee that last night I received a fax from the chairman of the Wind River Environmental Quality Commission expressing some concerns about, first of all, not being invited to participate in today's hearing.

Senator CHAFEE. I think we did pretty well out of five, we got two from Wyoming. That's not too bad a score.

Mr. HEILIG. If there is some way to enter this into the formal record, there are some interesting observations made by the chairman.

Senator CHAFEE. You can tell that gentleman I don't know at which end of the spectrum his views are, but they've been represented by one member from Wyoming or the other. I don't think you and Mr. Beach are singing off the same sheet. Have you met?

Mr. HEILIG. I believe we have.

Senator CHAFEE. Did you come on the same plane?

Mr. BEACH. No, we didn't.

Senator CHAFEE. Thank you, Mr. Heilig.

Mr. Ross Wilson, vice president, Texas Cattle Feeder's Association.

Mr. Wilson.

STATEMENT OF ROSS WILSON, VICE PRESIDENT, TEXAS CATTLE FEEDER'S ASSOCIATION, ON BEHALF OF THE NATIONAL CATTLEMEN'S BEEF ASSOCIATION

Mr. WILSON. Mr. Chairman, members of the committee, thank you for this opportunity to testify.

I am Ross Wilson, vice president of the Texas Cattle Feeder's Association. We are a State affiliate of the National Cattlemen's Beef Association. I am also involved in the Clean Water Working Group that NCBA has recently developed in an effort to work with USDA and EPA on reasonable regulations for our industry.

Our organization represents 30 percent of the Nation's fed cattle, about 7.2 million head per year. Cattle feeders and ranchers are keenly interested in protecting the environment, but it is also crucial that we maintain a strong livestock industry that is essential to the Nation's economic stability and our rural communities.

TCFA and other NCBA State affiliates have implemented proactive environmental protection programs. Some of those would include development of pollution prevention plans, manure management manuals, environmental research with several land grant universities, actual coring of retention ponds to ensure the liners are working and the list goes on and on, employee training, et cetera. That is taking place in a number of the major cattle feeding States, particularly in Texas, Kansas and Nebraska where 70 percent of the Nation's cattle are fed.

The USDA-EPA unified strategy for animal feeding operations has a broad goal and an extremely ambitious timetable to minimize water quality impacts from animal feeding operations. Please remember the cattle feeding industry has been regulated for some 25 years. Concentrated animal feeding operations currently are held to a zero discharge standard with the exception of the 25-year, 24-hour storm event.

Senator CHAFEE. Where does that regulation come from? Is that the State?

Mr. WILSON. That's Federal but it's reflected also in many of the State regulations. That's in the EPA regulations.

We're generally located in arid regions of the country as you can see from the map that was attached to our statement. As the title states, this is a strategy for animal feeding operations and thus applies to all livestock. The problem with this one-size-fits-all approach is that pork, poultry, dairy and cattle operations are run with different management strategies. This approach failed to recognize topography and climate differences within our industry. Some cattle feed lots are located 10 miles from surface water, over a 300-foot deep groundwater aquifer; others may be 400 yards or 100 yards from a stream and over a shallow groundwater aquifer.

While these operations utilize different management practices due to their diverse risk factors, the strategy treats them the same.

Another concern is the requirement for watershed permits where clusters of feedlots are located in a potentially impaired watershed. Current law requires a site specific determination for each of the animal feeding operations before they can be regulated as a concentrated animal feeding operation.

Also of concern, the strategy calls for comprehensive nutrient management plans, not the plans themselves, but the fact that they will be required for some 450,000 animal feeding operations by 2009. This is an extremely aggressive plan with a very stringent timetable, especially in light of some of the historical implementation of programs at the Department of Agriculture.

EPA also wants States to issue permits to 20,000 concentrated animal feeding operations designated as priorities by January 2000. The models for these permits would be finalized in August of this year, leaving only 3 months for States and the EPA to issue these 20,000 permits. It is these unrealistic timetables that concern our industry as well as the limited agency resources to accomplish these goals.

One of the areas of greatest concern in the comprehensive nutrient management plan is the discussion on land application of manure. There are two categories to consider—land application on land owned or controlled by the concentrated animal feeding operation and land application on land that is owned or controlled by a third party.

In our area, and in much of the Great Plains feeding States, the manure from feedlots is sold to a third-party to contract haulers who then provide the manure and the service of land application as a part of a business agreement, i.e., the sale of commercial organic fertilizer, to farmers.

To hold the CAFO operator liable for a product that has been sold and taken miles away from the CAFO would not only be extremely burdensome and costly, it also appears to exceed the EPA's authority under the Clean Water Act. As we interpret the Act, the agricultural stormwater exclusion applies to off-site land application and places this in the non-point source category. EPA should respect this exclusion and let States remain in control of non-point sources.

Mr. Chairman, the market for manure versus commercial fertilizer is a very thin, fragile and competitive one. If EPA puts undue regulatory restrictions on land application of manure, we will see many farmers switch to commercial fertilizer.

Before I close, I have two more important points to make. First, the strategy will likely force small- to medium-sized operations to either expand or go out of business because of increased compliance costs. This should concern several of the Senators who have spoken on the floor recently about the consolidation in American agriculture.

Second, we recommend that EPA implement existing requirements before introducing a new, costly and perhaps unnecessary regulatory program. EPA, in its own document, admits that they have a very small implementation percentage across the Nation of the current permitting program for feeding facilities.

EPA must recognize that many States and most of our industry are doing an excellent job and are going beyond what the agency requires, but how can we judge the sufficiency of the current program before it is fully implemented.

Thank you and I will be happy to answer any questions.

Senator Chafee. That's constructive testimony, Mr. Wilson.

Ms. Jane Nishida, secretary, Maryland Department of the Environment.

STATEMENT OF JANE NISHIDA, SECRETARY, MARYLAND DEPARTMENT OF THE ENVIRONMENT

Mr. NISHIDA. Thank you, Mr. Chairman and members of the committee.

My name is Jane Nishida, secretary of the Maryland Department of the Environment, which is the principal regulatory agency for the environment for the State of Maryland.

I am pleased to be here today to support President Clinton's new national initiative to protect American waters and to give Maryland's perspective on behalf of Governor Parris Glendening.

After 27 years of pursuing regulatory solutions under the existing Clean Water Act, the Clean Water Action Plan represents a fresh and innovative approach which enhances the environmental options available to States to address impaired waters.

Maryland is fortunate to have one of the Nation's most outstanding resources, the Chesapeake Bay. The people of Maryland know the importance of the Chesapeake Bay and are committed to continue the excellent progress in restoring the health of the Bay. There are many waters around the country which could similar benefit from a comprehensive watershed management approach like the watershed assessment resource prioritization process and action strategies which are outlined in the Clean Water Action Plan.

The Action Plan will provide Marylanders a process for refocusing priorities and a mechanism for developing an overarching strategy to address issues which transcend various environmental laws such as the Clean Water Act, the Safe Drinking Water Act, and the Coastal Zone Management Act.

No better model exists as to how a watershed approach can serve as a catalyst for developing interrelated, voluntary and regulatory solutions to water quality management than the Chesapeake Bay Program. Through the Chesapeake Bay Program, strong Federal, State and local partnerships were achieved. Tributary teams were made up of citizens, farmers, local governments, environmentalists, scientists and various business interests to assess the waters, to identify problems and to establish goals. One of the most successful outcomes of these voluntary efforts was a goal to achieve a 40 percent nutrient reduction by the year 2000. Each tributary strategy team has identified reductions and targeted both point and nonpoint sources in each watershed.

In Maryland, we have instituted a 50–50 cost share program which has contributed over $125 million in the last 10 years to the cost of installing nitrogen removal equipment at 63 targeted wastewater treatment plants. This effort alone has reduced nitrogen to the Chesapeake Bay by 27 percent. Last year, the Maryland

General Assembly passed landmark legislation which would require nitrogen and phosphorous-based nutrient management plans on almost all farms by the year 2002 and complete implementation by the year 2005.

The Clean Water Action Plan will reinforce Maryland's efforts to clean up the Chesapeake Bay through various initiatives: No. 1, by promoting watershed assessments, by providing guidance to the State for establishing total maximum daily loads, for enhancing current funding levels for State programs such as 319, and by requiring all States to manage nutrients on farms by implementing the new CAFO or AFO strategy which would create a level playing field among farmers.

Although the Chesapeake Bay Program has focused on traditional pollutants like nutrients and toxics, in the summer of 1997, Maryland also experienced a serious health threat called *Pfiesteria*. Emerging diseases like *Pfiesteria* and the outbreak of cryptosporidium in Milwaukee illustrate the need to reinvigorate our public health program. Source protection studies under the Safe Drinking Water Act and the river basin studies in the Clean Water Act can achieve far greater results by combining them under a collaborative watershed assessment approach as encouraged under the Clean Water Action Plan.

Another approach encouraged through the Clean Water Action Plan which Maryland is aggressively pursuing involves smart growth. Governor Parris Glendening introduced landmark legislation in 1997 which discourages sprawl development by targeting public funds to existing communities where infrastructure is in place to accommodate planned growth. This program protects and preserves our green and open spaces and targets our limited public funding to existing infrastructure needs which significantly enhance our efforts to reduce pollution. Key projects targeted for receiving funds include combined sewer overflows, stormwater retrofits, sewage treatment upgrades, water source protection and wetland creation projects.

In summary, much progress has been made under the framework of the Clean Water Act, but as we move forward to the next millennium, new challenges must be met with renewed focus and commitment. Watershed assessments and permits, nutrient water quality standards, a progressive CSO strategy, implementation of the AFO–CAFO strategy, new wetlands initiatives and stricter controls on non-point source runoff, including smart growth, must be elements of our new environmental management approach.

Maryland strongly supports the watershed restoration and assessment approach outlined by the Clean Water Action Plan because by bringing together efforts to comprehensively address public health, water quality and living resources, it will enable us to meet the continuing challenges of restoring and preserving fishable, swimmable waters not only in Maryland but throughout all the waters in the Nation.

Thank you.

Senator CHAFEE. Thank you very much, Ms. Nishida.

We had testimony on smart growth and we had a witness, as I recall, from Maryland who talked about some of the steps you've been taking, for example, making sure that if you build a new

courthouse, you build it in the town instead of outside somewhere in some lovely field and lose that open space needlessly.

In your State, you have massive poultry operations. What do they say when you embrace the Clean Water Action Plan? What do they do with all the manure that emerges from these massive operations? What happens to it?

Mr. NISHIDA. As I mentioned, as a result of the *Pfiesteria* crisis that the State of Maryland suffered 2 years ago, we were able to introduce legislation and enact legislation that does require almost every farm in Maryland to adopt nutrient management plans.

Senator CHAFEE. What do they do? Do they have holding lagoons but then what happens to it?

Mr. NISHIDA. Yes. Obviously not every farm in Maryland is the same. Some farms land apply their nutrient. Under the legislation in Maryland, they will be required to reduce the amount of nitrogen and phosphorous in the manure. We have provided technical assistance to them; we have provided additional resources in terms of the NCSR and we have tried to work with them to try to develop new technology in terms of reduction of nitrogen in manure.

Senator CHAFEE. Have you succeeded?

Mr. NISHIDA. The legislation was just passed in 1998. We have been working closely with the agricultural community to address it.

Senator CHAFEE. Is there a certain time to meet these deadlines?

Mr. NISHIDA. Yes, 2002 to adopt the plans and 2005 to implement them.

Senator CHAFEE. I think Maryland certainly has a wonderful record as far as environmental protection goes. I think Governor Glendening has been a leader in all that.

Mr. Beach, you didn't have many good things to say about the Plan and yet you heard the prior testimony of the Secretary of Agriculture and the head of the EPA, saying they sought cooperation, that one-size-doesn't-fit, that they worked with the locals. What's been your experience on that score?

Mr. BEACH. My experience is that the Plan was crafted within the Beltway in a very short period of time. Yes, they flew around the country and offered about 11 meetings. Most of those meetings were by invitation, not a public forum. Fortunately, we were invited to attend. We were critical of the plan at that time because it wasn't bottom up, it was top down.

I'm not sure that our time there was worth the effort because I didn't see much change in the final that came out. I guess that's my perspective and hopefully that answers your question.

Senator CHAFEE. Mr. Heilig indicated that more can be done, he thought, by the State in Wyoming. Do you have any comments on his testimony?

Mr. BEACH. I would say that if you go to any State in this Nation, you will find stakeholders who feel the State is not doing enough, you will find stakeholders who feel they are doing too much. So I think Mr. Heilig pointed out some of the dirty laundry we have in Wyoming and there are some things we need to do. No doubt about it, there's a lot there to do.

What is fundamental though that I think explains some of the indifference that's going on in Wyoming is that you have to reach people. If we're to solve the problem, if we want to solve this na-

tional mission you have of clean water and you want to tackle nonpoint sources of pollution, we have to reach people, we have to motivate people and we have to make it meaningful for them to do something.

That will take time. You will not just send a rule out that says everyone will do this. I think that explains the difference, sir.

Senator CHAFEE. Mr. Godbee, I listened to what you said and it seems to me the folks who belong to your association—and I've heard the radio ads too—the companies have to adhere to the best management practices as you set them forth, and if they don't, they get thrown out. You indicated that you thought those best management practices were what's required. What happens when you talk with the Agriculture Department on these best management practices?

Mr. GODBEE. As I understand it, what happens when we talk with the Agriculture Department, most of our interface and best management practice is with the State Environmental Protection Divisions and with the State Forestry Commissions, indirectly with the Department of Agriculture. Department of Agriculture interaction would come through the Forest Service participation at the State level in the development and implementation of best management practices. Our interaction with USDA specific is pretty limited.

Senator CHAFEE. I see. How do you get along with the States? If they belong to your association, the company, that's good enough? In other words, do they give you some credit for the best management practices you've adopted?

Mr. GODBEE. It varies from State to State. State best management practice programs are developed for the specific forest practices, geological conditions, climatic conditions, the size of the industry and the types of industries within the States and we go from State programs that are fairly proscriptive to State programs that are completely voluntary in nature.

Our relations with the States are generally very good. My experience is primarily within the Southeast. In the State of Georgia, we worked very carefully over the last few years in the development of new best management practices with the State Environmental Protection Division, the Wildlife Resources Division, the local Nature Conservancy, conservation groups, forestry industry and State government all worked hand in glove in order to develop a new program, very strong working relationships.

Senator CHAFEE. My time is up.

Senator Thomas.

Senator THOMAS. Mr. Beach, Wyoming has primacy in the administration of EPA, is that correct?

Mr. BEACH. Yes, we have primacy for the Surface Water Quality, NPDES Program, yes.

Senator THOMAS. What's been your experience in terms of flexibility and so on as you exercise this primacy in carrying out the regulations?

Mr. BEACH. I wouldn't say there's a lot of flexibility. What I find is most people, if you take the Clean Water Action Plan, they carry it around like the Bible and they flip it open. Action item so and so says to do it this way. I'm talking about the staff level now. So

if you want flexibility, you almost have to elevate that to management level to get that consideration. Many of them strictly follow what is put into their instructions and that's the limit of their flexibility.

Senator THOMAS. If the State doesn't administer it, then they lose the primacy; EPA comes in and does it, isn't that correct?

Mr. BEACH. That's correct.

Senator THOMAS. Ms. Nishida, I listened to your progress. Why would you want the Federal Government to become involved? It sounds like you've been very successful. What is it you expect them to add to what you're doing?

Mr. NISHIDA. Again, the reason we're supporting the Clean Water Action Plan is because it is consistent with the approach Maryland is taking. We believe that EPA has provided flexibility to the States. We understand that one-size-doesn't-fit-all and I think EPA recognizes it as well.

The advantage of obviously the Clean Water Action Plan is it requires all States, given their unique circumstances, to develop a level playing field so that all waters—many of them are interstate waters—that there will be national standards and national protections for all our citizens.

Senator THOMAS. And there are not standards on interstate movement?

Mr. NISHIDA. Again, each State takes different approaches. One obviously is on nutrient management. Maryland took I guess a leadership role in adopting our nutrient management legislation last year. That is not something that most of the country has done.

Senator THOMAS. So your main thing is you want others to do the same thing you're doing?

Mr. NISHIDA. Again, we believe there should be minimum guidelines to the States. There are certain essential elements in the CAFO strategy like public participation, enforcement standards, but we also believe States need the flexibility through what can be determined by them to meet those standards.

Senator THOMAS. And you're comfortable there will be flexibility here?

Mr. NISHIDA. I know there have been concerns raised with the CAFO strategy among many States. My Governor is the chair of the Natural Resources Committee and he has initiated conversations with EPA and with USDA through NGA to work out those issues such as the definition of functional equivalent programs. So we are engaged in dialog with EPA.

Senator THOMAS. Mr. Heilig, you indicated in your statement you had submitted hundreds of pages of written comment in the public comment period. When was the public comment period?

Mr. HEILIG. I believe it was opened in late 1997 and extended on into early 1998.

Senator THOMAS. An open comment period for everyone to comment like in NEPA?

Mr. HEILIG. No, it was not a comment period that one would associate with a NEPA process; it was a notice in the Federal Register and many groups did respond, including the National Association of Conservation Districts during that period.

Senator THOMAS. You mentioned the lawsuit being filed and so on, not just Wyoming but a number of States and a number of organizations. If this has been accepted and signed on by everyone, why do you think that's happening?

Mr. HEILIG. I think frankly, Senator, there's quite a bit of misunderstanding about what the plan is proposing to do. I've read through it carefully now twice and many of the initiatives, while important, are somewhat innocuous. For example, there is an action item that would require EPA to improve its website to better facilitate the dissemination of information to the public. A number of initiatives like that, increased monitoring, research and education, most of which would have absolutely nothing to do with the States, would put no burdens or mandates on States or local governments.

Senator THOMAS. And you think other people don't understand that apparently?

Mr. HEILIG. I know from my discussions with people who have shared concerns that they have not taken the time to read the Plan. Again, I have been through it carefully now a couple of times. There are action items that will lead to rulemaking and as Administrator Browner stated earlier, those will be subject to EPA rulemaking and Clean Water Act requirements.

Senator THOMAS. Some of them, for example, indicate that only a very small percent, 3.5 percent of the assessed streams, go in as the scientific base for this. Isn't that troublesome?

Mr. HEILIG. I think it suggests we need to do a better job monitoring and assessing the Nation's waters.

Senator THOMAS. You mentioned the TMDLs. What really happened in Wyoming, as I recall, is that these streams were listed without any scientific basis. Some of them weren't even in the right county.

Mr. HEILIG. There were some mistakes made.

Senator THOMAS. There were lots of mistakes made.

Mr. HEILIG. And the science varied highly. Many of the streams though were placed on the list because of information provided by the Conservation Districts. The folks in Wyoming refer to these listings as drive-by listings where one would look out the window——

Senator THOMAS. And some of them were because they reduced it.

Mr. HEILIG. But many others were based on very good scientific evidence provided by Fish and Wildlife Service, Wyoming USGS.

Senator THOMAS. Mr. Wilson, do you think the runs on the confined cattle feeding are pretty simple and innocuous and don't amount to much?

Mr. WILSON. Not at all, Senator. Look first at the animal feeding operations which in the document, EPA proposes to regulate with a voluntary type of approach and says "implement a comprehensive nutrient management plan," but then insinuates very strongly later on in the document that if you do not do that on a voluntary basis, then you will come under some type of regulatory proposal in the future.

Later on in the document when they talk about specific strategies for implementation, they talk about changing the definition of

a CAFO which would pull in animal feeding operations today into a regulatory-based program.

Another concern we would have, a significant concern that's been previously discussed, is the lack of resources at the Department of Agriculture. In Texas over the last several years, the NRCS Regional Office has lost 34 percent of their manpower to work with producers, to implement programs like this. We seriously question whether the commitment in funds and/or manpower is there to get this implemented.

Senator THOMAS. Mr. Chairman, I want to thank all the witnesses for being here. I think it's been very helpful. I am concerned that we're told by the EPA that there's 110 propositions out there, that each of them as they are implemented will go through a process. I frankly am not persuaded that is going to be the case. I think you'll see many of them implemented without any congressional authority or without any public comment. That's one of the concerns I have.

Senator CHAFEE. I think the point Mr. Wilson made about the reduction in manpower at the Agriculture Department, what were the figures you gave a minute ago?

Mr. WILSON. Yes, sir. USDA NRCS regional office in Texas.

Senator CHAFEE. That really worries me because one of the inducements of this whole program is meant to be not only some money but they said even more important than the money is the technical assistance, but if they don't have the people, I don't know how they're going to give that.

Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman. I had to step out for a minute, so if the question I ask was just asked by Senator Thomas, please excuse me.

Mr. Wilson, I want to direct my first question to you. You were here during the testimony of Administrator Browner and Secretary Glickman, were you not?

Mr. WILSON. Yes, sir.

Senator CRAPO. As I took their testimony, they describe a situation in which we were going to have a very locally-oriented, bottom up type of development of standards, working on a watershed basis and that there's going to be a lot of flexibility at the State and local level. Is that your experience with the process to this point in time?

Mr. WILSON. No, sir. The document does talk about flexibility and voluntary versus regulatory, but also we must remember that the States are going to be held to implementing EPA standards or they run the risk of losing the delegation of the State program.

In dealing with some of the EPA regions, we also don't necessarily see the flexibility. The 1,000 per animal unit permitting threshold that moves you from an animal feeding operation to a concentrated animal feeding operation has been proposed for change.

Also, the Administrator talked about flexibility in some arid regions of the country. I believe she used your State for an example and indicated that you might not even have to have a permit. Today there exists what we call a CAFO exclusion within the regulations that says if you only discharge under certain circumstances, you don't have to have a permit. EPA, in its strategic initiatives

later on in the document, proposes to eliminate this exclusion. So I'm not sure the flexibility will be there.

Senator CRAPO. A lot of those concerns have been expressed to me and I assume you heard the Administrator say something like 95 percent of the operations would not be covered. As you review the Clean Water Action Plan and the CAFO requirements, do you reach the same conclusion?

Mr. WILSON. It will be a high percentage that will first have an initial opportunity to be regulated on a voluntary basis but again, our concern is they will ultimately be forced into a regulatory approach.

Our other major concern, as outlined in my testimony, is that we have some very good standards in place today. Our State, our region, in fact, our Region VI permit has been cited as a model for CAFO permits around the country but yet this strategy proposes to raise some of those technical standards. We seriously question, based on EPA's data, that only 25 to 30 percent of the concentrated animal feeding operations around the Nation have permits under the current strategy. We seriously question how you can judge the completeness of today's requirements without seeing those are fully implemented.

On a parallel track, EPA has proposed an expanded and enhanced compliance and enforcement program. We support that. Let's see what we have today with the current standards before we raise the bar.

Senator CRAPO. Mr. Beach, I'd like to direct a few questions to you as well. You are the Administrator of the Wyoming Department of Environmental Quality?

Mr. BEACH. Yes, the Water Quality Division of the Department.

Senator CRAPO. In Idaho that department is the one that administers—for example, I assume Wyoming has primacy under the Clean Water Act?

Mr. BEACH. Yes.

Senator CRAPO. So you would be the department that has the responsibility for administering that Act under the State primacy provisions?

Mr. BEACH. That's correct.

Senator CRAPO. As we deal with the question, getting back to the testimony of the Secretary and the Administrator, of flexibility and the issue of whether the States, under their primacy, will be able to have the flexibility to deal with the different needs in each watershed as I discussed with Senator Browner in my questions, do you see that under the Clean Water Action Plan as you're seeing it unfold, that type of flexibility true does and will continue to exist at the State level?

Mr. BEACH. My testimony was that I don't see the degree of flexibility that we need at each State level to give to the Federal Government the kind of program that will work in each watershed throughout the different basins in Wyoming.

If you ask me to give you a program, I might give you a program by basin in Wyoming of how I will approach clean water because I have to do it that way to reach those people who will be influenced by that program.

Senator CRAPO. But you don't have that flexibility?

Mr. BEACH. I don't think I have that flexibility now, no.

Senator CRAPO. So even though the Federal Government could say we are letting the State have primacy and we are letting the State address this on a watershed by watershed basis, what I understand you to be telling me is that because of either the withdrawal of funds or the requirements of regulations, whatever, the pressures are there for the State to follow pretty rigid rules even though the State is administering it?

Mr. BEACH. Right. What actually happens is you come out with a document endorsed by the President that says, here's some great goals we want to achieve. None of us disagree with those goals—we want clean water, we want to approach it holistically. The next thing is that out of that then rolls out all of these individual initiatives and those become more and more prescriptive. Finally, they say, Gary if you want the money, you've got to do these things and this is exactly how you've got to do it and this is when you've got to do it.

Senator CRAPO. If the State chose to not accept the Federal funding, would it be able to avoid the Federal mandates? Would you still have your hands tied in much of the administration which you are required to do?

Mr. BEACH. I assume that in the case of the Unified Watershed Assessment, we chose to do ours a certain way which was to take our TMDL program and say that's working for Wyoming, we think that achieves your results. That's what we want to do.

Initially, the Administration said, no, that doesn't meet our requirements for a unified watershed assessment and because of that, you're not going to get any of the incremental funding. Now they have come back and begrudgingly accepted that and we are getting 20 percent of the funds. So we're going to lose the other portion of the funds because we did not categorize our watersheds on a unit basis and Category I, II, III or IV as instructed. We didn't do that. Because we didn't do that, we didn't get the Federal funds.

Senator CRAPO. Do you believe the State of Wyoming's failure to do that caused any damage to the quality of the water?

Mr. BEACH. I think anytime you deprive a State of resources, you damage the resources.

Senator CRAPO. So the failure to allow the State access to the Federal funding is going to have an impact on water quality in Wyoming?

Mr. BEACH. Yes. I think there is a direct tie there.

Senator CRAPO. But if the Federal Government had allowed the State to do it its way, would there have been a negative impact on the water quality in Wyoming?

Mr. BEACH. No, I don't believe so. I believe the program we offered as a substitute to their prescription would have achieved the same results.

Senator CRAPO. So if I understand your testimony correctly, what you're saying is that there wouldn't have been an impact on the water quality, maybe even a better impact if the State had been allowed to do it its way, and yet the result of the Federal mandates that the State has to deal with is that either you have to shift to a different program, which you've chosen not to do, or you have to

lose Federal funding which will then have an impact on the water quality in a negative way?

Mr. BEACH. That's correct. We had to make that choice and we realized we may lose access to Federal money by not shifting to their program. The compromise was to betray our citizens where we have told them this is the program we're going forward with.

Senator CRAPO. It seems to me there's kind of an irony in that the State has to either submit itself to a rigid, bureaucratic, Federal mandate or put at risk Federal funding that will help in protecting its own water quality, so the water quality of the State is actually the pawn in this decision the State has to make between retaining its own control or submitting to Federal mandates.

Mr. BEACH. That's how I view it, Senator.

Senator CRAPO. Thank you. I have no further questions, Mr. Chairman.

Senator CHAFEE. I must say that I don't find it so shocking. As I understand what you're saying Mr. Beach, if the State adheres to the Federal guidelines, if you would, they get some money. If they don't, they don't get the money. So the State makes a decision. I must say I'm not sure I find that——

Senator THOMAS. Mr. Chairman, I don't think that's quite what we're saying. We're saying here is the result, here is the goal and if you achieve that goal in a different way, then you shouldn't be deprived of the money.

Senator CHAFEE. I agree with that.

Senator THOMAS. We're saying you shouldn't have to necessarily do it in exactly the same technique.

Senator CHAFEE. What you're saying is there ought to be more common sense in their review of what the State has done?

Senator THOMAS. Or goal-oriented.

Senator CHAFEE. Yes, goal-oriented. I think those are the words.

Just a statistic here that indicates that these problems in agriculture aren't going to get less, they're going to get increasingly challenging, between 1978 and 1992, the average number of animal units per operation increased. That's 14 years. The average number of animal units per operation increased by 134 percent for hogs and 176 percent for egg-laying poultry.

According to the 1997 census, agricultural census, 3.8 percent of the farms, call it 4 percent of the farms are responsible for 56 percent of all agricultural production. That's astonishing. Let me ask you experts, what do you say to that, Mr. Beach? Do you think that's a trend that probably will continue?

Mr. BEACH. The growth of the hog industry?

Senator CHAFEE. Yes, the growth per unit, farm unit, for cattle, for poultry, for whatever it might be.

Mr. BEACH. Yes, I think that's a reality, whether you look at dairy farms——

Senator CHAFEE. Whether you like it or not, it's happening?

Mr. BEACH. It's happening and that's the only way you survive is to become a big business and not a small business.

Senator CHAFEE. What do you say Mr. Wilson?

Mr. WILSON. I would agree, Mr. Chairman, that it will likely continue and one of the things driving that are these potentially higher environmental compliance costs.

Senator CHAFEE. I think it's disturbing in your testimony that the increased compliance costs could force or will force small- and medium-sized operations to go out of business. What do you call a small or medium operation, just out of curiosity?

Mr. WILSON. I think if you look at the regulatory threshold of 1,000 animal units.

Senator CHAFEE. You're talking cattle?

Mr. WILSON. It's 1,000 animal units regardless of the species. It happens to be 1,000 head of beef cattle. I believe it's also 2,500 head of swine.

Senator CHAFEE. What would that be for?

Mr. WILSON. That moves you from the animal feeding operation category into the mandated regulatory concentrated animal feeding division.

Senator CHAFEE. How many in a small operation or medium?

Mr. WILSON. It varies. You get into the uniqueness of the different areas of the country. For example, in Texas our average size cattle feed yard is probably going to be 20,000 to 30,000 head. If you put that same operation on the East Coast, it would be considered huge. Given the climatic situation and depending upon its location, you have some very unique management challenges.

Senator CHAFEE. Senator, do you have anything further?

Senator THOMAS. No, sir, I don't.

Senator CHAFEE. I want to thank this panel very much, each of you, Mr. Beach, Mr. Godbee, Mr. Wilson, Mr. Heilig and Ms. Nishida. You've been very candid and helpful to us. We appreciate it.

Thank you very much.

[Whereupon, at 12:28 p.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the Record follow:]

STATEMENT OF HON. CRAIG THOMAS, U.S. SENATOR FROM THE STATE OF WYOMING

Thank you, Mr. Chairman, for holding this oversight hearing. As one of the members who requested this hearing, I appreciate the opportunity to examine the Clean Water Action Plan, especially since this initiative was created without input from Congress, nor was it subjected to assessments under the National Environmental Policy Act (NEPA). I am especially pleased to have both the Secretary of Agriculture and the Administrator of the Environmental Protection Agency (EPA) appearing before us today. I also want to welcome the witnesses for our second panel. Certainly, having two witnesses here from Wyoming reiterates the importance of this issue to my home State.

Mr. Chairman, none of us will disagree with the importance of improving our Nation's water resources. In Wyoming, the tourism industry depends upon a pristine environment. We have streams that boast world-class trout fishing, so it is imperative that we protect our water resources. Let me be very clear on this, I support efforts to improve water quality, but I have substantial concerns with the Administration's approach to this problem. As many of you know, I strongly oppose the use of Executive Orders to launch efforts as broad and over-reaching as the Clean Water Action Plan—it is essentially 111 "key actions" affecting Federal agencies and State and local governments. Since the Clean Water Act leaves nonpoint sources largely unregulated, I believe this committee needs to ensure that the Action Plan does not become a mechanism for agencies to overstep their congressional authority.

In addition, I question if the Clean Water Action Plan truly targets the problem it is intended to solve—reducing nonpoint source pollution. The justification for the Plan is based upon the EPA's own National Water Quality Inventory, which is a summary of State's 305(b) reports. Scientific assessments by the U.S. Geological Survey have indicated that the National Water Quality Inventory is so severely flawed and scientifically invalid that it could not be used to summarize water qual-

ity conditions. The problem with the Inventory is that States use different measures to determine water impairment, but yet, data is compiled into one report. A report that is somehow supposed to summarize the status of our Nation's waters. To me, this comparison makes little sense.

Earlier this year the General Accounting Office (GAO) released a report that criticized the EPA's assessment of nonpoint source pollution problems. Specifically, the GAO highlighted concerns relating to: (1) how the Agency identifies waters polluted by nonpoint sources, (2) the need for more data to develop cost estimates, (3) and the extent to which the Federal Government contributes to water pollution. Further, the GAO cautioned that the methodology used in determining both water impairment levels and impacts from nonpoint sources was underfunded and consequently, results were possibly inaccurate.

These findings greatly trouble me. I understand the challenges Federal entities face in allocating limited financial resources. However, it seems to me that if the goal is to improve water quality, the Clean Water Action Plan should have first accurately identified the causes of the problem. Without using sound, credible science to assess the health of our waters, how can we be sure that this initiative, and the tax payer's dollars to support it, will reduce pollution? We already have programs in place, such as the Clean Water State Revolving Fund (CWSRF), that successfully reduce pollution problems and in my view, the Administration's proposed budget cut does little to promote clean water. What is the harm in wanting to know the scientific basis for the Action Plan and more importantly, why is this request deemed as somehow being opposed to cleaning up our environment? After collecting scientific data, if nonpoint sources are found to be a significant obstacle to clean water, then I would urge Congress and the Administration to make funding for voluntary and incentive-based programs, a priority, as was done with point sources, to assist landowners with pollution reduction efforts.

My interest in today's hearing will also encompass financial burdens being placed on States, local communities and individual land owners. This issue is not unique to Wyoming and I am concerned that States are now spending their time and resources in attempting to comply with the "key actions" called for in the Plan, instead of on protecting water resources. Again, my belief is that these types of problems are best dealt with at a local or State level, rather than federally mandated. Certainly, we all have a responsibility to improve water quality, the question is how to approach the problem without placing an unfunded mandate on our States and landowners.

Thank you Mr. Chairman and I look forward to hearing from our witnesses.

STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

We recently celebrated the 25th Anniversary of passage of the Clean Water Act. Since that time, we have made great strides in turning once polluted lakes, rivers, and streams into places that we can enjoy.

We are making progress in identifying impaired waters, and developing watershed-based approaches to protecting our valuable natural resources. In 1975, 60 percent of our waters did not meet water quality standards. Today only 40 percent fail that test.

One of New Jersey's own water bodies to benefit from the Clean Water Act is the Raritan River in the central part of my State. The Raritan is New Jersey's second largest river system. Thanks to the Clean Water Act, this river is cleaner today than it has been in nearly a century. Raw sewage discharges are no longer permitted and industrial dumping has been held in check. Yet the river still remains heavily polluted with contaminated sediments choking off marine life. Polluted runoff and landfills still threaten the river basin. Large volumes of PCBs and dioxin prevent fishing and swimming in the River.

The Raritan has been contaminated by ten Superfund sites, including one that Administrator Browner's agency identified and placed on the National Priority List just last year. The Superfund program is helping EPA clean up these toxic sites and restore this once thriving river. So I would add that the Superfund program is surely a large part of the Clean Water Action Plan.

I applaud the Administration's commitment to redouble our efforts on behalf of cleaner, safer water for all Americans. Under the Clean Water Action Plan, the Administration has identified numerous environmental threats that still need to be addressed. Both the Environmental Protection Agency and the Department of Agriculture have done a remarkable job in targeting those areas that need the greatest attention.

I want to highlight just some of the areas in addition to Superfund, where this Administration deserves tremendous credit:

- Reducing polluted runoff from urban areas.
- Improving agricultural practices.
- Identifying contaminants in our drinking water like those that threaten communities like Toms River in my State.
- Protecting the public from water-borne illnesses at the beach.

In 1997, there were over four thousand individual closings and advisories at U.S. ocean, Great Lakes, and freshwater beaches. The vast majority of these incidents were attributed to monitoring programs that detected bacteria levels exceeding beach water-quality standards.

In addition to causing beach closures, every year, disease-carrying pathogens cause thousands of illnesses including gastroenteritis, dysentery, hepatitis, respiratory illness, and ear, nose, and throat problems.

With its Beach Action Plan, EPA is assisting the States in improving beach water quality. This is a good start.

As you know, Mr. Chairman, in every Congress since 1993, I have introduced legislation to improve citizens Right-to-Know about the contaminants that could turn their day at the beach into a visit to the doctor.

My bill, cosponsored by fellow committee members Senators Lieberman and Boxer, would require States to develop and implement water quality criteria, monitoring, and public notification procedures for beach goers.

This year, the House of Representatives wisely decided to pick up on my idea and pass a bill that very closely resembles mine. Perhaps they wanted to provide me with a legacy when I leave here. But whatever the reason, I thank them for their hard work.

I hope that the committee will take up the legislation I introduced and I hope we can have a lively debate on the merits of improving beach water quality. Thank you.

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Mr. Chairman, members of the committee, thank you for the opportunity to speak on the issue of clean water, an issue that is very important to the State of Florida.

The Clean Water Action Plan presents a multi-agency approach to water quality enhancement through watershed protection. The objectives of the program are to improve information and citizens' right to know, address polluted runoff, enhance natural resource stewardship, and protect public health. The State of Florida has used a watershed approach to water quality management since 1987, when the Florida legislature established the Surface Water Improvement and Management (SWIM) program. The SWIM program is implemented by Florida's Water Management Districts, and sets priorities for protection and restoration of the State's waters. Information from the SWIM program was combined with information from other sources, including the Natural Resource Conservation Service's Environmental Quality Incentives Program, to complete the Unified Watershed Assessments requested as part of the Clean Water Action Plan.

The Southeast Florida watershed, including the Everglades and their associated drainages, was identified by the Unified Watershed Assessment as a Category I Watershed Most in Need of Restoration. The Everglades watershed is already the focus of several restoration projects. In its historic natural condition, the basin was a vast, continuous wetland. Water flowed slowly in a shallow sheet from Lake Okeechobee south to Florida Bay. The basin has been extensively modified from its historic condition, with thousands of miles of canals and levees constructed over the last century. The area is currently the subject of the Central and Southern Florida Project Restudy, conducted by the Corps of Engineers together with the South Florida Water Management District, as well as other Federal, State, and local restoration efforts. The interagency partnerships developed in conjunction with the Everglades restoration efforts are examples of the type of cooperation called for in the Clean Water Action Plan.

I understand that some States have concerns about the implementation of certain aspects of the Clean Water Action Plan, and I look forward to hearing the comments of our witnesses today.

STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Thank you Mr. Chairman for holding this hearing to review the progress made during the first year of implementation of the Clean Water Action Plan. The Clean Water Action Plan, which was developed during the 25th anniversary of the Clean Water Act, in 1997, is an exciting strategy. It represents a nationwide commitment to redouble our efforts to protect America's rivers, streams, lakes, and estuaries for the fish, wildlife and people who depend on them. Few would dispute that we made tremendous strides in improving and protecting the quality of America's waters between 1972 and 1997. With that 25 years of experience and the Clean Water Action Plan as a blueprint for our future water quality improvement efforts, I believe we can achieve the fishable and swimmable" waters goal of the Clean Water Act.

Many aspects of the Clean Water Action Plan are encouraging. For example, the watershed-based approach to assessing and protecting water resources is an important step toward comprehensive and efficient use of conservation resources. In addition, the broad participation of citizens, industry, and local, State and Federal Governments in the development of unified watershed assessments provides a model of how stakeholder collaboration can help define and solve challenging environmental dilemmas.

The State of Connecticut has made great strides in improving water quality since passage of Connecticut's Clean Water Act in 1968. The ongoing recovery and improvement of Long Island Sound is one great success story. However, Connecticut is experiencing an era of diminishing returns because many of its traditional programs have solved the most obvious water quality problems. We now must balance continuing needs of controlling point sources of pollution and improvements of wastewater infrastructure, with new programs that address runoff from more dispersed nonpoint sources.

One example of a straightforward problem that requires much more attention is the water quality impairment caused by combined sewer overflows. Combined sewer systems exist in many of Connecticut's older cities including Norwalk, Bridgeport, New Haven, Hartford, and Waterbury. Although the Connecticut Department of Environmental Protection and municipalities are making progress on this problem, a final solution will require much more time and money. It is important that we recognize that we cannot abandon our commitment to the ongoing efforts that have gotten us this far. Rather we must build on them and solve the remaining problems as quickly and cost-effectively as possible.

Nine Federal agencies are, and should be, involved in the Clean Water Action Plan. For the Clean Water Action Plan to fulfill its promise, it is imperative that these Federal agencies are funded so that they can coordinate their efforts, fulfill their current obligations and meet their Clean Water Action Plan obligations in a timely manner. For example, the vitally important Connecticut DEP–U.S. Geological Survey (USGS) cooperative stream gauging and monitoring program is in a sustained decline due to insufficient funding of the USGS stream gauging program. If we do not provide the funding so that agencies can make the Clean Water Action Plan a priority, we will be wasting an opportunity to take our water quality protection and enhancement efforts to the next level.

In October 1998, the Connecticut Department of Environmental Protection (DEP) and the USDA Natural Resource Conservation Service (NRCS) completed the Unified Watershed Assessments" of the State's surface water resources as required by the Clean Water Action Plan. In addition, Connecticut DEP developed a State watershed management implementation strategy launched pilot watershed management projects for the Quinnipiac, Naugatuck, Norwalk, and Sasco Creek watersheds. Implementation of the Clean Water Action Plan is underway and working in Connecticut.

Thanks to the hard work of many dedicated participants and the vision provided by the Clean Water Action Plan, our second generation of water quality improvement efforts hold great promise. I applaud the efforts that have been made so far and will work to help ensure that Congress makes the sustained investment necessary to put the Plan into practice.

STATEMENT OF CAROL M. BROWNER, ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman and members of the committee. I am Carol M. Browner, Administrator of the U.S. Environmental Protection Agency (EPA). Thank you for your invitation to be here today and for the opportunity to discuss the Clean

Water Action Plan announced by President Clinton and Vice President Gore in February of last year.

The Action Plan is a comprehensive blueprint for restoring and protecting the Nation's water resources. It truly charts a course for fulfilling the original goal of the Clean Water Act: "fishable and swimmable" waters for all Americans.

I. WATER QUALITY PROBLEMS TODAY

Past Progress and Current Problems

In the first quarter century of implementing the Clean Water Act, America has made tremendous strides in cleaning up its rivers, lakes, and coastal waters. In particular the Clean Water Act has stopped billions of pounds of pollution from fouling the Nation's water, greatly increasing the number of waterways safe for fishing and swimming.

In communities across the country, restoration of local water resources has had dramatic environmental, recreational, aesthetic and economic benefits. Restoring clean water has generated jobs and economic growth in recreation (including swimming, boating, sport fishing and hunting), tourism, and commercial fishing and shellfishing industries, among others.

Despite great progress, nearly 40 percent of the Nation's waterways assessed by States are still unsafe for fishing and swimming, and between 70,000 to 90,000 acres of wetlands are lost each year. Although pollution from factories and sewage treatment plants, soil erosion, and wetland losses have been dramatically reduced, the States identify runoff from city streets, rural areas, and other sources degrading the environment and putting drinking water at risk. We continue to lose wetlands each year. Although the causes of some problems have been abated, the consequences may still persist. Much of our historical wetlands have been lost, and sediments contaminated with toxic runoff and discharges decades ago now contaminate fish and complicate dredging our ports.

After careful consideration of these problems the Administration concluded that without the Clean Water Action Plan, implementation of the existing clean water programs would not stop serious new threats to public health, living resources, and the Nation's waterways, particularly from polluted runoff. These programs did not have the adequate strength, resources, and framework to finish the job of restoring rivers, lakes, and coastal areas.

Addressing Today's Problems: Overview of the Clean Water Action Plan

In order to energize and re-orient existing programs to address current and future pollution problems, and thereby fulfill the original goals of the Clean Water Act, USDA and EPA, along with the Department of the Interior, the Army Corps of Engineers, and the Commerce Department's National Oceanographic and Atmospheric Administration, as well as supporting agencies created the Clean Water Action Plan (*The Clean Water Action Plan: Restoring and Protecting America's Waters*, February 1998).

The Action Plan aims to achieve healthy waters through collaborative public and private sector efforts on a watershed basis, as well as through strengthening and expanding our existing clean water programs, to:

- protect public health;
- enhance natural resources stewardship;
- strengthen polluted runoff standards and controls; and
- improve information and citizens' right to know.

As a framework for this collaboration, the Action Plan was developed through a cooperative budget planning effort USDA and EPA, and the other lead agencies. The process for developing the Action Plan included a Federal Register notice soliciting public comment on what should be in it. The Federal agencies then held three "listening sessions" around the country to elicit public comment, and the agencies also had numerous informal meetings with a broad range of groups, including States, tribes, local governments, non-governmental organizations, and others.

In my remarks today, I want to highlight two aspects of the Action Plan that I believe exemplify the vision it provides for the diverse efforts to restore and protect water quality into the 21st century:

- the commitment to restore and protect water resources on a watershed basis; and
- the commitment to intergovernmental partnership in meeting water resource goals.

I also want to briefly raise some of our accomplishments over the past year and the major challenges we have before us.

II. CLEAN WATER ACTION PLAN: KEY THEMES

A Watershed Approach: Led by States, Tribes, and Local Organizations

The causes of pollution problems affecting our waters can vary greatly from region-to-region and from watershed-to-watershed. A "one-size-fits-all" approach is not the most effective strategy for solving many of today's water resource problems.

A "watershed approach" to implementing clean water programs is at the heart of the Action Plan. The Plan lays out a vision for Federal agencies, in conjunction with State, tribal, local governments, and the private and public sectors, to tailor their efforts to the particular needs of individual watersheds, assessing the full range of clean water problems, and identifying solutions. Locally led conservation, nurtured and supported by Federal and State resource conservation agencies, is a good example of a "watershed approach" envisioned by the Action Plan.

In addition, the Action Plan tackles problems, such as nutrient over-enrichment and sedimentation, that are widespread and contribute to interstate impairments. For each State or watershed council to try to tackle them in isolation would be neither efficient nor effective. Existing national authorities and programs need to help localized efforts address these problems, for example, through technical assistance, research, demonstrations, monitoring, public information, development of water quality criteria, effluent guidelines and permitting strategies. The Action Plan calls for strengthening these national tools.

Watershed Restoration

The Action Plan envisions States and Tribes playing the lead role in conducting assessments to determine which watersheds are not meeting clean water goals, and then in identifying watersheds that are priorities for restoration through the development of Watershed Restoration Action Strategies. The Action Plan calls for broadly participatory efforts to address place-specific problems and define the unique solutions appropriate for each watershed. These watershed strategies are not to be top-down, Federal strategies. Existing Federal programs can then be focused on Watershed Restoration Action Strategies. For example, at EPA we will target the incremental Section 319 funds (an additional $100 million) to support development and implementation of Action Strategies in priority watersheds.

Watershed Management

Successful models of public-private partnerships for watershed management can be found around the country in hundreds of smaller watersheds, as well as in such nationally-visible places as the Chesapeake Bay or the Great Lakes, and in more than 2 dozen estuaries designated under the National Estuary Program established by section 320 of the Clean Water Act. In EPA's Adopt-Your-Watershed program, we have identified more than 4,000 groups working to protect and restore their watersheds.

For all watersheds, regardless of their degree of impairment, the Action Plan identifies ways in which the Federal agencies can help locally-led groups work to help ensure clean water and a healthy watershed. For example, the internet-based Watershed Information Network (WIN), a coordinated, multi-agency undertaking, will allow the public to access consolidated watershed information. At EPA we are also awarding "watershed assistance grants" to some community organizations, similar to the technical assistance grants under the superfund program, to support local involvement in designing and implementing solutions.

Inter-governmental Partnerships

The second critical aspect of the Action Plan which I'd like to emphasize is the inter-governmental coordination that it has engendered. We are working smarter, avoiding duplication, and getting the most out of programs and resources thanks to the Action Plan.

Cooperation Across Federal Agencies

Coordination across the Federal agencies has been extraordinary in both the development and implementation of the Action Plan.

At the national level, teams composed of representatives from various agencies cooperate closely to carry out the Plan's action items, and senior managers of the nine Action Plan partner agencies provide oversight and direction to the overall Action Plan implementation. These managers and staff are becoming increasingly knowledgeable about each others' programs, and they are making decisions about how their programs can work together cooperatively.

In addition to this interagency cooperation at the national level, 12 Federal Coordination Teams have been established at the "regional" level, with representatives from the nine partner agencies, and others, to help in Action Plan implementation.

Their role is two-fold: (1) to help coordinate Federal activities in specific watersheds and (2) to identify resources (funding, data, technical expertise, etc.) that can help other levels of government and citizen groups addressing water issues on a watershed basis.

State and Tribal Partnerships

As the Federal agencies implement the Action Plan, we're reaching out to other levels of government, but especially to States and Tribes, because of the lead role they play in clean water programs—and we've been seeing a cooperative response. Indeed, the Action Plan asked States and Tribes to take the lead in a cornerstone of the Action Plan: the development of Unified Watershed Assessments. Through their assessments, the States and Tribes identify degraded water bodies and determine which of their watersheds are priorities for watershed restoration efforts. We are very pleased to note that each of the 50 States submitted Unified Watershed Assessments by the end of 1998, as did many Tribes. States are now developing workplans for the new $100 million in Section 319 funds to support Watershed Restoration Action Strategies in those watersheds.

Involvement of the Public and Stakeholders

The Federal agencies responsible for Action Plan implementation are committed to involving other levels of government, special units of government, such as conservation districts and regional councils of governments, and the public in carrying out individual action items in the Action Plan.

Each of the Action Plan's 12 Federal Coordination Teams will help sponsor "roundtables"—forums for bringing diverse stakeholders together to share information, experience, and expertise regarding watershed protection. All of the governmental agencies (Federal, State, tribal, and local) can play key roles in these cooperative ventures, as can the general public, citizen groups, and the private sector. Likewise, EPA and the other Federal agencies encourage States and Tribes to work with other levels of government and with the public and private sector interests in the development of Watershed Restoration Action Strategies.

The public and private sectors also have opportunities to become involved in implementation of the rest of the Action Plan's 111 individual action items. The Federal agencies responsible for the Action Plan maintain a strong commitment to involving the public in these actions, whether the action items are regulatory or voluntary in nature. Regulatory actions will include appropriate notice and comment in accordance with the Administrative Procedures Act. Beyond this, however, we are affording many opportunities to guide further implementation of the Action Plan. The Clean Water Action Plan web site (www.cleanwater.gov), a collaborative, cross-agency effort managed by the U.S. Geological Survey, provides regularly updated information on all key actions and opportunities for comment or other involvement.

III. ACCOMPLISHMENTS AND CHALLENGES

Accomplishments of the First Year

We've only completed 1 year of the Clean Water Action Plan, but already a great deal has been accomplished at various levels of government. I'd like to mention just a few of these accomplishments:

1. Although I've already mentioned Unified Watershed Assessments, I want to emphasize their importance as a means to draw together the full range of available information on the health of watersheds and to set priorities for funding watershed restoration, USDA and EPA cooperated in providing guidance to States and Tribes for this action item. All 50 States and over 76 Tribal leaders rose to the challenge. We at EPA are grateful for their leadership.

2. An Interagency Emergency Response Plan developed by various Federal agencies including EPA and lead by NOAA, was issued last year to coordinate Federal assistance to State and local governments in response to outbreaks of harmful algal blooms, such as *Pfiesteria*. The plan guided our response to last year's *Pfiesteria* outbreak in North Carolina, and it will continue to be refined and expanded.

3. An Action Plan for Beaches and Recreational Waters was issued by EPA in March 1999. It focuses on three key themes: (1) strengthening beach programs and water quality standards; (2) informing the public about recreational water quality; and (3) conducting research to improve the scientific basis for beach programs. One element of the plan, the BEACH WATCH web site, is a new Internet data base listing beach closings and advisories. It contains the results of the first national Beach Health Protection Survey covering approximately 60 percent of coastal and Great Lakes beaches, and it will be supplemented in future iterations with information on the remaining coastal beaches and on in-land beaches. The next phase of the Beach Action Plan will integrate EPA activities with those of agencies such as NOAA,

USGS, the Centers for Disease Control and Prevention, and State environmental and public health departments.

4. USDA and EPA have cooperated in the development of an Animal Feeding Operations (AFO) Strategy announced on March 9 of this year to control polluted runoff from cattle, dairy, poultry, and hog farms. The strategy is aimed at reducing pollution while ensuring the long-term sustainability of livestock production. The strategy establishes a national expectation that all AFOs develop and implement comprehensive nutrient management plans by 2009. We estimate that 95 percent of all AFOs will be encouraged to implement management plans on a voluntary basis, while the remaining 5 percent will be required to develop management plans as part of a permit issued under the Clean Water Act's National Pollutant Discharge Elimination System (NPDES). The AFOs requiring permits would be: the largest AFOs; AFOs with unacceptable conditions such as direct discharges; and AFOs that are significant contributors to water quality impairment in a watershed.

5. The Watershed Information Network (WIN), an interagency effort, is now operational on the Internet and accessible to the public as a prototype, either through the Clean Water Action Plan site maintained by USGS or through EPA's web site. As a multi-agency road map to watershed programs and services, it can provide communities with information needed to help them protect and restore water quality.

6. The 5-Star Restoration Grants Program has attracted great attention from local community leaders. Over 300 applications, involving over 1,500 grassroots organizations in 47 States and from several tribes, have been received to compete for 40 grants under this 5-Star program. NOAA's National Marine Fisheries Service has participated as a Federal partner for the grant recipients in coastal communities.

7. States and Territories are well positioned today to implement management measures needed to protect coastal waters from nonpoint source pollution. Most States have already received approval from EPA and NOAA for the majority of the management measures addressed by their Coastal Nonpoint Source Programs required by the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). Thus, they are eligible to use funds available under both the Clean Water Act and the Coastal Zone Management Act to help implement these measures. At the same time, we are working with the States and NOAA's National Ocean Service to secure final, complete approval for many of the State programs by the end of 1999. Even where full approval is not met by the end of the year, we expect significant improvement in their nonpoint programs as they work toward final approval.

8. In partnership with the River Network, EPA established the Watershed Assistance Grants Program to support the organizational development and long term effectiveness of locally-based watershed partnerships. Watershed Assistance Grants will be awarded to diverse partnerships who want to work together to assess the needs in their watersheds and devise creative, grassroots-grown solutions to the problems.

9. Many other accomplishments are highlighted in the report (entitled *Clean Water Action Plan: the First Year; the Future*) prepared to mark the first year anniversary of the Action Plan. I am attaching a copy of this report as a source of information on the many accomplishments, and future plans, of all the Federal agencies cooperating and coordinating in the Action Plan's implementation.

Challenges for the Future

The Clean Water Action Plan provides a vision of clean water and healthy ecosystems. By focusing on restoration and protection of watersheds we can more effectively implement clean water programs. By continuing to support partnerships across all levels of government, and with other stakeholders, we can foster enhanced stewardship of the Nation's waters. We have accomplished a great deal in 1 year, but much important work remains to be done.

Under the Action Plan, there are many specific actions which pose their own unique challenges. A few examples of these challenges include:

- States and tribes, with the support of Federal agencies and our other public and private partners, face the challenge of getting Watershed Restoration Action Strategies developed and implemented.
- USDA and EPA have issued the Unified National Strategy for Animal Feeding Operations, but now we, along with States, face the challenge of implementing this largely voluntary program, while also issuing permits as appropriate.
- EPA has prepared a strategy for development and implementation of nutrient criteria and standards tailored to specific needs of different types of water bodies. We now must coordinate across several Federal agencies and work with scientists to prepare guidance and criteria, and then assist States and tribes in the adoption of the criteria into their water quality standards.

Additionally, as we work on these and the other specific action items, we face challenges for the overall management of Action Plan. Among the broad challenges we face, perhaps most noteworthy are:

- the job of effectively involving the public in all aspects of implementation of specific action items in the plan;
- the challenge of using our limited dollars efficiently and wisely, knowing that the needs and demands are great; and
- collectively determining how best to measure environmental results from watershed-level projects, and how to make those results known to national policymakers in the Federal agencies and in Congress.

Mr. Chairman, this concludes my statement. I am happy to answer any questions you may have.

RESPONSES BY CAROL M. BROWNER TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. The primary program for addressing polluted runoff under the Clean Water Act is section 319. A 1997 report by EPA's Inspector General expressed serious concerns with Region 8's oversight of State section 319 programs. Region 8 did not require States to update their 319 management plans, and sent unclear messages to the State by failing to enforce program requirements. The report concluded that Region 8's oversight was inadequate to determine "if priority projects were still being funded and projects were strengthening and balancing overall management plan goals and milestones."

To what degree do the problems facing Region 8 reflect overall weaknesses in the section 319 program?

Response. The basic issues raised in the Inspector General's report are being addressed by program improvements nationwide. EPA and the States have recognized for many years that there is a need to improve and expedite implementation of the overall nonpoint source program. In 1995 and 1996, EPA and the States worked closely and cooperatively together to develop a set of nine key elements which characterize an effective State nonpoint source program. These nine key elements are set forth in detail in section 319 program and grants guidance published by EPA in May 1996; that guidance was endorsed in writing by the Association of State and Interstate Water Pollution Control Administrators. At this point, virtually every State in the United States is working expeditiously in cooperation with EPA to upgrade its State 319 management program. The Agency expects this process to be complete in fiscal year 2000.

Moreover, States have made considerable progress in the past 3 years to bring focus to their selection of projects for implementation and funding. Most States are focusing their nonpoint source implementation activities on their top priorities, using their section 303(d) lists of impaired waters, Unified Watershed Assessments, and similar tools to set their implementation priorities. States are further using their nonpoint source program upgrades to improve their prioritization processes. We are continuing to work with the States as they complete their program upgrades to assure that the programs have clear management goals and milestones that are in turn supported by implementation processes.

Question 2a. Section 319 and EPA guidance documents require States to set measurable goals for their nonpoint source programs. States must also submit annual reports to EPA detailing their progress in meeting these goals.

Could you please share with the committee some of the results of these annual reports?

Response. EPA's May 1996 nonpoint source program and grants guidance specifically establishes as Key Element #1 of a successful nonpoint source program that "the State program contains explicit short- and long-term goals, objectives and strategies to protect surface and ground water." The States are currently working to upgrade their programs to meet each of the nine key elements. A critical element of upgrading those programs will be to include such explicit goals, objectives and strategies in their programs.

Each year, the 56 States and territories submit annual reports to EPA Regional Offices on their progress in meeting the schedule of milestones set forth in their nonpoint source programs and, to the extent information is available, reductions in nonpoint source pollutant loadings and improvement in water quality. To date, the information available indicates increasing progress in States' nonpoint pollution control efforts. For example, EPA has published two status reports in recent years, Section 319 Success Stories (Nov. 1994) and Section 319 Success Stories: Volume 11 (October 1997) that provide evidence of progress on all fronts: trout returning to

streams; improvement of fish habitats; shellfish beds reopening; reduced pollutant loadings in project areas; a proliferation of watershed partnerships; and the enactment of new State-enforceable authorities.

Question 2b. Do you have an estimate for the number of impaired water bodies that are now in compliance with water quality standards as a result of section 319 projects?

Response. Although we have anecdotal information as described above, we do not have a national estimate for the number of impaired water bodies that are now in compliance with water quality standards as a result of section 319 projects.

EPA recognizes the need to improve our ability to account nationally for the extent and rate of water quality improvements being achieved as a result of State NPS program implementation, including those watersheds with NPS management efforts supported by section 319 monies. EPA intends to work with our State partners during the coming year to develop appropriate measures to assure that water quality improvements from the implementation of nonpoint source programs is documented and made publicly available.

Question 3a. One of the cornerstones of the President's Clean Water Action Plan is the watershed approach to environmental protection. This approach is embodied in Watershed Restoration Action Strategies. At the core of these action strategies are the development of total maximum daily loads or TMDLs. EPA and the States will need to calculate approximately 40,000 TMDLs.

What is EPA timetable for completing these calculations?

Response. Each State, not EPA, completes TMDLs for impaired waters on the State's section 303(d) list. EPA's current guidance asks each State to commit to an appropriate schedule to complete TMDLs for all waters on their most recent section 303(d) list, beginning with the 1998 list. Each State schedule should reflect the State's own priority ranking of the listed waters and be integrated with the Environmental Performance Partnership Agreement process. These State schedules normally extend from 8 to 13 years in length, but could be shorter or slightly longer depending on State-specific factors. These factors may include: number of impaired segments; extent of impairments (river miles, lakes acres, etc.); number and relative complexity of the TMDLs; number and similarities or differences among the source categories to be allocated; availability of monitoring data or models; and relative significance of the environmental harm or threat.

Question 3b. What steps is the Agency taking to assist States in making their calculations?

Response. In addition to financial support [see answer to part (d) of this question below], Regional EPA TMDL staff work directly with States to assist with their TMDL needs. We have helped the States use GIS technology to map their 303(d)-listed waterbodies. We have developed and distributed to States (and others) a user-friendly, CD-rom based, TMDL model called BASINS that facilitates fairly rapid calculation of TMDLs, using either locally-available data or nationally-derived values. We are developing technical protocols for establishing TMDLs for nutrients, clean sediments, and pathogens. And, finally, EPA is also facilitating the States' use of all available data, including data from USGS and NOAA.

Question 3c. Does EPA have a national cost estimate for calculating all the necessary TMDLs?

Response. We are working to develop an analytically rigorous estimate of the total costs to develop TMDLs for all the waters and causes currently listed on all of the 1998 State section 303(d) lists. We will complete this analysis in time to release it with the proposed revision to EPA's TMDL rule in fiscal year 1999.

Question 3d. Approximately how much total funding has the Agency allocated to the TMDL program?

Response. Resources supplementing State TMDL efforts are found in State water pollution control grants under Clean Water Act § 106, § 319 (State nonpoint source grants), and in EPA's operating resources. Section 106 grants, for which the Agency has requested $115.5 million in 2000, support a wide range of water pollution control activities including permitting, water quality planning and standard setting, assessment and monitoring, and TMDL development and implementation. While EPA does not generally request (nor allocate to States, Tribes or interState agencies) specific resource levels for the various eligible activities within the § 106 budget, EPA's 1998 request included an increase of $5 million to support State TMDL activities, which has been sustained in the fiscal year 1999 and fiscal year 2000 budgets. States can also use the $20 million increase to section 106 grants in fiscal year 1999 for TMDL activities. This funding level was also continued in the fiscal year 2000 Budget. We continue to emphasize the importance of establishing and maintaining increasingly robust TMDL activities from within available § 106 resources.

In addition, beginning in 1999, States are permitted to use up to 20 percent of their § 319 allocation to upgrade and refine their nonpoint source programs and assessments. A prominent example of potentially eligible § 319 activities is the development of TMDLs to help implement Watershed Restoration Action Strategies developed by States for high-priority watersheds. At $200 million appropriated for section 319 in fiscal year 1999, this policy makes available at a State's discretion approximately $40 million for such high-priority TMDLs. Aside from this direct State grant funding, EPA also requests resources to be used by EPA in direct and indirect support of States' TMDL efforts. At approximately $15 million in the 2000 request, these resources support technical assistance on specific TMDLs (primarily via expert contractors who work directly with States), training of State personnel, development of national guidance and policy, and backstopping State efforts as necessary to meet TMDL development deadlines. In addition, EPA just submitted a reprogramming request to increase EPA TMDL funding by $12 million in fiscal year 1999.

Question 3e. How does EPA intend to encourage nonpoint sources of pollution to implement voluntary best management practices?

Response. Most States use their section 319 NPS grants to encourage voluntary NPS implementation by supporting education, technical assistance and cost-sharing that helps farmers and others install and demonstrate best management practices. In addition, States are increasingly making use of the broad flexibility of the SRF program to support implementation of nonpoint source programs. Currently, 27 States are actively using their SRF programs to fund these kinds of projects. EPA and States are also working closely with USDA and other Federal agencies to use existing Federal natural resource programs and funding to support and encourage voluntary implementation of NPS best management practices that address priority State water quality problems.

Nonpoint sources implement the load allocations within TMDLs through a wide variety of State, local, Tribal, and Federal programs (which may be regulatory, nonregulatory, or incentive-based, depending on the program), as well as voluntary action by committed citizens. The Clean Water Action Plan, including over 100 specific key actions, outlines EPA and other Federal Agencies commitments to work with States and others to encourage and facilitate all needed watershed and NPS management activities, including accelerated implementation of voluntary best management practices. These include, for example, commitments by EPA to develop water quality criteria for nutrients and commitments by numerous other Federal agencies such as NOAA and USGS to increase water quality monitoring.

Question 3f. What happens if nonpoint sources are unable or unwilling to implement voluntary controls, will EPA seek to extract increased reductions from existing point sources?

Response. TMDLs and the associated decisions about the allocation of pollution reductions are developed primarily by the States. When a TMDL specifies that loads from nonpoint sources need to be reduced to meet water quality standards, the State provides reasonable assurances that nonpoint source load reductions will be achieved. These assurances may be non-regulatory, regulatory, or incentive-based, consistent with applicable laws and programs. If nonpoint sources are unable or unwilling to implement voluntary controls, then the State may choose to secure the needed reductions from the nonpoint sources using State or local authorities or from the point sources using NPDES permits.

Question 4a. The EPA/USDA Unified Strategy for Animal Feeding Operations lays out a very ambitious permitting goal for Concentrated Animal Feeding Operations. By January of 2000, EPA expects to have States permit an additional 15,000–20,000 facilities.

What type of assistance is EPA providing to the States to help them accomplish this goal?

Response. As described in the Unified AFO Strategy and under the current regulations, EPA estimates that a total of 15,000–20,000 CAFOs will ultimately need to have NPDES permits to address the Strategy's three permitting priorities: (1) facilities with significant manure production; (2) facilities with unacceptable conditions; and (3) facilities that are significantly contributing to water quality impairment. There are approximately 10,000 CAFOs with significant manure production. The other two permitting priorities (unacceptable conditions and significant contributors to water quality impairment) include approximately 5,000–10,000 CAFOs.

The Strategy discusses the short-term objective of issuing general NPDES permits to cover most CAFOs with significant manure production by January 2000. Since individual permits may be more appropriate for some CAFOs with significant manure production, the estimate of the CAFOs that need to have general permit coverage by January 2000 will be somewhat less than 10,000. The remaining CAFOs

with unacceptable conditions or that are significantly contributing to water quality impairment will be covered by NPDES permits by about 2002.

Although EPA is emphasizing these permitting priorities, it is important to note that CAFOs have been required to have NPDES permits since 1976. There are many reasons why CAFO permits have not been issued over the years, including resource constraints.

EPA received an increase for fiscal year 1999 of $20 million in Clean Water Act (CWA) section 106 grants for State and Tribal water quality program administration, and requested continuation of the increase in section 106 grants for fiscal year 2000 as well. These additional funds can be used by States for programs (including inspections) to address concentrated animal feeding operations or CAFOs, which are regulated under the CWA permitting program.

Question 4b. What is your estimate for the number of facilities that will need individual permits?

Response. We estimate that only about 5 percent of the entire universe of CAFOs will ultimately need individual NPDES permits.

Question 5a. As a condition of their permit, all CAFOs will be required to have a comprehensive nutrient management plan. These plans must be developed on a site specific basis. EPA is relying on the NRCS to provide technical assistance in developing these plans. NRCS is currently working on a draft nutrient management plan, and NRCS has informed my staff that it will take at least a year to train field personnel to develop the plans. NRCS also estimates a reduction in technical assistance staff from previous years.

Will EPA assist NRCS in developing 15,000 nutrient management plans in a reasonable timeframe?

Response. Under the current regulations, EPA does expect that approximately 15,000—20,000 CAFOs will be required through NPDES permits to develop and implement site-specific CNMPs. Most will be covered under general NPDES permits. Large CAFOs will be a priority for permitting under these general permits. EPA believes that many large operations will not require extensive assistance from USDA for development of these CNMPs. Feedback from site visits and the extensive outreach from the national listening sessions and other outreach efforts during development of the AFO Strategy suggests that large CAFOs may have access to expertise, including from the private sector, for development of CNMPs. EPA will help CAFOs to identify such sources of assistance.

Question 5b. What is the estimated time between issuance of general permit and the development of a site specific nutrient management plan?

Response. The schedules and timeframes for CAFOs to develop and implement CNMPs may vary somewhat from State-to-State, and should be appropriate to the circumstances in each State. While EPA is still developing the CAFO permitting guidance, we expect that CAFOs may have 12–18 months to develop a CNMP and an additional 12–24 months to achieve full implementation. (Under the current regulatory framework, CAFOs are expected to comply with existing permits and the existing effluent limitations guidelines for feedlots.)

Question 6a. The Action Plan argues that existing programs under the Clean Water Act lack the "strength, resources and framework to finish the job of restoring our rivers, lakes and coastal areas." This assertion is particularly surprising in light of the heavy reliance on existing programs in the Action Plan.

If EPA feels the Clean Water Act is broken, why isn't the Agency proposing language to fix it?

Response. The Administration does not believe that the Clean Water Act is broken. In fact, the Clean Water Act created some of the most successful environmental programs the Nation has. The quote above was not intended to disparage the Clean Water Act, but to highlight the fact that more needs to be done to make the best use of the authorities for protecting and restoring water quality by the Clean Water Act.

Question 6b. What are the specific areas in which EPA feels its authority is too limited and the Act needs to be strengthened?

Response. The Administration does believe that the Clean Water Act should be reauthorized. In fact, the Administration has made specific proposals beginning with President Clinton's Clean Water Initiative in February 1994. The President has recently challenged Congress to take up reauthorization this year and is committed to working closely with the relevant committees to find ways to strengthen the existing statute.

RESPONSES BY CAROL M. BROWNER TO ADDITIONAL QUESTIONS FROM SENATOR LIEBERMAN

Question 1. EPA estimates that approximately 60 percent of the pollution to our waters comes from polluted runoff. The CWAP recognizes that over 50 percent of the Nation lives within coastal watershed areas, contributing substantially to the problems associated with polluted runoff.

How do the agencies expect to address the issue of polluted runoff through existing enforceable programs, such as 6217 program under the Coastal Zone Management Act? Already, States with coastal zone management programs like Connecticut are eligible for 6217 grant funds. Unfortunately, historic funding has been inadequate. For example, the estimated fiscal year 1999 allotment for the 6217 program in Connecticut is only $68,000.

The Administration has proposed that States have the option of using up to 20 percent of fiscal year 2000 Clean Water State Revolving Funds as grants for polluted runoff projects. This is a wonderful concept, however, EPA already currently grants polluted runoff money to the States under section 319. At least for coastal States, why not provide the nonpoint money for 6217 instead of for the section 319 grants, since its provisions are enforceable and the money is based on comprehensive management plans approved by EPA?

Response. EPA believes that all States will most effectively prevent and control nonpoint source pollution through a variety of programs, including coastal management programs in coastal States, through an appropriate mix of voluntary programs and regulatory mechanisms. To this end, the recently published *Almanac of Enforceable State Laws to Control Nonpoint Source Water Pollution* (Environmental Law Institute, 1998), which was commissioned by EPA, provides guidance to States and other interested users describing existing and potential models of enforceable authority related to nonpoint source pollution. Almost all of the relevant States have decided to apply their enforceable programs to the entire State, not just the coastal areas.

With regard to the section 6217 coastal nonpoint program, EPA and the National Oceanic and Atmospheric Administration (NOAA), as co-administrators of the coastal nonpoint program, are continuing to work with coastal States to encourage them to develop fully-approvable programs. In October 1998, EPA and NOAA adopted new administrative flexibility for the program that will assist States in achieving that goal. This flexibility will allow States to receive full approval of approaches that include general enforceable authorities when combined with voluntary and incentive programs to encourage implementation of nonpoint pollution controls. To ensure that these approaches are effective, the States are required to describe how the agency implementing the voluntary and incentive programs will work with the enforcement agency to achieve a State-established implementation timetable.

With regard to funding, States may use their section 319 funds to address both coastal and non-coastal nonpoint source pollution, and have the discretion to choose the watersheds within the State where they will focus their implementation activities. Consistent with the section 319 funding guidance, EPA expects the States to focus their section 319 funds to address their highest-priority waters, i.e., those listed by the State as impaired under section 303(d) of the Clean Water Act; those identified by the State as being in greatest need of restoration under the State's Unified Watershed Assessment; and those high-quality waters that are at greatest risk of impairment. These will generally include both coastal and non-coastal waters, but the relative balance will vary from State to State.

Funding under section 6217 has been limited. Since 1992, Congress has appropriated approximately $19 million to the 29 coastal States and territories developing coastal nonpoint programs. Nevertheless, States have made significant progress—all 29 States and territories received conditional approval of their programs by the end of June 1998. Section 6217 was designed to support the development of coastal nonpoint programs. Under the statute, implementation of those programs was to rely on funding under both section 319 of the Clean Water Act and section 306 of the Coastal Zone Management Act (CZMA). Under the Administration's proposal for the reauthorization of the CZMA, increased authorizations for section 306 would provide this support.

Question 2. We are hearing some resistance today to the concept of watershed assessments of water quality. In my State, however, we have had real success in assessing water quality and developing comprehensive management plans. In fact, we find it necessary to work across State lines in order to protect and restore the most significant watershed in our State, the Connecticut River. In your view, what are the benefits of the unified watershed approach and what are the limitations of State-based water programs?

Response. The main purpose of the Clean Water Action Plan is to identify and restore those rivers, lakes, coastal waters, and wetlands that are still not meeting water quality and other natural resource goals, including the goal of fishable and swimmable waters. To hasten the restoration of the Nation's waterways, the Clean Water Action Plan makes best use of available restoration dollars by putting them to work in the watersheds with greatest need, i.e., the priority watersheds for restoration designated by the States and Tribes.

This approach reinforces good work underway, such as Connecticut's efforts to restore the Connecticut RiverWatershed. Moreover, this approach helps align Federal resources and programs with State, Tribal and local objectives. By requiring all Federal agencies to agree on policies and priorities under the Action Plan, for example, Federal agencies can help States and Tribes achieve even greater results than they might have been able with their individual efforts. Additionally, State and Tribal processes for preparing Unified Watershed Assessments and Watershed Restoration Action Strategies are highly inclusive and help promote restoration of watersheds which cross State and Tribal boundaries.

A major benefit of the Unified Watershed Assessments is to use the States priorities as the basis for coordinating restoration. Rather than supplant individual State and Tribal efforts, the Action Plan seeks to help raise the visibility of the priorities set by the States and Tribes and ensure that the available resources are directed to those priorities.

Question 3. Polluted runoff contributes to the problem of contaminated sediments, and complicates the dredging that is required to maintain safe and functional ports and harbors. I understand that the CWAP includes demonstration projects that are designed to implement new "state-of-the-art" technology that can be used to decontaminate sediment. In Connecticut, additional funding is needed to reduce sources of contaminated materials, develop cost-effective decontamination strategies, and maintain safe long-term disposal sites. What funds are available to address these problems, to study the contamination sources, and to develop cost-effective sediment decontamination strategies?

Response. The fiscal year 2000 President's Budget request contains $1,733,600 to manage the Agency's Contaminated Sediment program, including $750,000 to fund the demonstration projects described in the Clean Water Action Plan (CWAP). The Agency has eight qualifying candidate projects from which the five Clean Water Action Plan demonstration projects are being selected. Agency funding is provided to expand or enhance the goals of the selected projects and transfer successful approaches to other sites across the Nation. Final decisions on the five demonstration projects will be made in the near future. Our primary goal is to assure that the five CWAP demonstration projects are completed successfully and contribute to our knowledge about contaminated sediment remediation.

Question 4. Atmospheric deposition of mercury has contributed to Connecticut's fish contamination problem. Our State has issued Statewide fish advisories for mercury in freshwater fish. Connecticut's ongoing effort to collect data on mercury contamination sources could benefit from Federal support. What is your view of the Federal role in addressing atmospheric deposition?

Response. Mercury is one of the priority persistent, bioaccumulative, and toxic (PBT) pollutants covered by EPA's PBT strategy. The national action plan for mercury includes a reduction of mercury air emissions from municipal waste combustors and medical waste incinerators by 50 percent from 1990 levels. EPA is also working to better understand the impacts of air deposition of mercury and other substances on water quality and to better understand how we can reduce emissions, where necessary, using our current authorities.

In the July 1998 Federal Advisory Committee Report on the Total Maximum Daily Load (TMDL) Program, the Committee recognized that atmospheric deposition of toxic pollutants (such as mercury and lead) or of nutrients (such as nitrogen) may contribute to water quality impairments in many waterbodies. For example, in 1996, States estimated that approximately 2,000 waterbodies were polluted by mercury and other metals, with the pollutants coming from air sources in many cases. The Federal Advisory Committee also recognized that waters impaired by atmospheric deposition pose some unique challenges to environmental agencies. These challenges include attributing atmospheric loadings to specific sources, which could be outside a given State's boundaries, and identifying which State or Federal authorities can be used to address air emissions.

In an attempt to address these challenges, EPA has begun a pilot project that will examine how to address air sources of mercury through the TMDL program. The pilot project will examine methods for determining the relative contributions of mercury air emissions to specific waterbodies, and identifying how much deposition

comes from local and distant sources. It will also assess how Federal and State air and water programs can work together to reduce emissions. The pilot is being conducted in Devil's Lake, in Wisconsin, and a portion of the Florida Everglades, and involves close coordination with the two States. The goal is to help States develop TMDLs for waterbodies impaired by air sources. Under the TMDL program, a State identifies specific waterbodies that do not meet water quality standards, and establishes pollution reduction targets for meeting the standards. EPA plans to issue the findings of this pilot project in early 2000.

RESPONSES BY CAROL M. BROWNER TO ADDITIONAL QUESTIONS FROM SENATOR THOMAS

Question 1. Is the EPA currently conducting an effort which, according to an EPA source, is for the purpose of intensifying efforts to find concrete ways to measure nonpoint source contributions to water pollution?

Question 2. If the EPA is currently involved in the above mentioned effort, please explain what methodologies are being used to better determine the impact of nonpoint sources to water degradation. Why did the Agency not promote a similar effort prior to releasing the Clean Water Action Plan?

Responses 1 and 2. EPA has for many years been engaged in a variety of efforts to improve our ability to measure nonpoint source contributions to water pollution. These efforts range from continuing efforts to improve our modeling capabilities, our monitoring tools, and the range of environmental indicators that can be used to measure success in our nonpoint source pollution control efforts. For example, EPA established in 1991 a National Nonpoint Source Monitoring Program that is focusing intensive long-term monitoring on over 20 projects, in order to assess the effectiveness of various nonpoint source control practices in reducing pollution from a variety of sources in a variety of geographic settings. In addition, we have supported and are continuing to support many efforts throughout the United States to improve our methods of calculating or estimating the pollutant reduction effectiveness of a variety of best management practices and programs.

As required by the Government Performance and Results Act, EPA has established goals for its nonpoint source program as well as for other aspects of its national water quality program. One goal is to reduce nutrient loadings. To improve our ability to measure success in this regard during the coming years, we have entered into a cooperative effort with the U.S. Geological Survey to use their data and techniques to improve our capability to assess nutrient loadings at representative study sites.

We intend to continue to refine existing models and measurement tools, and develop new ones as appropriate over time. These continuous improvement efforts will occur concurrently with our continued development and implementation of programs and initiatives, such as those included in the Clean Water Action Plan, that have proven value in helping to reduce known nonpoint source pollution.

Question 3. The National Water Quality Inventory (NWQI) and the Clean Water Action Plan (CWAP) both State that only 19 percent of the Nation's rivers and streams have been surveyed. Of the 19 percent surveyed, only 36 percent have been deemed impaired. According to the NWQI, actual water quality was collected on slightly over half (51 percent) of these impaired waters. How do you justify the need for a comprehensive Action Plan when water quality data was collected on only roughly 3.5 percent of the Nation's waters?

Response. We believe that the current State section 305(b) reports (which make up the National Water Quality Inventory) provide a good synopsis of known water quality problems. Our understanding of water quality conditions is enhanced by other indicators of watershed health such as the Index of Watershed Indicators and by many Federal and State water quality assessments, such as the National Ambient Water Quality Assessment program managed by the U.S. Geological Survey. Further, the Clean Water Action Plan asked States to identify waters in need of restoration to meet water quality and other natural resource goals; States have identified over 800 watersheds as priorities for restoration.

EPA and State water quality agencies agree that monitoring and assessment coverage should continue to expand over time to provide more comprehensive water quality management information. EPA and other Federal agencies on the National Water Quality Monitoring Council are working with States to broaden the coverage of water quality studies, including the use of rotating basin monitoring approaches, and to provide technical assistance to States to help use statistical surveys to provide more information from the monitoring that is accomplished. Under the Regional Environmental Monitoring and Assessment Program, the Office of Research

and Development provides technical assistance to EPA Regions and States for design and implementation of probability-based surveys to characterize waters at the watershed, State, or ecoregion level.

In addition, EPA and the States are working collaboratively through the 305(b) Consistency Workgroup to update and improve the national guidelines and protocols for assessing State water quality. Through this effort, EPA and the States hope to improve water quality monitoring methods, provide consistent schedules for sampling and evaluation, and improve reporting mechanisms. Although this is a multi-year effort, much progress has already been made. However, over the next few years, we expect to see vastly improved monitoring and reporting by the States which should result in a much improved National Water Quality Inventory.

As all these various assessment efforts mutually highlight known watershed and nonpoint source problems that go beyond traditional point source concerns, we do support the need for all of us to take reasonable next steps as outlined in the Clean Water Action Plan to address these remaining problems.

Question 4. How does the agency justify, in the National Water Quality Inventory, that "without known and consistent survey methods in place, the EPA must use caution in comparing data or determining the accuracy of data of data submitted by different States and jurisdictions" yet the Agency compares and compiles States' data for the development of the NWQI report?

Response. We believe that the current State section 305(b) reports provide a good synopsis of known water quality problems. The NWQI report describes the sources of variation among the data reported by States; and, EPA, in turn, presents the best national summary that we can generate by combining the number of waters States classify as either supporting water quality goals or as impaired. We believe that these data are currently the best available to characterize national water quality. As you note, EPA does highlight the current data limitations and emphasizes that additional and more consistent information is needed.

Uncertainties in the national 305(b) summary arise primarily because States use different water quality criteria and survey methods to rate their water quality. The States also take different approaches to designating how their waterbodies are most appropriately to be used—such as for swimming, drinking, or fishing. The Clean Water Act does provide the States the flexibility to address these issues in ways that are the most appropriate to their local watershed conditions and circumstances. As described in response to your previous question, while still recognizing necessary State and local flexibility, EPA and the States continue to work together to improve the national consistency of the section 305(b) reporting process.

Question 5. In States where primacy has been granted over nonpoint source pollution, how does that State in turn manage pollution from Federal lands, within its boundaries, and more importantly, who retains the legal authority over these pollution problems?

Response. All States currently have approved nonpoint source management programs under section 319 of the Clean Water Act. The Federal land management agencies have lead jurisdictional authority to ensure that the land is managed in accordance with applicable laws. Under section 313 of the Clean Water Act, Federal land management agencies have the same legal responsibilities to comply with Federal, State, and local laws, processes, and sanctions with regard to discharges or runoff of pollutants to the same extent as any State or private entity. In addition, in section 319 of the CWA, Congress has established a process whereby States may review Federal financial assistance programs and development projects and, pursuant to Executive Order 12372 signed by President Reagan in 1983, identify which of those projects or programs are consistent with the State's program. Most States have identified in their nonpoint source management programs those Federal programs and projects that they review under Executive Order 12372. Moreover, many States have signed memoranda of Understanding with the Forest Service, the Bureau of Land Management, and other Federal agencies to promote water quality protection on Federal lands.

Question 6. The Unified Strategy for Animal Feeding Operations (AFOs) seems to require the permitting of AFOs that do not discharge to the waters of the United States. The regulations clearly require permitting of only those animal feeding operations that discharge at storm events that are less than 25-year, 24-hour events. How can permits be required for AFOs in areas where regulations clearly State that permits are not needed?

Response. EPA's position is that most AFOs with greater than 1,000 animal units are CAFOs and should be covered by an NPDES permit due to the quantity of manure generated. Further, it is EPA's belief that many of the largest CAFOs (greater than 1,000 AU) have had discharges in the past and/or have a reasonable likelihood

for future discharges and therefore should be required to seek coverage under a NPDES permit. After a permit application has been received, the State, or EPA as permitting authority, will then determine whether a permit is appropriate.

Question 7. What are the criteria for a functionally equivalent program? Will functional equivalency be based on performance (environmental outcome) or process (permits)?

Response. A program that is functionally equivalent to an NPDES program must first seek and secure authorization under 40 CFR 123.61 (initial approval) or 40 CFR 123.62 (modification of existing NPDES program) before a permit issued by the State will satisfy the NPDES permitting requirement. The criteria for authorization are found in 40 CFR part 123. These criteria include: elimination of conflicts of interest; requirements for enforcement authority and penalty provisions; confidentiality of permit application information; EPA review of and objection to State permits; public notice and public hearings for permit issuance; citizens appeal of final-issued permits; and citizen intervention in enforcement proceedings. This regulation specifies the procedures EPA will follow in approving, revising, and withdrawing State programs and the requirements State programs must meet to be approved by the EPA Administrator under sections 318, 402, and 405 of the Clean Water Act. Included in the regulation are procedural requirements intended to meet the procedural and water quality and public health objectives of the Act.

Question 8. The Strategy suggests that a "functionally equivalent" program for a State is some type of permitting program, which will eliminate many State programs that are currently protecting the environment. Has the EPA determined that the only way to protect the environment is through a permit process?

Response. The Unified Animal Feeding Operations Strategy emphasizes voluntary and incentive-based approaches to encourage AFOs to address water quality and public health impacts of their operations. EPA and USDA will be working closely with States, Tribes, the agriculture industry and other stakeholders to implement best management practices using the existing framework of technical and financial assistance, including effective State programs on the vast majority of the Nation's 450,000 animal feeding operations.

Under the existing regulatory framework of the Clean Water Act, NPDES permits are required for approximately 5 percent of all animal feeding operations (those that are defined or designated as CAFOs). EPA will be working with States to more closely align existing State programs to meet the environmental objectives outlined in the Federal program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an existing State permit program and can demonstrate that such a program meets the NPDES requirements, EPA is willing to work closely with the State to amend its authorization. EPA does expect NPDES-authorized States to issue NPDES permits to those operations that are CAFOs.

Question 9. How will the Agency handle a State, with delegated authority, that chooses not to implement the Strategy or is prohibited from doing so because of financial constraints?

Response. States and Tribes play a critical role in the development and implementation of national and State and Tribal water resource protection programs. EPA is committed to work in partnership with States and Tribes. EPA believes the need for a national goal and performance expectation for AFOs can be balanced with the need for flexibility to address the various needs and priorities of the States and Tribes, including coordination with other clean water programs. The Strategy does not, however, impose any binding requirements on States.

As a condition of NPDES authorization, each authorized State had to demonstrate that it had the necessary legal authority and resources to carry out the program. EPA expects authorized States to fully implement the NPDES program for CAFOs. In recognition of NPDES-authorized States' differing circumstances, the Strategy does, however, provide several types of flexibility.

First, EPA recognizes that some States may be implementing permitting programs under State law that meet or exceed the requirements of, and, therefore, are functionally equivalent to the NPDES program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an existing State permit program and can demonstrate that such a program meets the NPDES requirements, EPA is willing to work closely with the State to amend its authorization.

Second, because of differences in workload and resources among authorized States, EPA is providing flexibility for States in the issuance of permits for CAFOs with fewer than 1,000 animal units (AUs). While NPDES-authorized States are expected to issue general permits to the largest CAFOs (greater than 1,000 AUs) by

January 2000, States will have until the end of 2002 to issue permits to CAFOs with fewer than 1,000 AUs. EPA acknowledges that some States may even need additional time beyond 2002 to issue permits for smaller CAFOs.

A final area of flexibility relates to the schedule for issuing individual permits to certain CAFOs. Although these individual permits should be issued as expeditiously as possible, EPA and States should consider State-specific circumstances such as the total number of CAFOs with greater than 1,000 AUs, the need to issue individual permits to new or exceptionally large facilities, and the availability of technical assistance for development of comprehensive nutrient management plans. States may give permitting priority to impaired water bodies (such as 303(d) listed waters or those identified in State water quality management plans). In addition, where a State develops an NPDES program that provides for a comprehensive response to environmental issues at CAFOs, EPA will generally defer to an authorized State's judgment with respect to the use of individual or general permits.

To help States with the cost of issuing permits to CAFOs, as well as other costs associated with the CWAP, the Administration requested, and Congress appropriated, a $20 million increase to section 106 State and Tribal water quality program grants in fiscal year 1999. The same funding level has been requested for fiscal year 2000 to continue to support these activities.

Question 10. Please explain the number of FTE's the Agency has devoted to the Action Plan for (1) the regulatory aspects and (2) the voluntary and incentive based portions?

Response. As you know, most of the Clean Water Action Plan is based on voluntary and incentive-based strategies to address the remaining threats to water quality, especially polluted runoff. Additionally, much of the Federal portion of the Action Plan centers around providing the technical tools and assistance, as well as financial assistance to our State, Tribal, and local partners to address the wide variety of problems facing our rivers, lakes, coastal waters, and wetlands.

There are approximately 1700 FTE working in the national water program that support the general goals of the Clean Water Action Plan and the Clean Water Act. The Agency does not track FTEs in the categories suggested in the question above, however, we can offer the following estimates for the few direct regulatory aspects of the Clean Water Action Plan:

- Stormwater regulations (phase 11). The Agency is currently devoting approximately nine FTE to support the stormwater phase II effort.
- A small portion of the Unified Animal Feeding Operations Strategy (which affects approximately 5 percent of the of the 450,000 animal feeding operations nationwide) is regulatory in nature. The Agency is currently devoting approximately five FTE to support the permitting and enforcement aspects of this Strategy.
- A new effluent guideline for coal mining. The Agency is currently devoting approximately two FTE to this effort.
- For fiscal year 2000, the Agency asked the Office of Enforcement and Compliance Assurance (OECA) to redirect 20.0 workyears within the Water Quality Civil Enforcement program from lower priority activities, such as actions against significant non-compliers in non-priority watersheds, to carry out the Clean Water Action Plan. Two of the seven national priority areas in the fiscal year 2000/2001 OECA Memorandum of Agreement—Safe Drinking Water Act microbial rules and wet weather problems (combined sewer overflows, sanitary sewer overflows, concentrated animal feeding lot operations, and stormwater)—direct Regional staff to focus on these activities in the priority watersheds to be identified under the CWAP. In fiscal year 2000, both Headquarters and Regional staff will continue work to develop strategies and policies as well as improving our targeting to more effectively support implementation of the CWAP.

Responses by Carol M. Browner to Additional Questions from Senator Crapo

Question 1. During the hearing, it was stated that no cost analyses had been made on the strategic element of the Clean Water Action Plan. Rather, each of the individual elements will be analyzed separately. What are the estimated implementation costs to the Federal agencies, State agencies, and regulated communities for each of the action items under the Plan?

Response. As was stated during the hearing, cost estimates will be prepared for major regulatory elements of the Action Plan, as is the standard practice when developing new regulations.

Question 2. What resources have been or will be made to assist the States and regulated communities for carrying out each item?

Response. The Administration proposed a cross-agency budget initiative to support the Clean Water Action Plan. Much of that Budget request was intended to support our State and local partners in the implementation of the Action Plan. Unfortunately, Congress did not fully fund this request in fiscal year 1999. The Administration is requesting $2,275 million, a $453 million increase from fiscal year 1999, to fund such programs in fiscal year 2000 and would appreciate Congress's serious consideration of this request.

Within this funding request, several EPA programs directly support our State, Tribal, and local partners, including $200 million in polluted runoff funding (section 319 grants) and $116 million for State program management (section 106 grants). In addition, base funding for the wetlands protection grants, water quality cooperative agreements, water quality program management funds, and the State Revolving Fund all support our State, Tribal, and local partners in the implementation of the Action Plan.

The fiscal year 2000 President's Budget also includes increases for National Oceanic and Atmospheric Administration's polluted runoff State grants, the Office of Surface Mining's abandoned mine water quality, and the Natural Resources Conservation Service's locally-led conservation, all of which assist States and localities with implementing the CWAP action items.

Question 3. Without proper attention to the cost of implementation and provision of resources to the producer, this program will not be effectively implemented nor done on a voluntary basis. Will EPA tailor implementation to the availability of assistance to farmers and ranchers?

Response. As mentioned above, resources are an important part of the Clean Water Action Plan. In fiscal year 1999, the Administration proposed a multi-Agency budget increase of $568 million to provide much needed funds to farmers, ranchers, and others to implement voluntary pollution control measures. Unfortunately, Congress only provided $186 million of the increase requested. These reductions, particularly in the USDA portion of the budget request, have restricted our ability to provide assistance to farmers and ranchers and other landowners.

The agencies involved in the Clean Water Action Plan must prioritize assistance to correspond to the amount of funding available. It should be noted, of course, that there are many landowners who will respond to requests to implement pollution control measures on their land because they have a strong conservation ethic and have the financial resources to do so without governmental assistance. However, in today's difficult economy, many farmers, ranchers and other landowners do not have the financial resources to implement such measures without governmental assistance. Therefore, the financial assistance programs represented in the Clean Water Action Plan budget request, play a critical role in implementing these important programs.

Question 4. Have local Soil Conservation Districts been allowed significant input into the TMDL identification process.

Response. EPA regulations and guidance outline our expectations that a wide-range of stakeholders, including the general public, participate in the State section 303(d) listing process where impaired and threatened waterbodies needing TMDLs are identified. As just one example, the TMDL regulations require States to identify impaired waters by assembling and evaluating "all existing and readily available data" from a variety of sources, including water quality problems reported by local organizations [40 CFR 130.7(b)(5)]. Given their particular knowledge and expertise on agricultural pollution problems and solutions, the States and EPA have worked closely for many years with USDA's Natural Resources Conservation Service and their local Soil Conservation District partners on NPS programs; our programs and guidance encourage these partnerships. EPA also provides grant support to the National Association of Conservation Districts and the National Association of State Conservation Agencies to help their members become more involved in water quality issues, including TMDLs.

Question 5. What is the intention of the Watershed General Permit? Do you really intend for rural residents with a handful of horses to be subject to the same permitting requirements as a large farm? Do you intend to follow the complete Federal rulemaking process before you institute this and other parts of the Clean Water Action Plan?

Response. The Unified Animal Feeding Operations Strategy emphasizes voluntary and incentive-based approaches to encourage AFOs to address water quality and public health impacts of their operations. EPA and USDA will be working closely with States, Tribes, the agriculture industry and other stakeholders to implement best management practices using the existing framework of technical and financial

assistance, including effective State programs on the vast majority of the Nation's 450,000 animal feeding operations.

Under the regulatory framework of the Clean Water Act, NPDES permits are required for approximately 5 percent of all animal feeding operations (those that are defined or designated as CAFOs). EPA believes that most CAFOs will be covered by a Statewide general permit. A watershed-specific permit is nothing more than a general permit with a narrower geographic scope that corresponds to a particular watershed. The NPDES permitting authority may choose to use a watershed specific CAFO permit to address the unique problems facing a particular watershed. The AFO Strategy calls for primarily large operations (greater than 1,000 AUs) be covered by NPDES permits. EPA does not anticipate "rural residents with a handful of horses" to be CAFOs or to be covered by an NPDES permit. EPA will follow the Federal rulemaking process as it reviews and revises the current regulations for CAFOs. The AFO Strategy itself is not a rule and does not change the legal requirements for CAFOs. General permits are not rules, but EPA will follow a very similar administrative process to issue general permits.

Question 6. How does the EPA intend to use general discharge permits? Will these be handled at the discretion of State regulators under their Clean Water Act primacy or by the EPA?

Response. EPA believes that most CAFOs will be covered by a State-wide general permit. For those States with authorized NPDES programs, the States issue NPDES general permits. For those States that do not have authorized NPDES programs, EPA will issue the general permit.

Question 7. Given the likelihood that many smaller operations will go out of business rather than comply with certain requirements, has the EPA measured the probable environmental impact of further transforming the AFO industry toward fewer, but considerably larger operations?

Response. The vast majority of AFOs, particularly the small operations, will be encouraged to develop comprehensive nutrient management plans. These plans are voluntary and should not directly contribute to the already existing economic pressures on small farm operations. Further, it is not the intent of the anticipated CAFO rulemakings to drive out small operations out of business. By law, EPA is required to assess the impacts on small businesses. EPA will also obtain small business input during the rule development phase to help mitigate adverse impacts to small business.

Question 8. Under the proposed TMDL rules, the EPA may require BMPs for nonpoint sources on impaired streams. How is the requirement for States to implement BMPs different from Federal establishment of nonpoint source regulation.

Response. The forthcoming changes to the TMDL regulations have not yet been proposed; they are expected in late summer 1999. They likely will closely follow the consensus recommendations of a Federal Advisory Committee Act [FACA] committee for TMDLs submitted to the Administrator in mid–1998 (see http://www.epa.gov/OWOW/tmdl/advisory.html). A key recommendation of the FACA committee is that BMPs for nonpoint sources should be implemented by States where needed, but that reasonable assurances for implementation—not regulation—should be required.

Specifically, if a TMDL identifies load reductions from nonpoint sources to meet water quality standards, the State would provide reasonable assurances that nonpoint source load reductions will be achieved. In addition to any regulatory means a State chooses to employ (such as local ordinances for septic tanks), these reasonable assurances could be voluntary, non-regulatory or incentive-based, consistent with applicable programs at the local, State or Federal level and generally reflected in the State's NPS management program under CWA section 319.

Question 9. Has the EPA done an assessment of the impact of voluntary BMPs the forest industry has undertaken? Would it be appropriate for Federal agencies to undertake an investigation of these impacts prior to the development of TMDL requirements?

Response. EPA has reviewed a number of State assessments of the effectiveness of their forestry programs (which in most cases focus on voluntary approaches that are backed by enforceable authorities) and also has had the opportunity at various times to tour forestry sites with State officials. The State assessments over time have indicated a general improving trend in the implementation rates of State-established best management practices. While the improved implementation of best management practices does not guarantee that the State's water quality standards will be achieved in all cases, it is good evidence of the improving effectiveness of the State's programs.

A total maximum daily load (TMDL), required by section 303(d) of the Clean Water Act, is a calculation of the maximum amount of a pollutant that a waterbody

can receive and still meet water quality standards. States identify waters not meeting water quality standards, set priorities, and then develop TMDLs for those waters. A State that has an effective voluntary BMP program for forestry will very likely have fewer waters that are not meeting water quality standards due to forestry activities. Thus, an effective voluntary program can reduce the number of waters for which a TMDL needs to be developed. Furthermore, even where a TMDL is developed, voluntary means may be used to implement pollution control measures as long as there is a reasonable likelihood that these measures will actually be implemented.

RESPONSES BY CAROL M. BROWNER TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. The strategy mentions Federal support for State certification programs to develop private sector sources of assistance in developing Comprehensive Nutrient Management Plans ("CNMP"). Specifically, what kind of financial and technical resources will the EPA and USDA provide to develop CNMP certification?

Response. EPA does support the concept of certified specialists to help ensure the quality of CNMPs. States will have the lead role to establish these certification programs. EPA and USDA will support development of these certification programs and have outlined in the Strategy several actions related to building capacity for CNMP development and implementation. Of course, States may use funding such as 106 and 319 funding to establish such a certification program.

Question 2. How does EPA intend to regulate dry-litter poultry operations and ensure compliance with the provisions of the Strategy?

Response. Currently, most dry poultry operations are not subject to NPDES permitting because the current regulation only applies to operations with 100,000 layers or broilers with continuous flow watering systems, or operations with 30,000 layers or broilers with liquid manure systems. In practice, "continuous watering system" refers to an outdated technology, and the threshold in the CAFO regulation that is based on this technology would rarely apply. Therefore, the threshold based on liquid manure system" would be the more commonly applied threshold for poultry operations.

EPA believes that animal feeding operations, including poultry operations, that remove waste from pens and stack it in areas exposed to rainfall or an adjacent watercourse may have established a crude liquid manure system for process wastewater that may discharge pollutants, and therefore would be subject to the current CAFO regulations. These facilities would be point sources under the NPDES program if the number of animals confined at the facility meets the regulatory definition in 40 CFR Part 122, Appendix B or if the facility is designated a CAFO.

In addition, under the Strategy, EPA committed to consider revising the regulation to include large poultry operations, consistent with the size threshold for other animal sectors, as CAFOs, regardless of the type of watering or manure handling system. The Agency is at the early stages of its rule development process in which this option is being considered.

Under the regulatory framework of the Clean Water Act, approximately 5 percent of all animal feeding operations are either defined or designated as concentrated animal feeding operations (CAFOs) and required to have NPDES permits. The permit, as with permits for other CAFOs, would require development and implementation of a comprehensive nutrient management plan. This CNMP would be the key vehicle for ensuring that the litter is managed properly and water quality impacts are minimized.

Question 3. Does EPA intend to regulate, or have any involvement in, dry-litter poultry operations that currently follow a State-certified, NRCS approved AMP?

Response. EPA expects that a State-certified AMP would likely satisfy or could be modified to satisfy the requirement for a CNMP.

Question 4. Will EPA Regional Offices be required to follow the provisions of the strategy when developing Regional General Permits for CAFO's, or will Regional Offices be given the flexibility to tailor CAFO General Permits to the needs of States in their regions?

Response. EPA Regions, where they are the NPDES permitting authority, will be expected to issue permits for CAFOs that are consistent with the permitting approach in the AFO Strategy, which includes the flexibility to issue general permits.

Question 5. If flexibility is given, will Regional Offices be allowed to develop CAFO General Permits that are more stringent than what is provided in the strategy (as Region 6 in Dallas has already attempted)?

Response. EPA Regions, where they are the NPDES permitting authority, will be expected to issue permits for CAFOs that are consistent with the permitting approach in the AFO Strategy. The EPA Region 6 draft CAFO general permit proposed on June 26, 1998, is largely consistent with the USDA/EPA Unified AFO Strategy issued on March 9, 1999. Region 6 has worked closely with EPA Headquarters to develop a model general permit and we fully expect that its general permit will be consistent with the AFO Strategy.

Question 6. Because the most limiting factor in most States is lack of adequate scientific data to accurately identify sources of nonpoint source pollution, (a) what will EPA do to support better water quality monitoring and (b) what information will EPA use in the meantime to identify watersheds being adversely impacted by AFO's (i.e., for watershed-specific CAFO General Permits)?

Response. One of the actions in the AFO Strategy addresses water quality monitoring. EPA, in cooperation with States, will identify ways to improve the Clean Water Act section 305(b) Water Quality Inventory to better report the water quality impacts caused by AFOs. States, not EPA, have historically, and will continue to have the primary role in monitoring the condition of their surface waters and in determining which watersheds may be adversely impacted by AFOs and may benefit from a watershed permitting approach. EPA encourages States to use existing watershed assessment processes, such as the Clean Water Act section 303(d) listing process, to evaluate causes of water quality impairment.

In addition, EPA is currently reviewing available information to determine in which watersheds to focus the Agency's CAFO compliance assistance, permitting and compliance monitoring activities. The Agency will use watershed information on (1) the potential for manure runoff; (2) the amount of surface water (stream miles and lake acreage); and (3) water quality monitoring information to determine these CAFO priority watersheds. This activity could be used to help determine where to use a watershed permitting approach for CAFOs.

Question 7. The current Clean Water Act and the regulations associated with it have not been fully implemented to include all those currently required to have CAFO permits. The regulations allow EPA a great deal of latitude when it comes to determining what is a CAFO. It appears polls and politics are driving this program as opposed to science. Why is EPA proposing to expand the current program when it has not even implemented the existing program? Should you not interpret the success of the current program prior to changing it? You make predictions in the Strategy on numbers that cannot be defended yet the conclusion that we need to change the focus is made. Is the direction of new policy determined by looking at the number of permits and enforcement actions?

Response. The Unified Animal Feeding Operations Strategy emphasizes voluntary and incentive-based approaches to encourage AFOs to address water quality and public health impacts of their operations. EPA and USDA will be working closely with States, Tribes, the agriculture industry and other stakeholders to help implement best management practices on most of the Nation's 450,000 animal feeding operations.

Under the regulatory framework of the Clean Water Act, NPDES permits are required for approximately 5 percent of all animal feeding operations (those that are defined or designated as CAFOs). The Strategy includes a number of actions designed to better implement the existing regulatory program during the next decade and that reflect the expansion and concentration of the animal agriculture industry over the past two decades. During Round I permitting of CAFOs (2000–2005), EPA is focusing primarily on the large operations, which should be addressed through NPDES general permits. EPA expects many other operations to seek voluntary assistance to ensure that are not a priority in future NPDES permitting. EPA will consider the success of the current efforts as we consider changes to the existing regulations, which will be in effect during Round II (2005–2010).

Question 8. You have gone before numerous committees stating EPA does not have the resources to implement the current environmental statutes. Clearly, EPA has demonstrated that you are unable to fully implement the existing programs, as it pertains to agriculture. States have made it clear that they do not have the resources to implement the existing program. How does the administration expect to implement an entirely new program that is much more expansive than the existing program?

Response. The program outlined in the Unified AFO Strategy is a largely a collection of existing efforts and programs. EPA and USDA are committed to better coordinating these efforts and ensuring that programs are more effectively implemented to better address the water quality and public health impacts of animal feeding operations while maintaining the overall, long-term sustainability of the in-

dustry. For instance, EPA and USDA have existing programs that provide technical and financial assistance, such as the nonpoint source grants program (CWA sec. 319), the Clean Water State Revolving Fund Program, the Environmental Quality Incentives (EQIP) program, Conservation Technical Assistance, and many others. Additionally, concentrated animal feeding operations have been required to have NPDES permits since 1976. (There are many reasons CAFO permits have not been issued over the years and resource constraints are only one of the issues.)

To support the States in these efforts, in fiscal year 1999 the Administration requested and received increases to the nonpoint source (319) and State program management (106) grants. However, only $174 million was authorized for EQIP rather than the $300 million requested by the Administration. The Administration has also included additional funds to support the Clean Water Action Plan, including a $126 million increase to EQIP, in the fiscal year 2000 budget request.

Question 9. Has a cost analysis been done to determine EPA's needs to implement this strategy? Has any cost/benefit analysis been done? Are you avoiding SBREFA and Regulatory Flexibility Act by changing regulations with Strategies and Policies as opposed to regulations?

Response. The Strategy summarizes possible changes to EPA's regulations that are being considered, but the Strategy is not itself a proposed regulation. Nevertheless, EPA and USDA committed in the Strategy to develop a joint evaluation of its costs and benefits. In addition, EPA will conduct the appropriate cost benefit analyses, cost-effectiveness analyses and financial analyses as required under the Regulatory Flexibility Act, and the other statutes and Executive Orders if changes to the existing regulations are proposed.

Question 10. The Strategy seems to require the permitting of AFOs that do not discharge to the waters of the United States. The regulations clearly require permitting only of animal feeding operations that discharge at storm events that are less than 25-year, 24-hour events. How can permits be required for AFOs where the regulations clearly say they are not needed?

Response. EPA's position is that most AFOs with greater than 1,000 AUs are CAFOs and should be covered by an NPDES permit due to the quantity of manure generated. Further, it is EPA's belief that many of the largest CAFOs (greater than 1,000 AU) have had discharges in the past and/or have a reasonable likelihood for future discharges and therefore should be required to seek coverage under a NPDES permit. After an application has been received, it will then be determined whether a permit is appropriate.

Question 11. What are the criteria for a functionally equivalent program? Will functional equivalency based on performance (environmental outcome) or process (permits)?

Response. A program that is functionally equivalent to an NPDES program must first seek and secure authorization under 40 CFR 123.61 (initial approval) or 40 CFR 123.62 (modification of existing NPDES program) before a permit issued by the State will satisfy the NPDES permitting requirement. The criteria for authorization are found in 40 CFR part 123. These criteria include: elimination of conflicts of interest; requirements for enforcement authority and penalty provisions; confidentiality of permit application information; EPA review of and objection to State permits; public notice and public hearings for permit issuance; citizens appeal of final-issued permits; and citizen intervention in enforcement proceedings. This regulation specifies the procedures EPA will follow in approving, revising, and withdrawing State programs and the requirements State programs must meet to be approved by the EPA Administrator under sections 318, 402, and 405 of the Clean Water Act. Included in the regulation are procedural requirements intended to meet the procedural and water quality and public health objectives of the Act.

Question 12. The strategy suggests that a "functionally equivalent" program for a State is some type of permitting program. This will eliminate many State programs that are currently protecting the environment. Has EPA determined that the only way to protect the environment is through a permit? Did we not already realize command and control does not work?

Response. The Unified Animal Feeding Operations Strategy emphasizes voluntary and incentive-based approaches to encourage AFOs to address water quality and public health impacts of their operations. EPA and USDA will be working closely with States, Tribes, the agriculture industry and other stakeholders to implement best management practices using the existing framework of technical and financial assistance, including effective State programs on the vast majority of the Nation's 450,000 animal feeding operations.

Under the existing regulatory framework of the Clean Water Act, NPDES permits are required for approximately 5 percent of all animal feeding operations (those that

are defined or designated as CAFOs). EPA will be working with States to more closely align existing State programs to meet the environmental objectives outlined in the Federal program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an existing State permit program and can demonstrate that such a program meets the NPDES requirements, EPA is willing to work closely with the State to amend its authorization. EPA does expect NPDES-authorized States to issue NPDES permits to those operations that are CAFOs.

Question 13. How does EPA make broad conclusions of environmental harm when only 19 percent of the rivers in the United States have been tested and it can be assumed that those are the waters in the worst condition?

Response. We believe that the current State section 305(b) reports (which make up the National Water Quality Inventory) provide a good synopsis of known water quality problems. Our understanding of water quality conditions is enhanced by other indicators of watershed health such as the Index of Watershed Indicators and by many Federal and State water quality assessments, such as the National Ambient Water Quality Assessment program managed by the U.S. Geological Survey. Further, the Clean Water Action Plan asked States to identify waters in need of restoration to meet water quality and other natural resource goals; States have identified over 800 watersheds in this country as priorities for restoration. Also, we don't assume the waters surveyed are the worst; many States use probabilistic methods or rotating basin approaches for water quality assessments in order to present a balanced picture.

EPA and State water quality agencies agree that monitoring and assessment coverage should continue to expand over time to provide more comprehensive water quality management information. EPA and other Federal agencies on the National Water Quality Monitoring Council are working with States to broaden the coverage of water quality studies, including the use of rotating basin monitoring approaches, and to provide technical assistance to States to help use statistical surveys to provide more information from the monitoring that is accomplished. Under the Regional Environmental Monitoring and Assessment Program, the Office of Research and Development provides technical assistance to EPA Regions and States for design and implementation of probability-based surveys to characterize waters at the watershed, State, or ecoregion level.

In addition, EPA and the States are working collaboratively through the 305(b) Consistency Workgroup to update and improve the national guidelines and protocols for assessing State water quality. Through this effort, EPA and the States hope to improve water quality monitoring methods, provide consistent schedules for sampling and evaluation, and improve reporting mechanisms. Although this is a multiyear effort, much progress has already been made. However, over the next few years, we expect to see vastly improved monitoring and reporting by the States which should result in a much improved National Water Quality Inventory.

As all these various assessment efforts mutually highlight known watershed and nonpoint source problems that go beyond traditional point source concerns, we do support the need for all of us to take reasonable next steps as outlined in the Clean Water Action Plan to address these remaining problems.

Question 14. How will EPA handle a State with delegated authority, that chooses not to implement the strategy or merely cannot under financial constraints?

Response. States and Tribes play a critical role in the development and implementation of national and State and Tribal water resource protection programs. EPA is committed to work in partnership with States and Tribes. EPA believes the need for a national goal and performance expectation for AFOs can be balanced with the need for flexibility to address the various needs and priorities of the States and Tribes, including coordination with other clean water programs. The Strategy does not, however, impose any binding requirements on States.

As a condition of NPDES authorization, each authorized State had to demonstrate that it had the necessary legal authority and resources to carry out the program. EPA expects authorized States to fully implement the NPDES program for CAFOs. In recognition of NPDES-authorized States' differing circumstances, the Strategy does, however, provide several types of flexibility.

First, EPA recognizes that some States may be implementing permitting programs under State law that meet or exceed the requirements of, and, therefore, are functionally equivalent to the NPDES program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an existing State permit program and can demonstrate that such a program meets the NPDES requirements, EPA is willing to work closely with the State to amend its authorization.

Second, because of differences in workload and resources among authorized States, EPA is providing flexibility for States in the issuance of permits for CAFOs with fewer than 1,000 animal units (AUs). While NPDES-authorized States are expected to issue general permits to the largest CAFOs (greater than 1,000 AUs) by January 2000, States will have until the end of 2002 to issue permits to CAFOs with fewer than 1,000 AUs. EPA acknowledges that some States may even need additional time beyond 2002 to issue permits for smaller CAFOs.

A final area of flexibility relates to the schedule for issuing individual permits to certain CAFOs. Although these individual permits should be issued as expeditiously as possible, EPA and States should consider State-specific circumstances such as the total number of CAFOs with greater than 1,000 AUs, the need to issue individual permits to new or exceptionally large facilities, and the availability of technical assistance for development of comprehensive nutrient management plans. States may give permitting priority to impaired water bodies (such as 303(d) listed waters or those identified in State water quality management plans). In addition, where a State develops an NPDES program that provides for a comprehensive response to environmental issues at CAFOs, EPA will generally defer to an authorized State's judgment with respect to the use of individual or general permits.

To help States with the cost of issuing permits to CAFOs, as well as other costs associated with the CWAP, the Administration requested, and Congress appropriated, a $20 million increase to sec. 106 State and Tribal water quality program grants for fiscal year 1999. The same funding level has been requested for fiscal year 2000 to continue to support these activities.

Question 15. Under section 208(j) of the Clean Water Act, EPA, with the Secretary of Agriculture, could enter into contracts with producers to install and maintain best management practices to control non-point sources. Has EPA asked to have this program funded? If yes, how much? If no, how can EPA place all the blame on nonpoint source agriculture and not even request funding to address that exact issue under the Clean Water Act.

Response. EPA does not "place all the blame" for continuing water quality problems on agriculture. We have significant efforts underway, as outlined in a variety of documents including the Clean Water Action Plan, to address problems associated with stormwater management, combined sewer overflows, sanitary sewer overflows, and septic systems, among other sources of impairment. Nevertheless, most experts, and many agricultural producers, recognize that some farming operations contribute to water quality problems. As the States report, in the aggregate, agricultural operations are, in fact, the leading cause of impairment. Accordingly, EPA has increased its requests for grants to States under section 319 of the Clean Water Act to address runoff to $200 million/year and has supported increases for complementary USDA programs such as EQIP, Conservation Technical Assistance, and CRP. A large portion—the exact amount determined by each State—of the 319 money is passed through to agricultural producers to assist them to demonstrate ways to reduce pollution. In addition, EPA has been working closely with the States and agricultural interests to increase the use of the Clean Water State Revolving Fund program, which may be used to provide low interest loans to address nonpoint sources of pollution, including animal feeding operations.

Section 208(j), which was part of the original CWA, was never funded largely due to concerns about overlap with existing USDA programs and concern about the appropriate role for both USDA and EPA. In response to these concerns, Congress created the Rural Clean Water Program in USDA to test some of the ideas originally expressed in section 208(j). This program ran for approximately 10 years and provided funds for pilot projects around the country. Based on these and other experiences, the section 319 program was added to the Clean Water Act when it was reauthorized in 1987. The section 319 program includes State-led nonpoint source assessments and management programs as well as a grant program. Based on this history, section 319 is generally recognized as the appropriate vehicle for EPA to fund best management practices to address nonpoint sources of pollution. The 1996 Farm bill established EQIP as a means for USDA to fund best management practices to address nonpoint source pollution among other things.

Question 16. Does EPA plan on regulating the land application of manure which is applied offsite of the CAFO permit? Will this be part of the CAFO permit or are you planning on regulating farmers?

Response. In general, the Clean Water Act does not regulate farmers that, in the normal course of business, use manure on their lands. In a case where a third party takes manure from a CAFO and applies it to the land (offsite) that party could be subject to regulation under the Clean Water Act. If that party develops and implements an appropriate comprehensive nutrient management plan, the operator would

qualify for the Clean Water Act's agricultural stormwater exemption and, thus, avoid regulation of its stormwater-related discharges. EPA will provide additional information on land application in its forthcoming CAFO permitting guidance.

Question 17. How does EPA plan on using individual permits v. general permits? Does EPA or the States make the determination of which permit to issue?

Response. The Unified AFO Strategy encourages the use of general NPDES permits for most CAFOs. There are some situations, however, where a general permit may not be appropriate, including for exceptionally large operations, new operations undergoing significant expansion, operations with historical compliance problems, and operations with significant environmental concerns. EPA plans to discuss general and individual CAFO permits more fully in its forthcoming CAFO permitting guidance. Those States with an authorized NPDES program have discretion to determine whether to use general or individual permits, particularly where a State develops an NPDES program that provides a comprehensive response to environmental issues at CAFOs. EPA will make that determination for non-authorized States.

Question 18. The time line for this Strategy is very ambitious. A draft model permit is supposed to be out in May and then in August. The strategy then states that the priority permits (15,000–20,000) will be issued by January of 2000. Is this not an extremely short time for States to implement 20,000 permits when EPA claims there have currently only been 6,000 permits issued since the beginning of this program?

Response. As described in the Unified AFO Strategy and under the current regulations, EPA estimates that a total of 15,000–20,000 CAFOs will ultimately need to have NPDES permits to address the Strategy's three permitting priorities: (1) facilities with significant manure production; (2) facilities with unacceptable conditions; and (3) facilities that are significantly contributing to water quality impairment. There are approximately 10,000 CAFOs with significant manure production. The other two permitting priorities (unacceptable conditions and significant contributors to water quality impairment) include approximately 5,000–10,000 CAFOs.

The Strategy discusses the short-term objective of issuing Statewide general NPDES permits to cover most CAFOs with significant manure production by January 2000. Statewide general permits are designed to cover a large number of a particular type of facility and thus only one is needed for each State. Since individual permits may be more appropriate for some CAFOs with significant manure production, the estimate of the CAFOs that need to have general permit coverage by January 2000 will be somewhat less than 10,000. EPA believes that because States will use Statewide general permits to cover CAFOs with significant manure production, the January 2000 objective is feasible. The remaining CAFOs with unacceptable conditions or that are significantly contributing to water quality impairment will be covered by NPDES permits by about 2002. Although EPA is emphasizing these permitting priorities, it is important to note that CAFOs have been required to have NPDES permits since 1976.

Question 19. Do you think every concentrated beef cattle feeding operations over 1,000 head should have a general permit? (Yes or no) If yes, what was the environmental consideration taken into account in making that determination and do you not have to discharge or have the potential to discharge into the waters of the United States in order to need an NPDES permit? How could a decision based solely on a number answer the other permitting questions?

Response. EPA's position is that most AFOs with greater than 1,000 AUs are CAFOs and should be covered by an NPDES permit due to the quantity of manure generated. Further, it is EPA's belief that many of the largest CAFOs (greater than 1,000 AU) have had discharges in the past and/or have a reasonable likelihood for future discharges and therefore should be required to seek coverage under a NPDES permit. After an application has been received, it will then be determined whether a permit is appropriate.

Question 20. Many times when asked about specific sections of the Strategy you and your staff have responded with an expansive interpretation of that section. The Strategy was written with extreme vagueness and you seem to treat it as a living document. How is the producer suppose to interpret it? Is he or she to suppose to rest assured on your interpretations?

Response. EPA and USDA have been working together to conduct extensive outreach on the Strategy. For example, we sponsored 11 listening sessions to help explain the draft strategy and gain input from the industry and other key stakeholders. Listening sessions were held between November 16 and December 15, 1998 in Tulsa, Oklahoma; Harrisburg, Pennsylvania; Chino, California; Madison, Wisconsin; Seattle, Washington; Des Moines, Iowa; Chattanooga, Tennessee; Indianapolis, Indi-

ana; Fort Worth, Texas; Denver, Colorado; and Annapolis, Maryland. The meetings provided basic information about the draft Strategy, answered specific questions on the strategy, and helped facilitate submission of public comments. Roughly 2,300 farmers, environmental groups, agriculture industry groups, and other members of the public attended the meetings.

Upon release of the draft Strategy in September, USDA and EPA broadcast a video satellite downlink to State conservationists and many other interested parties. The draft strategy was distributed widely to EPA and USDA stakeholders and partners and posted on the Internet. We continue to provide support and outreach to interested parties and are preparing support materials, including permitting guidance that will help clarify expectations and requirements for CAFOs. The final strategy was released in March, and is posted along with an executive summary at http://www.epa.gov/owm/afo.html on the Internet.

In all these cases, we endeavor to provide consistent support and interpretations and will continue to work to improve our materials and outreach efforts.

Question 21. The implementers of this Strategy will be regional directors and States. There is in many situations of regional administrators not agreeing with EPA headquarters and in some cases not following the direction of headquarters. Is that not a more immediate problem that faces the agency? How are we to know that the regions will follow EPA headquarters interpretation of this strategy?

Response. EPA will continue to work closely with the Regions and States to ensure understanding of the AFO Strategy.

RESPONSES BY CAROL M. BROWNER TO ADDITIONAL QUESTIONS FROM SENATOR HUTCHISON

Question 1a. The current Clean Water Act and the regulations associated with it have not been fully implemented to include all those currently required to have CAFO permits. The regulations allow EPA a great deal of latitude when it comes to determining what is a CAFO. Why is EPA proposing to expand the current program when it has not even implemented the existing program? Should you interpret the success of the current program prior to changing it?

Response. As you know, the Unified Animal Feeding Operations Strategy emphasizes voluntary and incentive-based approaches to encourage AFOs to address water quality and public health impacts of their operations. EPA and USDA will be working closely with States, Tribes, the agriculture industry and other stakeholders to help implement best management practices on most of the Nation's 450,000 animal feeding operations.

Under the regulatory framework of the Clean Water Act, NPDES permits are required for approximately 5 percent of all animal feeding operations (those that are defined or designated as CAFOs). The Strategy includes a number of actions designed to better implement the existing regulatory program during the next decade and that reflect the expansion and concentration of the animal agriculture industry over the past two decades. During Round I permitting of CAFOs (2000–2005), EPA is focusing primarily on the large operations, which should be addressed through NPDES general permits. EPA expects many other operations to seek voluntary assistance to ensure that are not a priority in future NPDES permitting. EPA will consider the success of the current efforts as we consider changes to the existing regulations, which will be in effect during Round II (2005–2010).

Question 1b. Has EPA done an analysis of States with delegated authority and their NPDES program? If so, could you supply me with that information? If not, how did EPA make the conclusion that the State programs need to be changed?

Response. Forty-three States are authorized to implement the NPDES program. EPA believes that, with the exception of Oklahoma, all these States currently have authority to address CAFOs through their NPDES program. Despite this longstanding authority, some States such as North Carolina have developed alternative regulatory programs to deal with AFOs. The NPDES regulations provide for the recognition of these State programs as NPDES permit programs. Where a State can demonstrate that its program meets the NPDES program requirements, EPA will amend the State's current NPDES authorization to recognize the State program.

Question 2. The strategy would put in place thousands of new NPDES permits for AFOs across the country, at the same time that EPA's enforcement office is pursuing existing CAFO permit holders. What is the goal of the Strategy: compliance, assurance or enforcement?

Response. The AFO Strategy clearly indicates reliance on a complete range of tools to ensure that animal waste is effectively managed to protect water quality,

including permitting, compliance assurance, and enforcement as needed. While the vast majority of AFOs will be encouraged to implement appropriate environmental safeguards through voluntary programs, EPA expects that about 15,000–20,000 CAFOs will be covered by NPDES permits under the current regulations. As with all CWA regulatory programs, EPA may take action for discharges without a permit or discharges in violation of a permit, and may initiate emergency action at any time against an entity that presents an imminent or substantial endangerment to human health or the environment.

Question 3. The strategy causes States to implement general NPDES permits by January 2000, but CNMPs come a couple of years later. Also the effluent guidelines (ELGs) are being rewritten and due out in a later part of next year. Why rush through a very ambitious permit requirement when many pieces of the permits are still being worked on and it is obvious the State and Federal officials aren't ready?

Response. As outlined in the Unified AFO Strategy, EPA plans to work with States to establish a two-phase approach to permitting CAFOs during the next decade. Round I of CAFO permitting (2000–2005) will begin early next year and will focus on large CAFOs (i.e., greater than 1,000 animal units), and will occur under EPA's existing regulations and effluent guidelines. The permits issued during Round I are expected to remain in effect at least until 2005. The largest CAFOs should develop and begin implementation of CNMPs between 2000 and 2003; EPA and States may require CAFO CNMP development and implementation earlier depending on the specific circumstances in each State. Many of these large CAFOs may already have CNMPs or planning documents that could be adapted to meet the requirements of their NPDES permit. EPA believes that it is appropriate to proceed with Round I CAFO permitting activities since implementing the existing regulations allows for substantial short-term progress in addressing the water quality and public health impacts of CAFOs. Moreover, all authorized States have the necessary authority to issue NPDES permits to CAFOs under Round I.

In Round II (2005–2010), EPA and States will issue permits that reflect revisions to the efffluent guidelines, permit program regulations, and State-adopted water quality standards. Although EPA is already working on these revisions, they will not be complete until about 2003.

Question 4. During the Hearing you stated that cost/benefit analysis was not done on the entire Clean Water Action Plan, however the policies and rules coming out of the Clean Water Action Plan would have such analysis. Could you supply me with the cost analysis done on the USDA/EPA Unified Strategy for Animal Feeding Operations? If one has not been done, please explain why not.

Response. Neither the CWAP nor the Unified Strategy for Animal Feeding Operations required a cost/benefit analysis. Nevertheless, EPA and USDA committed in the Strategy itself to develop a joint evaluation of the costs and benefits of the Strategy.

We will comply with all the legal and procedural requirements associated both with the CWAP and the Strategy, including cost/benefit analyses, where appropriate. Each is a compilation of activities that we will undertake over a multi-year period. EPA's activities under the AFO strategy include the revised regulations for CAFO Effluent Guidelines and CAFO Permits. EPA will conduct cost/benefit analyses to support these revised rules. The Agency will also comply with the Regulatory Flexibility Act, Unfunded Mandates Reduction Act, and Paperwork Reduction Act, as appropriate.

Question 5. In the strategy, you provide specific numbers of CAFOs and AFOs. Could you supply the source of those numbers? Also, could you supply how the numbers of facilities outlined in the section addressing regulatory priorities were reached? Please be specific in how these numbers were determined.

Response. The numbers used in the Strategy are clearly indicated as estimates, and are based on the 1992 agriculture census conducted by USDA. Based on recent trends within the industry toward consolidation, adjustments were made to the base numbers from this 1992 census data.

Question 6. The regulatory priority section outlines an aggressive date of January 2000 to have approximately 20,000 permits in place. Could you provide the cost analysis of implementing these permits and does the brunt of this cost fall on the States?

Response. Since most States are authorized to implement the NPDES program for CAFOs, States will have the primary responsibility for issuing NPDES permits to CAFOs. EPA is, however, encouraging States to issue Statewide general permits to cover most large CAFOs by January 2000: General permits are much less resource-intensive than using individual permits.

In addition, EPA received an increase for fiscal year 1999 in Clean Water Act section 106 grants for State water quality program administration, and requested continuation of the increase in section 106 grants for fiscal year 2000 as well. These additional funds can be used by States for programs to address CAFOs.

As we develop regulatory changes called for in the AFO Strategy, we are committed to undertaking all appropriate and necessary cost-benefit analyses.

Question 7. You have gone before numerous committees stating that EPA does not have the resources to implement the current environmental statutes. Clearly, EPA has demonstrated that it is unable to fully implement the existing programs, as it pertains to agriculture. States have made it clear that they do not have the resources to implement the existing program. How does the administration expect to implement an entirely new program that is much more expansive than the existing program?

Response. The program outlined in the Unified AFO Strategy is a largely a collection of existing efforts and programs. EPA and USDA are committed to better coordinating these efforts and ensuring that programs are more effectively implemented to better address the water quality and public health impacts of animal feeding operations while maintaining the overall, long-term sustainability of the industry. For instance, EPA and USDA have existing programs that provide technical and financial assistance, such as the nonpoint source grants program (CWA sec. 319), the Clean Water State Revolving Fund Program, the Environmental Quality Incentives (EQIP) program, Conservation Technical Assistance, and many others. Additionally, concentrated animal feeding operations have been required to have NPDES permits since 1976. (There are many reasons CAFO permits have not been issued over the years and resource constraints are only one of the issues.)

To support the States in these efforts, in fiscal year 1999 the Administration requested and received increases to the nonpoint source (319) and State program management (106) grants. However, only $174 million was authorized for EQIP rasher then the $300 million requested by the Administration. The Administration has also included additional funds to support the Clean Water Action Plan, including a $126 million increase to EQIP, in the fiscal year 2000 budget request.

Question 8. The strategy seems to require the permitting of AFOs that do not discharge to the waters of the United States. The regulations clearly require permitting only of animal feeding operations that discharge at storm events that are less than 25-year, 24-hour events. Is a site-specific determination that a facility is discharging into the waters of the United States still needed to determine that a permit is required? Can EPA make assumptions that a facility is discharging in order to require a permit? If these operations are not required to be permitted what is the standard EPA will use to exclude these operations from the permitting program? Is the burden on the producer to demonstrate they will not discharge?

Response. EPA's position is that most AFOs with greater than 1,000 AUs are CAFOs and should be covered by an NPDES permit due to the quantity of manure generated. Further, it is EPA's belief that many of the largest CAFOs (greater than 1,000 AU) have had discharges in the past and/or have a reasonable likelihood for future discharges and therefore should be required to seek coverage under a NPDES permit. After a permit application has been received, the State, or EPA as permitting authority, will then determine whether a permit is appropriate.

Question 9. What are the criteria for a functionally equivalent program? Will functional equivalency be based on performance or process?

Response. A program that is functionally equivalent to an NPDES program must first seek and secure authorization under 40 CFR 123.61 (initial approval) or 40 CFR 123.62 (modification of existing NPDES program) before a permit issued by the State will satisfy the NPDES permitting requirement. The criteria for authorization are found in 40 CFR part 123. These criteria include: elimination of conflicts of interest; requirements for enforcement authority and penalty provisions; confidentiality of permit application information; EPA review of and objection to State permits; public notice and public hearings for permit issuance; citizens appeal of final-issued permits; and citizen intervention in enforcement proceedings. This regulation specifies the procedures EPA will follow in approving, revising, and withdrawing State programs and the requirements State programs must meet to be approved by the EPA Administrator under sections 318,402, and 405 of the Clean Water Act. Included in the regulation are procedural requirements intended to meet the procedural and water quality and public health objectives of the Act.

Question 10. How does EPA make broad conclusions of environmental harm when only 19 percent of the rivers in the United States have been tested and it can be assumed that those are the waters in the worst condition?

Response. We believe that the current State section 305(b) reports (which make up the National Water Quality Inventory) provide a good synopsis of known water quality problems. Our understanding of water quality conditions is enhanced by other indicators of watershed health such as the Index of Watershed Indicators and by many Federal and State water quality assessments, such as the National Ambient Water Quality Assessment program managed by the U.S. Geological Survey. Further, the Clean Water Action Plan asked States to identify waters in need of restoration to meet water quality and other natural resource goals; States have identified over 800 watersheds in this country as priorities for restoration. Also, we don't assume the waters surveyed are the worst; many States use probabilistic methods or rotating basin approaches for water quality assessments in order to present a balanced picture.

EPA and State water quality agencies agree that monitoring and assessment coverage should continue to expand over time to provide more comprehensive water quality management information. EPA and other Federal agencies on the National Water Quality Monitoring Council are working with States to broaden the coverage of water quality studies, including the use of rotating basin monitoring approaches, and to provide technical assistance to States to help use statistical surveys to provide more information from the monitoring that is accomplished. Under the Regional Environmental Monitoring and Assessment Program, the Office of Research and Development provides technical assistance to EPA Regions and States for design and implementation of probability-based surveys to characterize waters at the watershed, State, or ecoregion level.

In addition, EPA and the States are working collaboratively through the 305(b) Consistency Workgroup to update and improve the national guidelines and protocols for assessing State water quality. Through this effort, EPA and the States hope to improve water quality monitoring methods, provide consistent schedules for sampling and evaluation, and improve reporting mechanisms. Although this is a multiyear effort, much progress has already been made. However, over the next few years, we expect to see vastly improved monitoring and reporting by the States which should result in a much improved National Water Quality Inventory.

As all these various assessment efforts mutually highlight known watershed and nonpoint source problems that go beyond traditional point source concerns, we do support the need for all of us to take reasonable next steps as outlined in the Clean Water Action Plan to address these remaining problems.

Question 11. There have been many concerns that agriculture is becoming consolidated. We have heard from many livestock producers that the strategy will clearly force more consolidation of industry and eliminate the small livestock producer. Does EPA take this into consideration and if so please explain how this strategy will avoid forcing consolidation?

Response. The Strategy emphasizes a balanced voluntary/regulatory approach, with permitting focused on the largest CAFOs. EPA expects that smaller operations in situations that might otherwise make them subject to regulation will voluntarily address those situations to avoid the requirement to have a permit under the NPDES program. With respect to the anticipated CAFO rulemakings discussed in the Strategy it is not EPA's intent to drive out small operations out of business. By law, EPA is required to assess the impacts on small businesses. EPA will also obtain small business input during the rule development phase to help mitigate adverse impacts to small business.

Question 12. How will EPA handle a State, with delegated authority, that chooses not to implement the strategy or merely cannot under financial constraints?

Response. States and Tribes play a critical role in the development and implementation of national and State and Tribal water resource protection programs. EPA is committed to work in partnership with States and Tribes. EPA believes the need for a national goal and performance expectation for AFOs can be balanced with the need for flexibility to address the various needs and priorities of the States and Tribes, including coordination with other clean water programs. The Strategy does not, however, impose any binding requirements on States.

As a condition of NPDES authorization, each authorized State had to demonstrate that it had the necessary legal authority and resources to carry out the program. EPA expects authorized States to fully implement the NPDES program for CAFOs. In recognition of NPDES-authorized States' differing circumstances, the Strategy does, however, provide several types of flexibility.

First, EPA recognizes that some States may be implementing permitting programs under State law that meet or exceed the requirements of, and, therefore, are functionally equivalent to the NPDES program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an

existing State permit program and can demonstrate that such a program meets the NPDES requirements, EPA is willing to work closely with the State to amend its authorization.

Second, because of differences in workload and resources among authorized States, EPA is providing flexibility for States in the issuance of permits for CAFOs with fewer than 1,000 animal units (AUs). While NPDES-authorized States are expected to issue general permits to the largest CAFOs (greater than 1,000 AUs) by January 2000, States will have until the end of 2002 to issue permits to CAFOs with fewer than 1,000 AUs. EPA acknowledges that some States may even need additional time beyond 2002 to issue permits for smaller CAFOs.

A final area of flexibility relates to the schedule for issuing individual permits to certain CAFOs. Although these individual permits should be issued as expeditiously as possible, EPA and States should consider State-specific circumstances such as the total number of CAFOs with greater than 1,000 AUs, the need to issue individual permits to new or exceptionally large facilities, and the availability of technical assistance for development of comprehensive nutrient management plans. States may give permitting priority to impaired water bodies (such as 303(d) listed waters or those identified in State water quality management plans). In addition, where a State develops an NPDES program that provides for a comprehensive response to environmental issues at CAFOs, EPA will generally defer to an authorized State's judgment with respect to the use of individual or general permits.

To help States with the cost of issuing permits to CAFOs, as well as other costs associated with the CWAP, the Administration requested, and Congress appropriated, a $20 million increase to sec. 106 State and Tribal water quality program grants for fiscal year 1999. The same funding level has been requested for fiscal year 2000 to continue to support these activities.

Question 13. Under section 208(j) of the Clean Water Act, EPA, with the Secretary of Agriculture, could enter into contracts with producers to install and maintain best management practices to control non-point sources. Has EPA asked to have this program funded? If yes, how much? If no, how can EPA place all the blame on nonpoint source agriculture and not even request funding to address that exact issue under the Clean Water Act.

Response. EPA does not "place all the blame" for continuing water quality problems on agriculture. We have significant efforts underway, as outlined in a variety of documents including the Clean Water Action Plan, to address problems associated with stormwater management, combined sewer overflows, sanitary sewer overflows, and septic systems, among other sources of impairment. Nevertheless, most experts, and many agricultural producers, recognize that some farming operations contribute to water quality problems. As the States report, in the aggregate, agricultural operations are, in fact, the leading cause of impairment. Accordingly, EPA has increased its requests for grants to States under section 319 of the Clean Water Act to address runoff to $200 million/year and has supported increases for complementary USDA programs such as EQIP and CRP. A large portion—the exact amount determined by each State—of the 319 money is passed through to agricultural producers to assist them to demonstrate ways to reduce pollution. In addition, EPA has been working closely with the States and agricultural interests to increase the use of the Clean Water State Revolving Fund program, which may be used to provide low interest loans to address nonpoint sources of pollution, including animal feeding operations.

Section 208(j), which was part of the original CWA, was never funded largely due to concerns about overlap with existing USDA programs and concern about the appropriate role for both USDA and EPA. In response to these issues, Congress created the Rural Clean Water Program in USDA to test some of the ideas originally expressed in section 208(j). This program ran for approximately 10 years and provided funds for demonstration programs around the country. Based on these and other experiences, the section 319 program was added to the Clean Water Act when it was reauthorized in 1987. The section 319 program includes State-led nonpoint source assessments and management programs as well as a grant program. Based on this history, section 319 is generally recognized as the appropriate vehicle for funding best management practices to address nonpoint sources of pollution.

Question 14. Does EPA plan on regulating the land application of manure which is applied by a 3rd party, offsite of the CAFO? If yes, will this be part of the CAFO permit or are you planning on regulating farmers under separate permits?

Response. In general, the Clean Water Act does not regulate farmers that, in the normal course of business, use manure on their lands. In a case where a third party takes manure from a CAFO and applies it to the land (offsite) that party could be subject to regulation under the Clean Water Act. If that party develops and imple-

ments an appropriate comprehensive nutrient management plan, the operator would qualify for the Clean Water Act's agricultural stormwater exemption and, thus, avoid regulation of its stormwater-related discharges. EPA will provide additional information on land application in its forthcoming CAFO permitting guidance.

Question 15. How does EPA plan on using individual permits vs. general permits? Does EPA or the States make the determination of which permit to issue? Is there any type of size determination being discussed as an automatic individual permit? If yes, are there any other factors taken into consideration other than size?

Response. The Unified AFO Strategy encourages the use of general NPDES permits for most CAFOs. There are some situations, however, where a general permit may not be appropriate, including for exceptionally large operations, new operations undergoing significant expansion, operations with historical compliance problems, and operations with significant environmental concerns. EPA plans to discuss individual CAFO permits more fully in its forthcoming CAFO permitting guidance. Those States with an authorized NPDES program have discretion to determine whether to use general or individual permits, particularly where a State develops an NPDES program that provides a comprehensive response to environmental issues at CAFOs. EPA will make that determination for non-authorized States.

Question 16. The strategy discusses new facilities (1,000 hd.)will have to get individual permits? Why does a general permit not suffice? Is the number the sole issue in making this determination or are there any environmental concerns taken into account?

Response. There is a correlation between number of head and amount of manure produced. To properly dispose of large amounts of manure requires large amounts of land, which may or may not be available. Additionally, the public has stated they want to be notified of new, large operations in their area that could affect their health and water quality. Public notice is an important component of individual permits.

Question 17. The time line for this strategy is very ambitious. A draft model permit is supposed to be out in May and then final in August. The Strategy then states that the priority permits (15,000–20,000) will be issued by January of 2000. Is this not an extremely short time for States to implement 20,000 permits when EPA claims there have currently only been 6,000 permits issued since the beginning of this program? How will EPA help the States that do not have the financial capability?

Response. As described in the Unified AFO Strategy and under the current regulations, EPA estimates that a total of 15,000–20,000 CAFOs will ultimately need to have NPDES permits to address the Strategy's three permitting priorities: (1) facilities with significant manure production; (2) facilities with unacceptable conditions; and (3) facilities that are significantly contributing to water quality impairment. There are approximately 10,000 CAFOs with significant manure production. The other two permitting priorities (unacceptable conditions and significant contributors to water quality impairment) include approximately 5,000–10,000 CAFOs.

The Strategy discusses the short-term objective of issuing Statewide general NPDES permits to cover most CAFOs with significant manure production by January 2000. Statewide general permits are designed to cover a large number of a particular type of facility and thus only one is needed for each State. Since individual permits may be more appropriate for some CAFOs with significant manure production, the estimate of the CAFOs that need to have general permit coverage by January 2000 will be somewhat less than 10,000. EPA believes that because States will use Statewide general permits to cover CAFOs with significant manure production, the January 2000 objective is feasible. The remaining CAFOs with unacceptable conditions or that are significantly contributing to water quality impairment will be covered by NPDES permits by about 2002. Although EPA is emphasizing these permitting priorities, it is important to note that CAFOs have been required to have NPDES permits since 1976.

As a condition of NPDES authorization, each authorized State had to demonstrate that it had the necessary legal authority and resources to carry out the program. EPA expects authorized States to fully implement the NPDES program for CAFOs. In recognition of NPDES-authorized States' differing circumstances, the Strategy does, however, provide several types of flexibility.

First, EPA recognizes that some States may be implementing permitting programs under State law that meet or exceed the requirements of, and, therefore, are functionally equivalent to the NPDES program. Where an NPDES-authorized State indicates an interest in amending its NPDES program authorization to recognize an existing State permit program and can demonstrate that such a program meets the

NPDES requirements, EPA is willing to work closely with the State to amend its authorization.

Second, because of differences in workload and resources among authorized States, EPA is providing flexibility for States in the issuance of permits for CAFOs with fewer than 1,000 animal units (AUs). While NPDES-authorized States are expected to issue general permits to the largest CAFOs (greater than 1,000 AUs) by January 2000, States will have until the end of 2002 to issue permits to CAFOs with fewer than 1,000 AUs. EPA acknowledges that some States may even need additional time beyond 2002 to issue permits for smaller CAFOs.

A final area of flexibility relates to the schedule for issuing individual permits to certain CAFOs. Although these individual permits should be issued as expeditiously as possible, EPA and States should consider State-specific circumstances such as the total number of CAFOs with greater than 1,000 AUs, the need to issue individual permits to new or exceptionally large facilities, and the availability of technical assistance for development of comprehensive nutrient management plans. States may give permitting priority to impaired water bodies (such as 303(d) listed waters or those identified in State water quality management plans). In addition, where a State develops an NPDES program that provides for a comprehensive response to environmental issues at CAFOs, EPA will generally defer to an authorized State's judgment with respect to the use of individual or general permits.

In addition to the flexibility offered in the Strategy, EPA received an increase for fiscal year 1999 in Clean Water Act (CWA) section 106 grants for State water quality program administration, and requested continuation of the increase in section 106 grants for fiscal year 2000 as well. These additional funds can be used by States for programs (including inspections) to address concentrated animal feeding operations or CAFOs, which are regulated under the CWA permitting program.

Question 18. Do you think every concentrated beef cattle feeding operation over 1,000 head should have a general permit? (Yes or no). If yes, what was the environmental consideration taken into account in making that determination and do you not have to discharge or have the potential to discharge into the waters of the United States in order to need an NPDES permit? How could a decision based solely on a number answer a permitting question?

Response. EPA's position is that most AFOs with greater than 1,000 AUs are CAFOs and should be covered by an NPDES permit due to the quantity of manure generated. Further, it is EPA's belief that many of the largest CAFOs (greater than 1,000 AU) have had discharges in the past and/or have a reasonable likelihood for future discharges and therefore should be required to seek coverage under a NPDES permit. After an application has been received, it will then be determined whether a permit is appropriate.

Question 19. The implementers of this strategy will be regional directors and States. There is in many situations of regional administrators not agreeing with EPA headquarters and in some cases not following the direction of headquarters. Is that not a more immediate problem that faces the agency? How are we to know the regions will follow EPA headquarters interpretation of this strategy?

Response. EPA will continue to work closely with the Regions and States to ensure understanding of the AFO Strategy.

Question 20. The Strategy was written by many individuals who had never been on a cattle feedlot.The ones that been on a cattle feedlot may have gone to a 2000 head lot but never visited a 150,000 head feeding lot. How does EPA justify regulating an industry that officials at all levels have admitted to knowing very little about? How is EPA clarifying the issue of poor communication between regions, States, and communities and how does EPA plan on dealing with this problem in the future?

Response. The Strategy was written by representatives of USDA and EPA who had a solid base of experience in agriculture and livestock issues. The strength of the AFO Strategy is that EPA and USDA brought their very different yet complementary experiences together in a full partnership. EPA and USDA are committed to continue to work closely with the States and regional counterparts to help ensure a common understanding and level playing field.

Question 21. During your testimony before the Senate VA–HUD Appropriations Subcommittee, you expressed the need for the Clean Water Act to be amended to allow Federal authority over nonpoint sources. Could you please clarify this comment? Have you come to the conclusion that all State NPS programs are failing?

Response. Under the Clean Water Act, States have, and should continue to have, the lead responsibility for developing and implementing NPS programs and controls. The Administration has long supported a framework of voluntary and incentive-based approaches as the primary mechanism for controlling nonpoint sources of pol-

lution and making progress toward meeting water quality standards. EPA has encouraged States to build strong nonpoint source management programs and to use their best judgment in determining the appropriate mix of voluntary and regulatory tools to address the individual circumstances in each State.

EPA and the States have recognized for many years that there is a need to improve and expedite implementation of the overall nonpoint source program. In 1995 and 1996, EPA and the States worked closely and cooperatively together to develop a set of nine key elements which characterize an effective State nonpoint source program. These nine key elements are set forth in detail in section 319 program and grants guidance published by EPA in May 1996; that guidance was endorsed in writing by the Association of State and Interstate Water Pollution Control Administrators. At this point, virtually every State in the United States is working expeditiously in cooperation with EPA to upgrade its State 319 management program. The Agency expects this process to be complete in fiscal year 2000.

EPA and USDA have worked closely on the development and implementation of the Clean Water Action Plan to improve the effectiveness of voluntary and incentive-based programs at the Federal level. The Administration also supports the development of State and local authorities to provide a back-up mechanism where voluntary approaches fail to achieve the desired results. In fact, President Clinton's Clean Water Initiative (February 1994) outlines such a strategy and also includes a proposal that would allow EPA to take enforcement action in extreme cases where State efforts have failed or a State has failed to act. When Congress takes up reauthorization of the Clean Water Act, the Administration would like to discuss opportunities to strengthen and improve our voluntary and incentive-based programs and, within the context described above, provide appropriate back-up enforcement authorities.

STATEMENT OF DAN GLICKMAN, SECRETARY, DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the committee, thank you for inviting me to discuss the Administration's Clean Water Action Plan. Thank you, Chairman Chafee and Senator Baucus, for your continued attention to the important issue of the health of our Nation's water.

I am pleased to be here along with Environmental Protection Agency (EPA) Administrator Carol Browner. I am also accompanied by Under Secretary Jim Lyons, who represented me as co-chairman of the President's Clean Water Action Plan team.

Both the United States Department of Agriculture (USDA) and EPA share a common mission helping individuals and communities restore and protect the Nation's water resources. The Clean Water Action Plan, that President Clinton and Vice President Gore released in February 1998, provides a blueprint for how USDA, EPA, the Department of Interior, the Department of Commerce, the Department of Defense, and other Federal, State, and local partners will work together to continue the progress in water quality improvement we have made over the last quarter century.

USDA has a unique role protecting quality and quantity of water resources in the United States. The Forest Service's management of public forestlands play a critical role determining the quality and quantity of waters that flow from the headwaters of most of the major river systems in the West. In addition, the Natural Resources Conservation Service (NRCS), in concert with local soil and water conservation districts, helps to guide the stewardship of private farm, forest, and ranch lands downstream from these headwaters, to ensure that the quality of the Nation's waters are not impaired. Together, the Forest Service and the NRCS are also working in urban and suburban areas to reduce storm water runoff and sedimentation through urban and community forestry and conservation programs.

BACKGROUND

The Clean Water Action Plan was developed through a cooperative budget planning effort. It sets strong goals and identifies the tools and resources to protect public health and restore our Nation's precious surface and ground waters. It is a broad plan that utilizes existing programs and funding, as well as potential new investments to address problems in our watersheds. Significantly, the plan emphasizes collaborative strategies built around watersheds and the communities they sustain—a new component the President and Vice President have brought to the Federal strategy to revitalize our water resources.

Agriculture plays an important role in protecting and enhancing our environmental quality of life. Sound environmental practices, such as conservation buffers,

conservation tillage, forest management, and integrated pest management, help improve water quality, soil health, and wildlife habitat, keeping our agricultural and forestlands economically sustainable and our farmers, ranchers, and foresters globally competitive.

In addition, we made a concerted effort to involve the public in developing the plan. For example, in putting together the Unified National Strategy for Animal Feeding Operations, USDA and EPA co-sponsored 11 national listening sessions to discuss the draft strategy and, more importantly, to receive the public's comments. Many of these sessions were co-chaired by USDA Deputy Secretary Rich Rominger and Under Secretary Jim Lyons. We also managed a hotline for the public to receive clarification about the draft strategy. Together, these efforts generated about 1,800 written comments from the public, in addition to the 300 oral comments at the listening sessions.

USDA'S CLEAN WATER ACTION PLAN ACTIVITIES

The Clean Water Action Plan sets ambitious goals for improving the quality of water resources, and the Department of Agriculture will play a key role in achieving them. In addition to the Forest Service's present investment to improve watershed health on the national forests, the Fiscal Year 2000 budget request includes funds to accelerate the maintenance of needed national forest roads and the obliteration of roads no longer essential for rural commerce or administrative or recreational access. The Forest Service will be central to developing a unified Federal policy for managing watersheds administered by all Federal land management agencies; a draft of this policy is currently being prepared for publication in the Federal Register for public comment. NRCS provides technical and financial assistance to farmers, ranchers, and rural communities on water quality and quantity issues and also has a leading role implementing the plan. Through its field structure, NRCS works directly with the land owners and provides technical assistance through its Small Watersheds Program, Environmental Quality Incentives Program, Wetlands Reserve Program, and Resource Conservation and Development Program, all of which play an important role in improving and maintaining water quality.

Also, USDA has enrolled over 30 million acres in the Conservation Reserve Program (CRP), which idles agricultural land for 10- to 15-year periods. The resulting grassland or woodland filter runoff water and create valuable wildlife habitat, among other amenities. A new feature USDA has added to the CRP is the Conservation Reserve Enhancement Program (CREP), which establishes a Federal-State partnership to encourage farmers and ranchers to remove sensitive lands from agricultural use. In Oregon and Washington, for example, CREP funds will be used to protect streamside buffers critical to water quality and salmon restoration. In Maryland, the CREP will enroll lands essential to efforts to restore the water quality of the Chesapeake Bay. In total, there are 7 CREP programs in place, and several others under development.

Mr. Chairman, I want to emphasize two key elements of the USDA role in improving the Nation's waters through implementation of the Clean Water Action Plan. First, as it applies to private lands, the Clean Water Action Plan emphasizes voluntary approaches to solving problems, a key component of the strategy USDA has used since the Dust Bowl era of the 1930's, to assist farmers and ranchers in conserving our natural resources.

Second, the Department's natural resource conservation and environmental protection activities will continue to involve the public through locally-led conservation, involving people at the local level to identify various private, local, State, and Federal programs and funding sources that would help them best to meet goals.

For example, the community of Squaw and Baldwin Creeks, Wyoming, exemplifies the meaning of locally-led conservation. The Squaw and Baldwin Creeks contributed significant amounts of silt and nutrients to the Popo Agie River, primarily due to the subdivision of large grazing areas into small ranchettes. The resulting concentration of livestock caused the stream banks to become badly eroded, and storage capacity of a reservoir was greatly reduced by sedimentation and trout habitat degraded. Using the locally-led conservation approach, the Squaw and Baldwin Creeks Watershed Rehabilitation project began in 1990, installing erosion and sediment control conservation practices, restoring stream riparian habitat, and improving grazing practices. They have improved the irrigation and fishery capabilities in the watershed, and the restored natural, meandering pattern of the creeks.

These efforts have focused community involvement and education. People who were at first skeptical of the project joined the effort when they saw the water getting clearer, demonstrating how voluntary efforts of local people, who know and understand the natural resource needs of their community and watersheds, can ad-

dress their local needs and concerns. We believe we can apply these experiences nationwide to achieve the goals contained in the Clean Water Action Plan.

In addition to technical and financial assistance for farmers and ranchers, we also need to make further investments in research and development. The Agricultural Experiment Stations and Cooperative Extension system, coordinated by the Cooperative State Research, Education, and Extension Service (CSREES) along with the Agricultural Research Service (ARS) have been active for many years in research and development that apply to water quality improvement and protection. ARS recently held a nationwide conference to assess current research work being done by the agency on animal feeding operations, to improve coordination among research efforts, and to plan future activities. Fourteen land grant universities have formed a nationwide research and extension consortium to focus on animal manure management issues. Most State extension programs have developed handbooks, training material, and offer training on water quality, manure, and nutrient management for agricultural producers.

CONCLUSION

As Secretary, I believe that a healthy and sustainable American landscape, to which an abundant supply of clean water is critical, is one of the most important legacies we can leave to future generations. Through our efforts to implement the Clean Water Action Plan, I firmly believe we will continue the progress made during the past quarter-century. I look forward to working with you and the Congress to protect the Nation's waters and thank you, Mr. Chairman, for the environmental leadership you have provided during your many years of public service.

I would be pleased to answer any questions that you may have.

RESPONSES BY SECRETARY DAN GLICKMAN TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1a. One of the key actions identified under the Clean Water Action Plan is for the Department of Agriculture (USDA) and the Department of the Interior to develop a Unified Federal Policy to enhance watershed management for the protection of water quality. The Federal Government currently owns 22 percent of all land nationwide. In certain western States, such as Arizona and Oregon, the Federal Government may own up to 60 percent of all land. According to a recently released Government Accounting Office report, Arizona and Oregon attribute 50 percent of their water quality problems to non-point source pollution from Federal lands.

What actions will your draft policy take to address the problem of Federal water pollution, and how will you ensure that these actions are implemented?

Response. The draft policy proposes that Federal land and resource management agencies move toward a more consistent approach to the watershed-based management of Federal lands. The policy proposes 18 specific actions that address water quality issues on Federal lands, and includes a proposed implementation plan to assure implementation by Federal agencies.

Question 1b. In addition, what steps have you taken to ensure that not only other Federal agencies, but the States, local industry, environmental groups, and other stakeholders also have an opportunity to participate?

Response. States, tribes, and other interested parties will have ample opportunity to review and comment on the draft policy, and to participate in the implementation of the policy's components. One of the main tenets of the draft policy is greater cooperation with State and tribal governments in watersheds that include Federal land, and greater public participation in resource management. In developing the draft policy, we plan a period of consultation with States and tribes, followed by publication of the draft in the FEDERAL REGISTER with a public comment period, and a number of public listening sessions across the country to allow for participation by all interested parties.

Question 1c. Finally, when do you intend to release your policy?

Response. A draft Unified Federal Policy will be published in the FEDERAL REGISTER later this year, following the consultation with the States and tribes.

Question 2a. According to the 1999 report on the Clean Water Action Plan, agriculture accounts for approximately 70 percent of the identified water quality problems in assessed rivers, 49 percent in lakes, and 27 percent in estuaries. Some have criticized the accuracy of this information, citing the heavy reliance on evaluated data, rather than actual monitoring.

Could you please comment on the accuracy of this monitoring data?

Response. USDA does not question the accuracy of data obtained from monitoring. In fact, we support all efforts to monitor water quality using scientifically-sound techniques, and we encourage increased use of monitoring. A problem with the referenced data is that it was not evaluated with a consistent process.

Question 2b. Do you agree with the assessment that agriculture is the primary cause of water quality impairments?

Response. USDA does not agree with the manner in which the water quality assessments have been portrayed. The Clean Water Action Plan (CWAP) first-year report references information provided by States for their Clean Water Act Section 305(b) reports to the Environmental Protection Agency, based on 1996 information. In 1996, States and tribes surveyed 19 percent of the total 3.63 million river miles in the Nation, or just 693,905 miles. This 19 percent sample did indicate that impairment exists in 36 percent of the river miles, or 248,000 miles; about 70 percent of the identified water quality problems in the impaired rivers, 49 percent in lakes, and 27 percent in estuaries could be attributed to agriculture. We are not convinced that a survey of 19 percent of the river miles is reflective of the remaining 81 percent, nor are we convinced that what is found on 248,000 river miles is what will be found on the remaining 2.94 million unsurveyed miles.

Additionally, what the CWAP first-year report did not indicate is that 64 percent of the surveyed river miles fully supported all of the designated uses for the water. Some form of pollution or habitat degradation impairs the remaining 36 percent of the surveyed river miles. Siltation was identified as the most common pollutant.

We do not intend to suggest that our Nation's waters are not impaired, or that agricultural operations do not contribute to nonpoint sources of pollution. However, we would prefer that more miles of our rivers and water bodies be surveyed, so that a more accurate assessment can be made. We would also prefer that a more accurate and complete description of the findings be used.

Question 3a. In recent years, we have witnessed a significant move toward consolidation; there are fewer operations producing more animals. Between 1978 and 1992, the average number of animal units per operation increased by 134 percent for hogs and 176 percent for egg laying poultry. According to the 1997 Agricultural Census, 3.6 percent of the farms are responsible for 56 percent of the market value of all agricultural products sold.

Do you expect this trend toward consolidation to continue?

Response. Animal agriculture has been transformed from an extensive, land-based activity to a specialized, capital-intensive activity. Although the trends toward consolidation (*i.e.* larger animal feeding operations) have been underway for many years, the changes from 1992 to 1997 in the Agricultural Census are particularly dramatic. The number of farm operations with animals fell by 25 percent from 1992 to 1997, and USDA does not see any reason to expect this general trend to change in the near future.

Question 3b. How is the USDA working with farmers to ensure that, as these operations increase in size, they are encouraged to mitigate their environmental impacts?

Response. USDA conducts research, facilitates technology transfer, and provides information, education, technical and financial assistance to help farmers mitigate the environmental impacts of their animal feeding operations (AFO). Most information on the environmental impacts of larger scale AFOs, however, is anecdotal. USDA, in conjunction with industry groups, other Federal agencies, the land grant college and university systems, and others, need to further examine the environmental impacts of larger scale AFOs, and better define their needs.

Question 4a. The joint Unified National Strategy for Animal Feeding Operations lays out a very ambitious goal for its voluntary program. By 2008, USDA and EPA will encourage over 450,000 animal feeding operations to develop and implement comprehensive nutrient management plans. Despite this tremendous challenge, NRCS staffing levels have decreased considerably over the years. In 1989, technical assistance for conservation operations had 9,560 full time equivalents; the estimated figure for 2000 is 8,769. In 1989, watershed operations and small watershed authorities had 1,396 full time equivalents; the estimated figure for 2000 is 586.

At existing staffing levels, how long do you estimate it will take to develop nutrient management plans for all 450,000 animal feeding operations?

Response. Successful implementation of the Unified National Strategy for AFOs will require NRCS to deliver more comprehensive technical assistance to develop and implement comprehensive nutrient management plans, as identified in the Strategy. Delivery of this assistance to AFOs through voluntary conservation programs will need to be greatly accelerated to achieve this goal, especially considering

that NRCS is only able to assist roughly 10,000 AFOs per year through ongoing programs. At the current rate (10,000 per year), assuming 450,000 animal feeding operations request NRCS assistance, it will take about 45 years to assist all AFOs.

Question 4b. How do you encourage farmers to voluntarily develop nutrient management plans if you cannot provide adequate technical assistance?

Response. The Unified National Strategy for AFOs identifies the need to build capacity for comprehensive nutrient management plans. USDA recognizes that in order to meet the goals of the Strategy, USDA alone cannot address the anticipated workload. USDA will facilitate and encourage participation by soil and water conservation districts, State conservation agencies, the Cooperative Extension System, and private sector consultants, through training certification and other activities to increase the number of certified specialists to assist with comprehensive nutrient management plan development. The Strategy also identifies the need to secure additional funding to support increased technical and financial assistance to meet the needs of voluntary participation.

Question 5a. The committee has heard from a number of sources that the agricultural sector of our economy, particularly small and medium operations, are under tremendous financial pressure.

Do small- and medium-sized operations have the resources to implement the voluntary components of the Strategy?

Response. The goal of the Unified National Strategy for AFOs is for AFO owners and operators to have voluntarily planned and be implementing comprehensive nutrient management plans by 2009. In order to help AFO owners and operators meet this goal, it is anticipated that a large portion of the small- and medium-sized AFOs will need financial assistance to help them implement their comprehensive nutrient management plans. The comprehensive nutrient management plans for many of these small- and medium-sized AFOs will require a variety of components, including some structural elements such as manure storage facilities and the diversion of clean water (runoff) away from manure. The cost of these structural components can be significant, often beyond the ability for small- and medium-sized AFO owners and operators to pay for on their own. Financial assistance will be necessary from either Federal, State, local, or private (for profit and nonprofit) sources, or some combination of these.

NRCS has estimated the financial assistance need for the 298,500 AFOs likely to seek NRCS assistance by 2009 (as defined by the Agency's field-based workload assessment system) as nearly $14 billion. This represents an average cost of implementing a comprehensive nutrient management plan of over $46,000 per AFO. Employing a 75 percent cost-share rate, it is assumed the AFO owner or operator will pay the remaining 25 percent of the comprehensive nutrient management plan's implementation cost.

Currently, 20 States provide financial incentives to AFOs, such as cost-share and loan assistance. Also, five States provide non-cash incentives, such as tax relief and limited liability.

Question 5b. What incentives does USDA intend to offer to encourage voluntary compliance?

Response. USDA intends to continue to offer technical and financial assistance, consistent with funding appropriated by Congress, as incentives to encourage AFO owners and operators to develop and implement comprehensive nutrient management plans. The amount of technical and financial assistance available, given current budget levels for AFO work, will not be adequate for USDA to meet the needs of all small- and medium-sized AFOs.

USDA expects to continue to make technical assistance available to AFO owners and operators, principally through the Natural Resources Conservation Service (NRCS) and its Conservation Technical Assistance, Conservation Farm Option (CFO), and PL–566 Small Watershed Programs. The Environmental Quality Incentives Program (EQIP) also will provide financial assistance in priority watersheds and for selected conservation practices on a statewide basis. Other USDA agencies will play a supporting role, including the Agricultural Research Service with research and development, and the Cooperative Extension System with technology transfer and some technical assistance.

Question 5c. What financial programs are available to assist farmers in implementing their management plans?

Response. The EQIP and the PL–566 Small Watershed Program are USDA's two principal vehicles for delivering comprehensive nutrient management plan implementation of financial assistance to AFO owners and operators. During fiscal year 1999, these programs are providing $65.6 million in financial assistance for AFO

work, the overwhelming majority of this money coming through EQIP. Compare the $65.6 million available this current fiscal year to the estimated total cost sharing needed by 2009, for 298,500 AFOs, of $14 billion. Thus, fiscal year 1999 funding levels, the available USDA contribution toward total cost sharing needs by 2009, would be $656 million or less than 5 percent of the $ 14 billion cost sharing need.

It is apparent that local, State, Federal, and private sector resources will also have to contribute to AFO needs, along with significantly increased USDA financial assistance, if AFO owners and operators are to have the cost-share resources needed to begin implementing their comprehensive nutrient management plans by 2009.

Question 5d. Are these programs receiving adequate funding?

Response. Funding USDA programs that offer AFO support, at fiscal year 1999 levels in future years, will not satisfy the assistance needs of AFO owners and operators seeking to plan and to be implementing their comprehensive nutrient management plans by 2009. While significantly increasing funding for such USDA programs as Conservation Technical Assistance, CFO, EQIP, and PL–566 will help to meet the needs, other Federal, State, local, and private sector parties must also bring new resources to the table in a major way. Additionally, the Administration and Congress must work together to find innovative and creative incentives to encourage AFO owners and operators to voluntarily adopt comprehensive nutrient management plans. Without adequate funding and new incentives, AFO owners and operators will be less able and likely to plan and implement their comprehensive nutrient management plans voluntarily. This will increase the likelihood that greater regulation may evolve from Federal and State water quality agencies with regulatory authority.

Jointly, the Administration and Congress will need to look closely at tax incentives, risk management insurance approaches, no interest or low interest revolving loans, and other measures to encourage voluntary comprehensive nutrient management plan development and implementation by AFO owners and operators. USDA strongly believes that the voluntary, incentive-based approach is the way to accomplish the goals of the Unified National Strategy for Animal Feeding Operations. Adequate technical and financial assistance and new incentives will be essential if the voluntary approach is to succeed.

RESPONSES BY SECRETARY DAN GLICKMAN TO ADDITIONAL QUESTIONS FROM SENATOR CRAPO

Question 1. In the draft Animal Feeding Operation Strategy, it was unclear as to how winter calving pastures for beef cattle would be treated. In Idaho, due to cold winters and limited private ground, a large number of ranchers gather their cows in one location for calving. Do you agree that it is unnecessary and unfair to treat these ranchers like you would a large feedlot?

Response. The aspects of cow-calf operations, and specifically winter calving in a central location, are not clearly stated in the Strategy. However, based on present EPA National Pollutant Discharge Elimination System permit requirements and the individual State requirements, the conditions under which a cow-calf operation would be treated like a large feedlot rests with EPA and the State water quality agencies where the facility is located.

Question 2. How successful has the EQIP program been? If very, then should much of the implementation of the comprehensive CAFO strategy be handled on this or a similar cooperative, incentive-based basis?

Response. EQIP has been a very successful program. In the first 2 years of the program, over 44,000 contracts have been approved for over $320 million. However, these contracts were only able to meet one-third of the demand for the program. We project the demand for EQIP to increase in future years, as more livestock producers request assistance to implement comprehensive nutrient management plans, including agricultural waste management systems. We do intend for EQIP to be at the very heart of USDA programs to assist livestock producers with animal feeding operations.

Question 3. Without proper attention to the cost of implementation and provision of resources to the producer, this program will not be effectively implemented nor done on a voluntary basis. Will the USDA insist that EPA tailor implementation to the availability of assistance to farmers and ranchers?

Response. The Unified National Strategy for Animal Feeding Operations (AFOs) is not a new regulation or program, nor is it a substitute for existing Federal regulations. It does not impose any binding requirements on USDA, EPA, the States, tribes, localities, or the regulated community. The USDA and EPA goal is for AFO

owners and operators to take actions to minimize pollution from AFOs through the development and implementation of technically sound comprehensive nutrient management plans. USDA and EPA intend to promote, support, and provide incentives for the use of sustainable agricultural practices and systems that minimize water quality and public health impacts from AFOs. For the fiscal year 2001 budget, the Secretary of Agriculture will request additional Conservation Technical Assistance funds, along with additional financial assistance funds from the Environmental Quality Incentives Program (EQIP) and the Small Watershed Protection Program (PL–566). These funds will assist in the development of 298,500 AFO comprehensive nutrient management plans over the next 10 years.

Question 4. Federal crop insurance requires farmers to implement management practices to address weather-induced losses to crop yields. Could similar risk management tools be established to manage water pollution risks in an innovative and market-based incentive basis?

Response. Yes. Increasing use of risk management has potential to help producers reduce application rates for fertilizers and pesticides, while insuring against crop damages from specific perils, such as rootworm damage in corn. The Administration's Clean Water Action Plan included a key action stating that USDA will work with private insurance companies and foundations to review the feasibility of providing an insurance program that enables producers to offset their risks of using new technologies to manage fertilizers and pesticides to prevent pollution. It is also supported by such groups as the American Farm Bureau Federation.

The Natural Resources Conservation Service (NRCS) has supported these efforts, both financially and institutionally. The State of Iowa, led by the Iowa Farm Bureau and private insurance companies, has undertaken a 3-year effort to develop risk management insurance to increase nutrient management adoption.

NRCS has been developing public-private partnerships that improve risk protection for producers willing to voluntarily adopt conservation technology. These risk management tools offset the risks of losses and help prevent pollution. For the next crop year, for example, the IGF Insurance Company will offer an insurance policy that should increase farmer acceptance of corn rootworm Integrated Pest Management Systems, thus reducing unnecessary pesticide applications. Farmers can also purchase innovative risk reduction policies for improved conservation tillage from private companies at the same time as they typically would be buying their regular crop insurance. USDA believes that it may take several years for these risk management tools to be fully adopted in the marketplace.

Question 5. What is the role of NRCS in the Clean Water Action Plan strategy? NRCS is playing a key role in carrying out many of the actions in the Clean Water Action Plan (CWAP), in association with other USDA agencies and the other Departments with roles in the CWAP. NRCS is involved in several key action items, such as:

- Implementation of the Unified National Strategy for Animal Feeding Operations. This will include the technical and financial assistance provided to producers to voluntarily develop and implement comprehensive nutrient management plans.
- Assistance to States and tribes on the development of Unified Watershed Assessments.
- Development and implementation of rangeland vegetation classifications and inventories.
- Use of the Wetlands Reserve Program for the protection and restoration of wetlands.
- Use of various USDA conservation programs to establish 2 million miles of conservation buffers on agricultural lands by fiscal year 2002, to prevent pollution and help meet water quality goals.

RESPONSES BY SECRETARY DAN GLICKMAN TO ADDITIONAL QUESTIONS FROM SENATOR THOMAS

Question 1. Has the USDA conducted any type of analysis to determine what a producer will pay to obtain a water quality permit?

Response. USDA has not performed a formal analysis to determine the cost of a concentrated animal feeding operation permit for each State. The cost of permitting is controlled by individual State regulations and varies with each State. Animal feeding operations that will be addressed by voluntary participation, as covered under the Unified National Strategy for AFOs, will not require a permit in most States and therefore would not incur a permit cost. USDA is aware that presently

a permit cost can range from a few hundred to several thousand dollars, depending on the size and type of operation, and the State.

Question 2. What will the costs be to an agricultural producer in order to develop and implement a comprehensive nutrient management plan?

Response. Generally, there is no direct cost to the producer to develop a comprehensive nutrient management plan, unless the work involves a private consultant. Factors such as size of operation, environmental and public health issues that need to be addressed, the amount and percent of cost share, the kind of comprehensive nutrient management plan components selected, and other factors will affect overall cost. Comprehensive nutrient management plans need to be site-specific, and are developed and implemented to address the goals and needs of the owner or operator, as well as meet the environmental needs.

Question 3. Beyond providing technical assistance to producers through the Natural Resources Conservation Service (NRCS), has the Department determined if and in what manner it will help producers stay in compliance with the various actions called for under the Action Plan?

Response. The Department of Agriculture's role in the Clean Water Action Plan is to provide the support for voluntary actions by farmers, ranchers, other rural landowners, and rural communities that will improve and protect the Nation's water quality. USDA provides this support through natural resource information and education, by carrying out priority research to ensure that sound science is applied, by transferring technology, and by furnishing technical expertise and financial assistance that encourages voluntary action.

At USDA, we use a wide array of agencies, programs, and expertise to demonstrate how voluntary collaboration between government and land users can yield environmental benefits for the individual landowner, the community, and the Nation.

The Department has the delivery system in place to effectively carryout its actions under the Clean Water Action Plan. The Agricultural Experiment Stations and the Cooperative Extension System, coordinated by the Cooperative State Research, Education, and Extension Service and headquarters at State land grant universities, along with the Agricultural Research Service (ARS), have been very active for many years in technology research and development that applies to water quality improvement and protection. ARS recently held a nationwide conference to assess current research work being done by the Agency on animal feeding operations, to improve coordination among research efforts, and to plan future activities. Fourteen land grant universities have formed a nationwide research and extension consortium to focus on animal manure management issues. Most State extension programs have developed handbooks and training material, and offer training on water quality, manure, and nutrient management for agricultural producers.

The Forest Service works closely with rural communities and neighboring landowners to develop cooperative approaches to natural resource management, and administers the Forestry Legacy and Stewardship Incentives Programs through State forestry agencies. The Farm Service Agency delivers financial assistance programs to the Nation's farmers and ranchers through the Conservation Reserve Program and the Conservation Reserve Enhancement Program, which result in cleaner water.

Question 4: What is the USDA/NRCS role in the AFO strategy? Does the Department believe appropriate funding has been requested for the program? Where does funding to implement the Clean Water Action Plan rank among your appropriations requests?

Response. USDA/NRCS has a commitment to providing technical and financial assistance to AFO owners and operators through voluntary conservation programs. Delivery of the assistance will need to be greatly accelerated to achieve the goal, "All AFOs develop and be implementing a comprehensive nutrient management plan by 2009." USDA will need to increase annually, by at least three times, its technical assistance funding and 10 times its financial assistance funding over the fiscal year 2000 requested funding levels to meet the potential demand. Providing the technical and financial assistance for AFOs to meet the goals as identified in the Unified National Strategy for AFOs is a high priority within USDA.

Question 5. Please explain the number of FTE's the Agency has devoted to the Action Plan for (1) the regulatory aspects and (2) the voluntary and incentive-based portions?

Response. NRCS is not responsible for any of the regulatory aspects discussed in the Clean Water Action Plan (CWAP). However, USDA has taken an active role in the development and implementation of significant portions of the CWAP. USDA

does not keep detailed accounting records of time devoted to the CWAP, because funds have not been specifically appropriated to address this initiative. It is estimated that USDA has spent over 100 staff years on this effort since its inception on February 19, 1998, with NRCS staff accounting for over 90 percent of this time. The majority of this time was spent developing the Unified National Strategy for Animal Feeding Operations (AFO), assisting with the Unified Watershed Assessments, and serving as committee chairpersons and members, action team leaders, and technical specialists. USDA has coordinated with EPA eight CWAP rollout sessions and 12 regional AFO listening sessions (with USDA taking the lead for half of these AFO listening sessions).

STATEMENT OF GARY BEACH, WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Chairman and members of the committee, my name is Gary Beach. I am the Administrator of the State's Water Quality Division. I am here on behalf of Mr. Dennis Hemmer, Director of the Wyoming Department of Environmental Quality. The Department of Environmental Quality has primacy under the Clean Water Act to operate the surface water quality protection programs in Wyoming. However, I am here today to talk to you about our concerns with the Administration's *Clean Water Action Plan.*

In order that you understand our concerns, I need to give you a little background. When Wyoming first developed its Non Point Source Plan in the late 80's, we encountered a lot of concern and opposition from the agricultural community, particularly grazing agriculture. After several false starts, the method we selected to address their concerns was to organize a stakeholder group to address the issues. By incorporating the concerns of the group and other stakeholders, we created the document, resolved disagreements, and found common ground. In fact, this was such a success the stakeholders became advocates for water quality and non-point source pollution. Through the Section 319 funding you provided, we implemented very successful demonstration projects and created enthusiasm about addressing non-point source pollution.

After about 10 years of successful implementation of nonpoint 319 projects, we were one of the States in which EPA was sued over lack of progress on Total Maximum Daily Loads. This litigation once again polarized our stakeholders. After going through a period of anger and blame, we once again gathered all the stakeholders, including some of the litigants, and collaboratively addressed the issue. Through this collaborative process, we were able to craft a plan that addresses the issues surrounding TMDLs and beyond that, implemented a cooperative, local, watershed-based, approach to address these issues. To implement this plan, the State dedicated a significant amount of money and personnel. A number of entities, particularly the State's Conservation Districts dedicated funds and resources to addressing the water quality problems. This plan anticipates an aggressive 5-year monitoring program aimed at gathering credible scientific data on all potentially-impaired streams. We will then develop, in collaboration with the stakeholders, watershed management plans to address all problems. We are very proud of our progress and believe it could be a model for others. However, we would never suggest that it be dictated to others. One of the successes is that it is tailored to Wyoming and its stakeholders.

Enter the *Clean Water Action Plan.* The publication of the *Clean Water Action Plan* in the spring of 1998 reignited many of the fears and concerns we were able to work through in developing our TMDL program. Rather than suggest a process for identifying area specific issues and allowing these areas to develop a solution, it was a top down edict that mandated actions whether they were appropriate or not. It was not developed with stakeholder input. Rather, it was developed in a very short period within the beltway. As such it is not sensitive to stakeholder concerns and does not provide the flexibility for States to develop plans tailored to their specific situation.

The first deliverable was the *Unified Watershed Assessment.* While we have been preparing the Clean Water Act section 305(a) assessments for many years and also prepare the Clean Water Act section 303(d) impaired stream lists, we were now directed to develop a new plan called a Unified Watershed Assessment. In Wyoming it took 2 years of stakeholder input to develop our process for listing impaired streams. As part of that process, we agreed to quit listing streams on emotion and hearsay and to utilize credible scientific data. We then dedicated a significant amount of money and committed to a 5-year program to gather the credible data. This new action plan of EPA/NRCS now asked us to duplicate this 7-year effort in as many months. We refused.

We didn't refuse to develop data comparable to that in the unified watershed assessment. As we pointed out repeatedly, we had already committed to doing that. We refused to duplicate our effort that was worked out with our stakeholders. Had we agreed to the EPA/NRCS demands for an assessment based on eight digit Hydrologic units, in addition to betraying the agreements we made with our stakeholders, the product would be of questionable value. We don't have good data and in Wyoming 8 digit units can extend from alpine to high desert ecosystems.

The second issue is the *Clean Water Action Plan*, the Confined Animal Feeding Operation/Animal Feeding Operation, or CAFO/AFO strategy. In Wyoming, we have been addressing feeding operations as significant sources of pollution, for many years. We have historically required all those over one thousand animal units or that pose a threat to surface water to be permitted under the National Pollutant Discharge Elimination System. Additionally, we have required construction permits from any facility we determined to pose a threat to groundwater. We have worked cooperatively with the Department of Agriculture and the Conservation Districts to reach out and educate and assist producers to properly manage feeding operations. More recently, in an effort to reach more producers and take advantage of the excellent relationship between operators and the Natural Resource Conservation Service, we entered into a Memorandum of Understanding with the NRCS whereby, if they help an operator develop a waste handling system consistent with our requirements, that system will be recognized as having a State construction permit.

For some reason, the Clean Water Action Plan has focused on CAFO/AFO's. However, rather than assessing current efforts and the need for more regulations, we are once again emphasizing command, control, and enforcement. I have listened to EPA and NRCS describing the strategy to producers. It is confusing because there is no clear delineation of where a permit is required and producers are left without answers. In both cases, I had to step in and assure producers that in Wyoming we believe that we have all operations over 1000 units permitted, that we have permitted all those we know of that pose a risk to surface water, and that we intend to work with producers in the watershed plans to address remaining problems, if they exist. However, I fear that the Federal effort may destroy our good work once again. Believe me, our collective work through the TMDL program on a watershed basis, work that is locally-based and incentive-driven, will address animal feeding operations where we have real problems.

I also am concerned about the role the NRCS has been assigned. Regulators are not the most popular people on farms. On the other hand, the NRCS has historically been seen as a partner to the producer. Unfortunately, as more regulatory responsibilities have been assigned to NRCS, that acceptance is eroding. As I noted, we have used NRCS as an effective means of delivering water quality information and practices to the producer. I fear that the duties outlined in the Clean Water Action Plan may jeopardize that ability.

In conclusion, I believe the idea of a holistic approach to clean water is imperative. Likewise, better coordination between the Federal agencies is sorely needed. I believe the results desired are already identified in the Clean Water Act. If the Clean Water Action Plan only outlined those two needs and emphasized the desired results in the Act, it would be a valuable document. Unfortunately, it is a command and control document that goes far beyond the tenants of the Clean Water Act. It was written without stakeholder input in language that is not sensitive to stakeholder concerns.

My suggested solutions are these:

1. The President should withdraw the Clean Water Action Plan and the EPA and NRCS should withdraw the Unified Watershed Assessment and CAFO/AFO strategy.

2. Each State should be given the opportunity to provide functionally equivalent programs that meet the overall objectives for addressing non-point sources of pollution in a holistic and collaborative manner.

3. New regulatory programs should not be developed or initiated until a State-by-State assessment has been made to verify the need for new regulations. We might just find there isn't a national need, rather selected States or areas may need support and assistance to strengthen their programs.

The Clean Water Action Plan is another example of focusing on the process rather than the results. Allow us to focus on the results and we can achieve more improvement to water quality with buy-in rather than anger and fear.

RESPONSES BY GARY BEACH TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1a. Mr. Beach, you mention that you are in the process of gathering credible scientific data on all potentially-impaired streams:

What is your criteria for credible data?

Response. In 1997, after TMDL litigation was filed in Wyoming and before developing our 1998 Section 303d list of impaired water bodies, we went through an extensive process with our stakeholders to define the criteria that we would use to decide if a water body was impaired. We did this because we had a real credibility problem with many of our stakeholders who felt that our listing process for 1996 was terribly flawed. From these collaborative efforts we defined *credible scientific data* as:

(a) A combination of chemical, physical, biological, and historical data, wherever this data is available or collectable, that presents a complete picture of the system. For example, biological and chemical data may not be easily collected on ephemeral streams in which case you may only rely on physical and historical data.

(b) Acceptable data for chemical, physical, and biological may be qualitative or quantitative as long as the methods followed to develop the data are:

1. Published methods that have been subjected to a peer review process, and
2. The methods follow strict protocols so that the data collected are reproducible, scientifically defensible, and free from preconceived bias.

(c) We can also consider "historic data", which may not meet the scientific rigors described in b. above, but is valuable factual information to add perspective to the analysis of the water body's ability to support designated uses. Historic data may include quantitative information, like old USGS water quality data, or qualitative anecdotal information, like a historic description of the conditions of the water body.

In 1999, our State Legislature codified this concept into State law requiring that all decisions made by our agency for *designed uses* and *impairment of use* must be supported by credible data. {See Wyo. Statute 35–11–302(b)}. We are currently adopting rules to implement this new law. This issue has been very important to stakeholders in the private sector. They feel strongly that if government is going to list a water body as impaired, go through the process of creating a TMDL, and ask people to take corrective actions, they want to be sure that the water body is in fact impaired.

Question 1b. Approximately how much is Wyoming investing in its monitoring program?

Response. In response to the TMDL litigation, we developed a 5-year monitoring plan that will give us a basic understanding of the water quality conditions in the major basins of the State. After we do this initial screening, we will have to return to many sub basins and refine our sampling where we find evidence of potential problems. Our local conservation districts are also gearing up to collect scientifically valid data, and we have encouraged the Federal land management agencies to do the same. My best estimate of our collective investments during 1999 are:

State DEQ: Greater than $1 Million per year for data collection and lab analysis.

Conservation Districts and Wyoming Dept. of Agriculture: Approximately $720,000.

Federal Land Management Agencies: Making some investment, but not sure how much.

NRCS: Technical assistance in planning, not sure of the dollar amount.

Private Organizations: Very limited investment, however, some NPDES dischargers are volunteering to do additional in stream data collection.

Section 319 Projects: Estimate about $50,000.

Total Estimated Expenditure: Greater than $1.7 Million

Question 1c. Will Wyoming take action to address water bodies which are known to be impaired while additional data is being gathered on water bodies suspected of being impaired?

Response. Yes, for water bodies that have been listed, we will proceed with the development of a TMDL or watershed management plan (depending on the preference of the local stakeholders). This has been case with our 1998 303d list of impaired water bodies. Please realize that as we move forward with developing TM DLs or watershed management plans, more rigorous field sampling may be necessary to identify sources and allocate responsibility.

Question 2. If you have already issued NPDES permits to operations with over 1000 animal units and those operations that pose a threat to surface water bodies, haven't you finished your obligations under the Unified Animal Feeding Operations strategy? What additional operations would you be required to permit under the Strategy?

Response. Yes, we agree that we should have completed our primary obligation under the AFO strategy. However, in addition to permitting the CAFOs, we expect the following additional obligations to come out of the Unified Animal Feeding Operation strategy:

1. EPA has signaled their intention to go to rulemaking to update their requirements for CAFOs and to reevaluate the need for permitting AFOs from 300 AUS and up. The strategy includes providing guidance to States for ''model permits'' and states that all permits should include a comprehensive nutrient management plan (CNMP). Special types of permitting are mentioned when these operations are located in water quality impaired watersheds. From these intentions I expect new national standards resulting in new requirements that we must respond to at the State level and thereafter, incorporate them into existing permits.
2. I look for our involvement in the development of the initial CNMPs, to assure they meet State water quality protection requirements.
3. If NRCS cannot meet the demand to develop CAMP for all AFOs, then we must come to some agreement on how we will certify professionals to do this work. We will probably have some participatory role in this process.
4. Finally, we will want to encourage AFOs (particularly the smaller operations) to use the ''good faith'' incentive of the strategy and avoid permitting if this option is feasible. This will require coordination efforts to direct operators through this alternative process. I acknowledge, this is time well spent as it would achieve the desired results and reduce our administrative workload for processing permits.

Question 3. My understanding is that a firewall has been created between the EPA and USDA with respect to regulation. According to the strategy, the NRCS is only responsible for providing technical assistance to farmers. In what way is the NRCS role in the strategy regulatory?

Response. I would suggest that you view this situation from a rural landowner's perspective. In the eyes of a skeptic public, *perception is reality*. We realize that the working relationships between landowners and the SCS (now NRCS) was built through years of trust and respect. If we loose this element of trust, we loose the relationship.

In rural America you will perceive the following:

1. That NRCS is tasked to develop CNMP on all operations 2008 (sounds like a regulatory approach). That operators must accept NRCS's technical specifications for an acceptable CNMP. If NRCS personnel are unable to do the CNMP, the operator must hire someone certified by the NRCS/State to do this work and achieve the goal that all AFOs have a CNMP.
2. USDA sits shoulder to shoulder with EPA to present and defend the CWAP and AFO strategy. At the field level, NRCS staff presented and support the AFO strategy in front of their customers.
3. Word got out that EPA had submitted a FOIA request to NRCS to access data on AFOs. Although NRCS refused to comply with this request, it will still have a chilling effect on the relationships between private landowners and NRCS staff.
4. Finally, one cannot forget that NRCS staff are Federal employees that answer to the same chief.

These perceptions in the field undermine the ''firewall'' that the administration has attempted to build in the strategy. I realize there are clear benefits from this joint effort, but I'm not sure they will outweigh the damage being done at the field level. I feel strongly that we must protect this relationship so that landowners will confide in and receive much needed educational and technical assistance from NRCS technical staff. This is a task that no one else is better equipped to do.

RESPONSES BY GARY BEACH TO ADDITIONAL QUESTIONS FROM SENATOR CRAPO

Question 1. State regulators and the NRCS have historically been seen by farmers as more cooperative than Federal agency officials. Moreover, AFO operators have a long-term relationship with State regulatory officials. Does it make more sense to ensure the voluntary and cooperative participation of farmers to have the State continue to take the lead in CWA regulatory matter?

Response. I am a firm believer that the State and local cooperating agencies should take the lead role in achieving the requirements of the Federal Clean Water Act. Yes, most States by now have established an understanding with their operators and have put in place both voluntary and regulatory programs that are achieving the Federal goal in a manner that the operators can accept. These understandings and relationships should not be jeopardized for some new notion or Federal perspective on how we should conduct business. I keep reiterating, let's use what is already working to achieve our goals, for that which is already working has stood the

test of time and has been accepted by our people. This question goes to the very heart of my testimony. Before we specify a new way of conducting business from Washington (i.e., new regulatory programs), let's first do an inventory and see where we need to make adjustments and then work with those few programs that need more support. The NGA has advocated that EPA look more seriously at accepting "functionally equivalent programs." This advances the notion that each State may have developed different approaches to achieve the same outcome.

Question 2. Are State and regional differences significant enough to magnify or reduce the environmental impact of AFO or resource-industry discharges? Is it appropriate to construct a regulatory system within a flexible framework?

Response. It is my experience that State and regional differences are great enough that being specific on how to deal with the problems at the national or regional level is the wrong approach. An example for AFOs is the use of NRC's technical specifications. To determine sound land application practices at an operation, NRCS staff considers the local climate, soils, vegetation, geology, and depth to groundwater. In the adjoining States of Utah, Idaho, and Wyoming we have real differing conditions where land application of animal wastes to agricultural lands may be an acceptable practice year round, whereas at other locations this practice may be very limited if not impracticable. In addition to these environmental differences, we must be responsive to local politics. A process (or approach) that may work in one basin may not be accepted by local people in another basin. So we need a framework of flexibility that allows us to deal with technical and political differences between States and within the State.

Question 3. Has enough time been allotted in the implementation process to permit States and local governments to have ample notice and adequate opportunity for input?

Response. I do not believe that adequate time nor opportunity was provided for State and local governments to have meaningful input on the release of the Clean Water Action Plan. When I say *meaningful,* I'm talking about a process where stakeholders have time and access to provide input, this input is seriously considered, and the final product reflects a sincere effort to meet stakeholder needs. After release of the CWAP, no opportunity was provided for State and local governments to comment on the role out of the unified Watershed Assessment strategy. It was delivered to States in the spring of 1998 and by October 1st we had to produce a deliverable if we wanted to participate. The instructions in this document included a requirement that we include public participation in the development of our State Unified Watershed Assessment. In Wyoming, for example, we had just completed a year long public participation process to create our 1998 list of impaired water bodies. We realized that to do the public participation process right, we would need to dedicate at least 6 to 8 months to a public participation process. I will acknowledge that much better public participation and outreach was provided for the role out of the CAFO/AFO strategy. Maybe this was due in part to the false start by EPA and the later joining of forces with USDA. As I indicated, NRCS staff and in some cases EPA staff made a number of presentations to local groups about the CAFO/AFO proposal. There was a formal notice and formal solicitation for comments on the strategy. I know that NRCS/EPA received many comments and had limited time after the comment period closed to analyze and seriously consider the comments before release of the final document. To EPA/USDA's benefit, I did see many good changes in the final strategy that I think resulted from a much better outreach and public participation process. In summary, only in the case of the CAFO/AFO strategy would I say that there was adequate notice and comment period for State and local governments. I'm not sure that the opportunities that were provided for comments were meaningful.

Question 4. What reliability can be expected from a watershed assessment process done in an abbreviated schedule? What level of validity and consistency can be expected from this information?

Response. When doing a meaningful watershed assessment, one must learn to gauge the right pace. I can assure you that this schedule will vary from site to site, depending once again onsite conditions, complexities and the political environment. A short or an abbreviated schedule may work at certain times if the task is simple, the problem well defined, and the people are already comfortable with the solution. But in most watershed assessments, it will not be simple and people must be given the right amount of time to accept the reality and move forward with solutions they own. Please realize, He pace can be too long in which case you can lose motivation and people will begin to think they can avoid doing anything. I am suggesting that the pace or schedule is site specific and will be variable. If you try to accelerate it

too fast you will lift the solutions from the local people and they will no longer have an ownership in the problem. Once this happens, it will be a uphill battle to achieve the desired results.

STATEMENT OF JOHN GODBEE, ENVIRONMENTAL MANAGER, INTERNATIONAL PAPER COMPANY, ON BEHALF OF AMERICAN FOREST AND PAPER ASSOCIATION

Mr. Chairman, members of the committee, I appreciate the opportunity to present my testimony today on behalf of the American Forest and Paper Association on: (1) the Administration's Clean Water Action Plan; (2) the significant efforts of the U.S. forest products industry to maintain and protect the Nation's waters; (3) improvements to State nonpoint source programs that will help restore and maintain the physical, chemical and biological integrity of the Nation's waters and; (4) upcoming EPA proposals that require special attention.

AF&PA is the national trade association of the pulp, paper and forest products industry. We represent approximately 84 percent of paper production, 50 percent of wood production and 90 percent of industrial forestland in the United States. Nationwide, there are more than 9 million non-industrial private landowners who own 59 percent or approximately 288 million acres of the total productive private timberland. Most of these landowners have holdings of less than 100 acres. In comparison, forest products companies own 15 percent of the Nation's timberland and rely heavily on the fiber supply provided by these small landowners.

My name is John Godbee and I am Environmental Manager of Forest Resources for International Paper. International Paper is a major manufacturer of printing papers, packaging and wood products. We are the largest private forest landowner in the country with over 7.5 million acres. We also have 191 operations in 46 States located throughout the United States.

While, as stated, AF&PA also represents the manufacturers of the country's paper supply, I will confine my remarks to our forestry activities.

Upon release of the February 1998 Clean Water Action Plan, the forest products industry's initial action was to: (1) evaluate the Federal Government's proposals in light of what actually is going on in the private sector; (2) determine if there was consistency with industrial and non-industrial private landowner programs; and (3) examine if the Plan recognized private sector initiatives that are making progress in meeting the goals of the Clean Water Act. After careful review, we believe the Plan is heavily weighted toward Federal prescriptiveness, rather than recognizing and promoting successful State and private sector initiatives that are making a significant difference in water quality protection.

Back in 1994, members of AF&PA committed themselves to the Sustainable *Forestry Initiative* (SFI)SM. The SFI program is a comprehensive system of principles, guidelines and performance measures that integrates the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil, air and water quality. All AF&PA member companies are required to comply with the SFISM or their membership will be terminated, as has occurred for some. Among the water quality commitments that AF&PA members make in subscribing to the SFI is the agreement to:

- Meet or exceed all established Best Management Practices (BMPs);
- Meet or exceed all applicable State water quality laws, regulations and the requirements of the Clean Water Act for forestland;
- Establish and implement riparian protection measures for all perennial streams and lakes and involve a panel of experts at the State level to help identify goals and objectives for riparian protection;
- Individually, or through cooperative efforts, provide funding for water quality research.

In 1997, AF&PA member companies began reporting on the number of acres and miles of streams that are enrolled in wildlife and fisheries agreements with conservation groups and public agencies that specify on-the-ground management practices. Almost 11 million acres, representing 20 percent of the total acres in the SFI program, and 4,286 miles of stream have been enrolled in these agreements.

As you can tell from these commitments, this effort represents the industry's own Clean Water Action Plan and it has the full backing and support from an Independent Expert Review Panel that monitors our progress. The Panel consists of members from the conservation, environmental and academic communities, Federal and State representatives and includes the Chief of the U.S. Forest Service and an EPA official.

Far from being a program based in Washington D.C., the SFI program has established State Implementation Committees in 32 States that receive more than $3.1

million from AF&PA members and allies to foster their responsibilities to promote SFI principles.

While industrial forestland constitutes approximately 15 percent of the Nation's forested acreage base, AF&PA members are also committed to expanding and promoting sustainable forestry into the broader forestry community. For example, in 1997:

- Over 9,600 loggers and foresters completed comprehensive training programs that include forestry education with over 20,000 loggers trained since 1995;
- More than 86,000 landowners across the country received information on the SFI program;
- 99 percent of the estimated 9,700 member company employees who exercised SFI duties were fully trained in sustainable forestry practices.

As the Federal agencies involved in water quality and forest management issues work with State agencies in implementing programs to protect water quality from the impacts of land-based activities, we would hope that they work with the private sector in identifying areas that will compliment our commitments.

As an example, we believe that implementation of forestry best management practices (BMPs) through State-sponsored and directed programs are the key mechanisms to protecting water quality in streams and lakes. Eighteen States have recently reported that overall compliance with BMPs across all ownerships—industry, private landowners and public—averaged 85 percent. Although these results are encouraging, we can do better through promotion of BMP training and monitoring effectiveness. Therefore, AF&PA and our regional and State forest associations strongly support funding for States to conduct BMP effectiveness audits of forestry practices. Numerous studies show that when BMPs are implemented, water quality is maintained. The more recent studies conducted in Florida, South Carolina and Idaho illustrate that when BMPs are implemented, the biological, physical and chemical integrity of the Nation's waters are protected. We can provide copies of these studies and others that document our claims. As we move forward, we would encourage Federal and State officials to establish a dialogue with the SFI State implementation committees and support ongoing efforts in the forestry community to reach out to forest landowners, loggers, consultants and practicing foresters on promoting BMP implementation to protect water quality.

At this point, I'd like to shift your attention briefly to two issues that many in the forestry and other nonpoint source communities believe have the possibility of imposing onerous and incompatible requirements on land management practices. First, the EPA is in the process of issuing proposed rules to revise the total maximum daily load (TMDL) program under Section 303(d) of the Clean Water Act. The TMDL program is designed to assure attainment of water quality standards by requiring the establishment of loading targets and allocations for waters that are not in attainment with those standards. The Clean Water Act and its implementing regulations require States to identify these impaired waterbodies and for EPA to approve the State lists and State-developed TMDLs for each pollutant. While we await issuance of the proposed rules, we remain very concerned with the lack of sufficient data used to list the 21,000 waterbodies identified by States and approved by EPA as impaired and the methods used to determine which activities have caused impairments. Even after these waters have been designated as impaired, which we believe requires a scientific water quality monitoring and sampling program conducted over time and seasons, the determination of actual daily loads to waterbodies and their allocations to individual activities in a stream segment is extremely complex and expensive. We do not believe this is a practical solution and should only be undertaken as a last resort where absolutely necessary and where significant resources are available.

Second, under the Clean Water Action Plan (CWAP) announced in March 1998, the Environmental Protection Agency (EPA) is beginning the process of re-examining the regulatory, legal and statutory exemptions and definitions for defining runoff from forest roads as a nonpoint source activity. While the industry supports the Agency's review on the effectiveness of forest road construction best management practices, their scientific underpinnings and how they are developed and implemented to attain and maintain water quality, we do not believe the Agency has the statutory authority to revise the regulations which recognize forest roads as nonpoint sources. Under the Federal Water Pollution Control Act and its amendments in 1977 and 1987, Congress cleary recognized forest roads as a nonpoint source category. In fact, several recent Federal cases specifically recognize the different approaches taken by Congress to regulate point sources on the one hand and to address nonpoint sources on the other. Where roads were at issue, these courts upheld their definition as a nonpoint source.

I have one final remark, Mr. Chairman, regarding EPA's request for additional authority and money to run a new nonpoint source pollution control program under the Clean Water Act. All States with an active forestry presence have State and EPA-approved BMP forestry programs tailored to the conditions and forest types of the State. A Federal Agency prescribing forestry BMP programs to tell us what practices we can and cannot do would not be helpful. Likewise, we *are not* seeking Federal financial assistance to implement BMPs. We do this as standard business and operating practice. What we do need is forestry BMP effectiveness funding for States to document their well-designed and scientifically-based programs and additional BMP research support for continuous improvement.

In conclusion, as EPA proceeds in implementing any of the key actions related to forest management in the Clean Water Action Plan, we hope that the agency recognizes the significant commitment of resources and efforts the private sector has launched in promoting water quality protection.

Again, I thank you for the opportunity to present these remarks, and I'd be glad to respond to any questions.

RESPONSES BY JOHN GODBEE TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. Does the 85 percent statistic represent 85 percent of all lands, 85 percent of all companies or neither.

Response. The States, through the State Forestry Agencies conduct periodic BMP compliance assessments on all forest lands. States generally use a weighted sampling system based on the proportion of public, nonindustrial private and industry ownership. The figure of 85 percent represents a statistically weighted average of BMP compliance across all ownerships.

Question 2a. GAO report on forest roads.

Do the BMPs implemented by AF&PA members attempt to mitigate the damage caused by forest roads?

Response. To the best of my knowledge all State Forestry BMP manuals include specific management criteria for roads. These include guidelines for road location, construction, stream crossings, maintenance and retirement. In addition, to be exempt from permitting requirements under Section 404 of the Federal Water Pollution Control Act, all forest road construction and maintenance activities must be conducted in accordance with best management practices. Through regulation, EPA has promulgated 15 BMPs for forest roads constructed in jurisdictional wetlands. AF&PA member companies have committed to meeting or exceeding all BMPs on wetlands and uplands they control and promoting their use on all lands. As indicated above, compliance with these practices on all lands is approximately 85 percent.

Question 2b. How effective are these BMPs?

Response. There are numerous studies demonstrating that when BMPs are applied, they are very effective in protecting water quality. For example, compliance with 8 high risk BMPs, which included 5 forest road runoff practices in Montana on 333 sites, it was reported that 90 percent of these practices were effective in protecting water quality. The successful implementation of these practices is evidenced by the fact that while forest management represents the single largest land use in this country, a very small percentage of streams or water bodies are listed as impaired due forestry activities. The forest products industry is very supportive of additional funding for State sampling and monitoring programs designed to evaluate BMP implementation and effectiveness to improve on specific practices where needed.

Question 2c. After a harvest is completed are efforts taken to destroy the roads to prevent future erosion?

Response. Harvesting activities may require 3 road types; permanent, temporary access and skid trails. Temporary roads and skid trails are generally retired with culverts removed and the roadbed and/or site reshaped and revegetated as part of the reforestation effort. Permanent roads are stabilized using a variety of practices such as waterbars, seeding and mulching. Permanent roads are an essential component of forest management as they provide access for forest management and protection from insects, diseases and destructive wildfire.

Question 3. If the initial implementation of BMPs does not bring the water body into compliance with WQ standards, would you then support the development of a TMDL for the Water body?

Response. BMPs are implemented at the time of the forest management activity to prevent water quality impairment from these activities. In the unlikely event that the BMPs are found not to be effective in preventing WQ impairments, foresters amend the practice to achieve the desired results. This reiterative process recognizes the natural phyisographic and climatic variables that must be considered by professional foresters in conducting these activities. The setting of a total maximum daily load (TMDL) for nonpoint pollutants does not provide an effective process or mechanism for addressing runoff from silvicultural practices. It is extremely cumbersome, expensive and cannot be realistically monitored. The most effective process for reducing loadings from a nonpoint source category is through implementation of BMPs. In contrast the setting of TMDLs for point source discharges provides a mechanism through the permit process to address the cumulative contributions at the end of the pipe discharges by linking known concentration levels and volume of flow.

RESPONSES BY JOHN GODBEE TO ADDITIONAL QUESTIONS FROM SENATOR CRAPO

Question 1. Your Testimony describes the success of BMPs and the SFI. If a forest operation conforms with State and EPA-approved BMP program, would you consider similar CWA Plan-driven activities as duplicative?

Response. Yes. BMPs are developed and implemented at the State level with Federal assistance from the EPA through CWA Section 319 funding. This program has proved highly effective in developing public private partnerships in education, training and effectiveness monitoring. The forest industry's Sustainable Forestry Initiative provides an excellent example of our industry's commitment to achieve the goals of the CWA without the need for duplicative programs administered and funded by the Federal Government.

Question 2. Your Testimony also mentions that the industry is not seeking Federal assistance to implement BMPs. Would the industry require additional resources to meet its obligations under the CW Action Plan?

Response. The Forest Industry is not seeking nor does it require additional Federal funding for implementation of BMPs. Compliance with BMPs is viewed as part of the business of managing industrial forest lands. We also have active programs such as the Sustainable Forestry Initiative which promote their implementation on all lands through industry funded training and education programs. The forest industry would like to see more Federal support for State led BMP programs to monitor implementation and effectiveness.

Question 3. Efforts to redefine road construction and maintenance as a point source of pollution subject to a discharge permit would invalidate congressional intent in establishing road maintenance as a nonpoint source. What has been the reaction of the State Forestry Agencies to this proposal.

Response. While the reaction varies somewhat among the States, there is general concern that the State Forestry Agencies do not have the manpower, resources nor funding to implement an NPDES permit program for forest road construction and maintenance. The consensus among State forestry agencies which operate in States with an active commercial forest industry is that existing statutes clearly define road construction and maintenance as a nonpoint source category. Any changes proposed to address specific permitting requirements should be decided at the State level.

Question 4. Can you quantify the improvements made to watersheds based on the industries SFI program?

Response. The industry, through the American Forest & Paper Association, academic institutions and other research organizations, have conducted numerous watershed studies throughout the country to examine the industry's landowner education, outreach, logger training and on-the-ground BMP implementation programs. We have cooperated with State forestry agencies, water quality agencies and members of the environmental community to conduct collaborative research on forested watersheds. The SFI program has numerous conservation, recreation and wildlife associations as sponsors and endorsers of the program. We are currently working with many of these organizations to begin the process of benchmarking successes and improvements in protecting water quality and sustainable forest management such as improvements to fish habitat and streamside management zone corridors for wildlife habitat.

Question 5. Are State regulatory agencies failing to fulfill their obligations under the Clean Water Act?

Response. From our perspective in the forest industry, the States, like all of us must set priorities for responding to various programs based on the availability of manpower, funding and the cost benefits of various compliance options. We believe the States are generally doing a responsible job in allocating resources and administering CWA programs addressing the regulatory requirements for our industry.

Question 6. Are States and Federal Agencies working well under the current rubric?

Response. The proof of the success of existing programs is best measured by the level of implementation of the intended objectives. Under the CWA, the forest industry bases its performance on implementation of State and Federal BMP programs. Successful programs exist in all States with an active commercial forest industry. Compliance levels with BMPs are high and gaining greater acceptance and implementation each year. Federal, State and private sector partnerships to promote education, implementation and training are paying big dividends in improving the health of our Nation's waters.

Question 7. What is the likely impact of the Clean Water Action Plan requirements on this cooperative relationship and State enforcement of the forest industry?

Response. Federal programs with a prescriptive one-size-fits-all strategy for meeting and improving the quality of our Nation's waters leads to the ineffective allocation of limited resources. The setting of WQ standards for individual streams and lakes, and the development of specific programs and practices to meet these standards is most effective when done by the State. The role of the Federal Government in this effort should be limited to general oversight and funding support to assist the States in meeting the goals of the Federal CWA.

STATEMENT OF DANIEL F. HEILIG, EXECUTIVE DIRECTOR, WYOMING OUTDOOR COUNCIL AND MEMBER OF THE CLEAN WATER NETWORK

My name is Dan Heilig and I am the executive director of the Wyoming Outdoor Council (WOC). Established in 1967, WOC is the oldest and largest independent non-profit conservation organization in Wyoming. The mission of my organization is to protect Wyoming's environment and conserve its natural resources by educating and involving citizens and advocating environmentally sound public policies. I appreciate the opportunity to testify today in support of the Clean Water Action Plan.

I am also an active member of the Clean Water Network, an alliance of over 1000 public interest groups representing environmentalists, family farmers, anglers, commercial fishermen, civic associations, rural policy, and consumer advocacy groups working together to implement and strengthen Federal clean water policies. The Clean Water Network submitted hundreds of pages of written comments on the Clean Water Action Plan in 1997 and 1998 during the official public comment period and members of its steering committee briefed this committee's staff last week on the Clean Water Action Plan. I am testifying today on behalf of the Clean Water Network as well as the Wyoming Outdoor Council.

Encompassing nearly 98,000 square miles, Wyoming is a vast, sparsely populated State. Approximately 49 percent of the State's land area, about 30 million acres, is managed by the Federal Government, primarily the Forest Service and Bureau of Land Management. The Nation's first Park, Yellowstone, first Forest, Shoshone, and first Monument, Devils Tower, lie within Wyoming's borders.

Although known better by its official motto as the "Equality State," Wyoming is the Nation's headwaters State. The Snake, Green, Madison, Yellowstone, Bighorn, and North Platte rivers all originate here, high in the Rocky Mountains. Unfortunately, despite the extraordinary natural values of these headwaters, only one river, the Clarks Fork of the Yellowstone, has been designated a Wild and Scenic River.

My organization supports the Clean Water Action Plan ("Plan") because it focuses significant Federal resources on the most pervasive cause of water quality impairment to Wyoming's surface waters: polluted surface runoff. The Plan's emphasis on watersheds, rather than discrete stream segments, makes sense given that polluted surface runoff comes from many different and often diffuse sources spread out over large areas. A key feature of the Plan is a $100 million increase in funding under Section 319 of the Clean Water Act for Fiscal Year 1999 for locally-led restoration efforts in watersheds that do not meet clean water or other natural resource goals.

Unfortunately, not everyone in Wyoming shares our enthusiasm about the Plan. In February of this year, the Wyoming Association of Conservation Districts ("Districts") and several other parties filed a 60-day notice of intent to sue the EPA and the U.S. Department of Agriculture in which the Districts oppose the Plan. Underlying this effort is a fear that identifying watersheds that do not meet clean water

or other natural resource goals could ultimately lead to regulatory action to restrict land uses and activities found to be contributing to water quality impairment. This concern is evidently based, in part, on their experiences with Wyoming's TMDL (total maximum daily load) Program. Under the TMDL program, States are supposed to identify and restore impaired watersheds by creating a list of impaired waters and then developing and implementing restoration plans, commonly called TMDLs. The TMDL provisions have been a feature of the Clean Water Act since its enactment in 1972, but implementation of these provisions has only been recent.

In 1996, using information provided by a variety of sources—including many Wyoming Conservation Districts—the Wyoming Department of Environmental Quality ("DEQ") listed over 360 stream segments as water quality limited, and therefore requiring watershed restoration strategies or TMDLs. As far as the Districts were concerned, the larger the list the better, since the availability of Section 319 money was based in part on the presence of impaired water quality. Later, when the Districts learned that TMDLs could be required for impaired segments, they took affirmative steps to remove as many segments from the list as possible. This effort proved successful when, in 1998, the EPA approved Wyoming's 303(d) list containing only 63 water quality limited segments. Over 300 segments were removed from the 303(d) list and placed on a list requiring monitoring sometime in the next 5 years.

Since late 1996, the Wyoming Association of Conservation Districts has focused its attention and resources on strategies to block the creation and implementation of TMDLs. As mentioned earlier, this strategy involves removing as many segments as possible from the 303(d) list (without taking corrective action) and efforts to reclassify surface waters to a lesser standard to obviate the need for pollution limits. As a result, citizens in Wyoming today are involved in a pitched battle to prevent the further weakening of water quality standards by interests that seem interested in nothing but maintaining the status quo. It is our hope that the availability of Federal dollars and other benefits provided by the Plan and successes of neighboring States may eventually entice the DEQ and Conservation Districts back into the business of restoring damaged watersheds.

For the benefit of this committee, I provide an overview of the situation in Wyoming from my vantage point.

Unified Watershed Assessments. The Unified Watershed Assessment is the centerpiece of the Clean Water Action Plan. We considered it a major milestone in Federal policy because for the first time it calls on States to consider data from a variety of sources and to develop one unified set of watershed restoration priorities by coordinating across Federal and State programs. The fact it was done hand in hand by water quality and agricultural agencies was a sign of progress.

Wyoming was the only State in the Nation to miss the initial deadline for submitting a Unified Watershed Assessment. As you can see from the map on page 5 of the EPA's first year report on the CWAP, Wyoming was also the only State in the Nation that failed to identify any watersheds requiring restoration efforts. The absence on the map of such watersheds should not be construed as evidence that we have no water quality problems in Wyoming. Rather, it reflects the Conservation Districts' concerns that identifying damaged watersheds could trigger a regulatory response that includes restrictions on land use or mandatory imposition of best management practices.

It is amazing that Wyoming officials appear to feel threatened by the Federal agencies asking them for their assessment of which watersheds are in need of action. The Unified Watershed Assessment and Watershed Restoration Action Strategy requirements were truly minimal mostly just asking States where and why they wanted to direct new Federal dollars that are allocated to address non-point pollution. Apparently, the State of Wyoming feels that Congress should simply hand over the cash, no questions asked.

EPA–USDA Unified National Strategy for Animal Feeding Operations (EPA–USDA AFO Strategy). Another important part of the Clean Water Action Plan is the EPA–USDA AFO Strategy. This strategy is simply a road map for how the Federal agencies will work together to implement existing Clean Water Act authority. More than 25 years ago, the Clean Water Act identified feedlots as point sources of pollution thus required to obtain National Pollution Discharge Elimination System (NPDES) permits. However, these provisions have been largely ignored until recently.

The EPA–USDA AFO Strategy describes steps to be taken over the next 5 to 10 years to implement the vision of the Clean Water Act by permitting large-scale animal feedlots. The Strategy does not in itself create any new rules or regulations. It does, however, describe a timeline for updating regulations on permitting and technology standards. These updates will require EPA to go through the formal rulemaking process, including public comment.

As a strategy, the EPA–USDA AFO Strategy was not required to go through the entire rulemaking process. However, it should be noted that the EPA and USDA provided ample public notice and comment opportunities—a 120-day comment period and 11 public listening sessions around the country. Clean Water Network members participated in the listening sessions and dozens of members submitted detailed comments on the EPA–USDA Strategy.

Triennial Review a Decade Behind Schedule. Wyoming's triennial review of its surface water standards is nearly a decade behind schedule. Last completed in 1990, this three-year review is required by Section 303(c) of the Clean Water Act ("Act"). As a result of the nearly 10-year delay, and due to inadequate oversight by EPA, many of Wyoming's surface water standards do not meet minimum Federal requirements. For example, all of Wyoming's Class 4 waters (classified for industrial, agriculture and wildlife watering uses) do not comply with the Act because they are not supported by a Use Attainability Analysis (UAA). EPA's regulations require a UAA for surface water standards that do not support aquatic life or recreational uses.

Lack of An EPA Approved Antidegradation Policy. Although the antidegradation provisions are a critical element of the Clean Water Act, Wyoming's water quality standards still lack—27 years after the passage of the Act—this mandatory provision. As a result, many of its high quality "tier 2" waters have been unlawfully degraded by point and non point source pollution. In some cases, single point source discharges lacking proper effluent controls have consumed substantially all of the water body's assimilative capacity.

Recent Legislative Enactments Block Attainment of Clean Water Goals and Threaten Wyoming's Primacy to Administer Environmental Laws. Earlier this year, the Wyoming State Legislature passed two laws that directly conflict with Federal pollution control measures. Known as the "credible data" bill, Senate File 27 requires the use of credible data—defined as "scientifically valid chemical, physical and biological monitoring data collected under an accepted sampling and analysis plan, including quality control, quality assurance procedures and available historical data"—to designate uses and to establish water quality impairment. Because the law requires that designated uses assigned by the DEQ be backed by credible data, it frustrates the water quality "enhancement" goals of the Clean Water Act. Under the Act, designated uses must reflect the potential water quality that could be attained with proper pollution controls and best management practices. The requirement that designated uses be based on water quality as it exists today will not improve water quality. Moreover, because it severely restricts the kind of data DEQ may use in determining impairment, it prevents DEQ from considering such obvious forms of water quality impairment as oil slicks, foul odors, floating scum and fish kills. Among its other egregious flaws, Ron Micheli, the Director of Wyoming's Department of Agriculture, boasted in the Department's Spring 1999, newsletter that "the approval of this legislation [SF 27] will now send DEQ back to the drawing board on [the Triennial Review of water quality standards]."

Second, concern surrounding the controversial Senate File 147-Brownfields legislation has prompted EPA to undertake a review of Wyoming's primacy under the Resource Conservation and Recovery Act (RCRA). Among its many problems, this law substantially expands exemptions to landowner liability, in conflict with strict liability provisions of Federal law. In a March 4, 1999 letter to Wyoming Governor Jim Geringer, EPA Region VIII Administrator William Yellowtail noted that "The Federal programs' provision of strict liability would be negated by the proposed revision. Owners of property contaminated by a previous owner, or by a contractor, or by any other party, would have no obligation to clean up the property, no obligation to monitor or investigate the contamination, and no obligation to comply with waste, water, and air program monitoring requirements. This proposed provision is unparalleled in Federal law and is inconsistent with authorized, approved and delegated State programs."

It is interesting to note that both laws were enacted over strong objections from citizens, conservation organizations and the U.S. Environmental Protection Agency.

Wyoming's Program for Reducing Non-Point Source Pollution Suffers from Lack of Resources and Oversight. A 1997 audit prepared by the EPA's Office of Inspector General revealed that Wyoming's Section 319 Program lacks adequate resources and sufficient oversight and technical support by EPA. Despite citizens' efforts to compel enforcement of the TMDL provisions of the Clean Water Act, Wyoming still refuses to take meaningful efforts to address the leading cause of impairment of Wyoming's rivers and creeks: siltation. Over 300 stream segments identified on the State's 1996 303(d) list as impaired from siltation were removed from the 1998 list and placed on a "monitoring" list. The few TMDLs that have been developed lack daily load allocations and many of the other basic elements of real TMDLs such as a margin of safety.

Loss of Wetlands Continues at Unacceptable Rates. I believe that the Clean Water Action Plan's goal of achieving a net gain of 100,000 acres of wetlands per year by 2005 is a laudable goal. However, unless the Administration and the States start protecting more remaining natural wetlands in addition to their efforts to restore degraded wetlands, it will be expensive and extremely difficult to reach that goal. Wyoming has already destroyed over 38 percent of its natural wetlands since 1780 according to the US Fish and Wildlife Service. According to Wyoming's 1996 and 1998 Section 305(b) water quality assessments, 413 acres of wetlands were destroyed over a 4-year period. Although this loss was partially offset by the addition of 339 acres of constructed wetlands, the loss of values of naturally functioning wetlands is significant. No program exists to monitor the effectiveness of wetlands constructed as mitigation.

These 305(b) reports indicate that most losses occur under various nationwide permits. A recently proposed general permit, Wyoming GP 98–08, would have authorized the destruction of up to 2 acres of wetlands and unlimited inundation of ephemeral drainages for each natural gas well drilled in Wyoming. With as many as 15,000 new natural gas wells proposed for construction in the next 10–15 years, wetland loss from this general permit would have been unacceptable. To its credit, the Corps of Engineers has responded to public comment and lowered to 1 acre the permissible loss per well and has proposed other strengthening provisions.

Finally, we are concerned that wetland loss reported to the Corps of Engineers may not accurately reflect actual losses. Many projects proceed without authorization, while others result in destruction to wetlands well beyond the scope of the permit. A recent example is the canal constructed on the Wind River near Riverton, WY. There, the Corps granted a permit to Fremont County (on behalf on the 1838 Rendezvous Committee) to remove 30 cubic yards of material as part of a flood control project. When the project was completed, an estimated 4,000 cubic yards of material had been removed to create what local officials dubbed the "Suez Canal."

Lack of Resources Remains a Problem. Despite the addition of new staff and an expanded budget, the lack of adequate technical and financial resources within the Water Quality Division is still a factor in the inadequate administration and enforcement of the State's clean water program. It is generally acknowledged that additional monitoring requirements imposed by Senate File 27 can not be met with existing budget and staff levels. The problem could be alleviated by a permit fee system, but recent legislative attempts to institute such a system have proved unsuccessful. Wyoming citizens pay to fish, hunt, and park—but polluters pay nothing to cover the administrative costs of permits that give them the privilege of spilling millions of gallons of waste into our surface and ground waters each year.

Access to Information Barred. Public access to water quality related information is frustrated by unreasonable agency policies. In a recent example, staff of the Powder River Basin Resource Council requested from the Wyoming Department of Environmental Quality a copy of a draft NPDES permit for produced water associated with coal bed methane development in the Powder River Basin. They were advised that in order to review the proposed permit, they would have to travel to the DEQ's main office in Cheyenne, a 6 hour drive from Sheridan. Although the information request was made in response to a legal notice announcing the availability of the draft permit, the DEQ refused to provide photocopies of the permit by mail.

State-Tribal Relations Suffer. Chronically poor relations between the Northern Arapaho and Eastern Shoshone Tribes and the State of Wyoming continue to undermine efforts to achieve the goals of the Clean Water Act. For example, when Tribal representatives announced last year their intent to develop water quality standards for surface waters within the Wind River Reservation, Wyoming's then Attorney General William Hill fired off a letter opposing their efforts. Despite the well established authority to the contrary, the Attorney General claimed—without citing any case law—"[a]s a matter of law, the Tribes lack the authority to adopt such standards."

In conclusion, let me just say that the Wyoming Outdoor Council and many of Wyoming's citizens support the goals of the Clean Water Act and efforts to achieve those goals, including the Clean Water Action Plan. While it certainly won't fix all of Wyoming's problems, it has raised public awareness of water quality issues in our State and has made available significant new resources, both technical and monetary, for watershed restoration and protection efforts.

I would also like to enter into the record, testimony from other members of the Clean Water Network on various aspects of the Clean Water Action Plan not addressed in my statement.

Mr. Chairman and members of the committee, thank you, again, for the opportunity to be here today.

RESPONSES BY DAN HEILIG TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. Mr. Heilig, you allege in your testimony that Wyoming delisted 300 water bodies and was unwilling to conduct unified watershed assessments out [of] fear that such listings and assessments would lead to regulation. Are you saying Wyoming has sufficient data to classify water bodies as impaired and refuses to do so, or that fear of regulation is preventing Wyoming from adequately monitoring its waters.

Response. The Wyoming DEQ has ample evidence to support a finding of impairment or threat of impairment on many of the 300 segments removed for the 1996 § 303(d) list. The information used to compile the 1996 list came from a variety of sources including the Wyoming Association of Conservation Districts (WACD), United States Geological Survey (USGS), United States Fish and Wildlife Service (USERS), Wyoming Game and Fish Department (WGFD), Wyoming Department of Environmental Quality (DEQ), National Park Service, Bureau of Land Management (BLM) and USDA Forest Service. There is little fear that monitoring may lead to regulation since the recently enacted Senate bill 27 sets such a high threshold (by requiring chemical, physical and biological monitoring data) for documenting water quality impairment.

Question 2. Federal law requires the calculation of TMDLs, but implementation is left to the States.

2a. Assuming that further monitoring confirms water body impairments and TMDLs are calculated, do you foresee the State taking action to meet the load and waste load allocations established by the TMDLs?

Response. Wyoming DEQ has begun to calculate daily waste load allocations for incorporation into NPDES permits. The State is much more reluctant' however' to establish TMDLs for sediments, nutrients other pollutants caused by non-point sources, preferring instead to address this pervasive form of pollution through voluntary implementation of best management practices.

Question 2b. Does Wyoming State law contain regulatory responses that could be triggered by the calculation of TMDLs?

Response. Yes. Section 35–11–301 of the Wyoming Environmental Quality Act (WEQA) prohibits the "discharge of any pollution or wastes into the waters of the State" or "alter[ation] of the physical, chemical, radiological, biological or bacteriological properties of any waters of the State" without a permit, WEQA Section 302 directs the DEQ to adopt rules, regulations, standards and permits that prescribe among other things: water quality standards specifying the maximum short-term and long-term concentrations of pollution, effluent standards and limitations specifying the maximum amounts or concentrations of pollution and wastes; and standards for the issuance of permits under section 402 of the Clean Water Act. Thus, under the WEQA, the Wyoming DEQ could establish and enforce TMDLs on any surface water where technology-based effluent limits, alone, are not adequate to implement any applicable water quality standard.

Question 3: As you stated in your testimony, a 1997 audit by EPA indicated that the Agency was providing insufficient technical support for the Wyoming section 319 program.

3a. Do you feel that the Action Plan remedies this problem?

Response. Although the Action Plan provides significant increases in incremental section 319 funding to Wyoming, EPA's capacity to oversee the State's use of the money has not kept pace. For example, inadequate travel budgets and staff shortages prevent EPA from maintaining a presence in Wyoming necessary to ensure appropriate oversight and enforcement of the NPS program. The Action Plan does not appear to directly address this problem.

Question 3b. With respect to the development of TMDLs, do you feel that EPA is providing sufficient technical and financial support to the States?

Response. In Wyoming we often hear the expression; "You can lead a horse to water but you can't make him drink." Although EPA has made technical and financial resources available to Wyoming to support its fledgling TMDL program, the Wyoming DEQ continues to question the need for TMDLs by arguing that segments identifies as impaired in the 1996 § 303(d) list were listed improperly, on the basis of inaccurate, incomplete or erroneous information. We believe EPA must improve its oversight of Wyoming's program, and resist approving TMDLs that lack the basic statutory elements such as a margin of safety and maximum daily loads.

STATEMENT OF PAUL SCHWARTZ, PROGRAMS DIRECTOR FOR CLEAN WATER ACTION AND MEMBER OF THE CLEAN WATER NETWORK

Clean Water Action is pleased that the Administration with the support of Congress is using the Clean Water Action Plan to begin a long overdue process of coordinating and targeting limited funds in a rationalized manner. The mere act of many Agencies and Departments and Divisions sitting down together to coordinate overlapping or disconnected programs and management values may lead in the end to great cost savings and economies of scale. Also, we are pleased that both Congress and the Administration are putting more dollars into some of the most successful and best used programs to achieve improvements in clean water such as CREP and EQUIP.

A number of issues, however, disturb us about the direction of the plan:

- Many necessary programs are severely underfunded. We commend that Unified Watershed Assessments were "done" by all 50 States, 5 territories, DC and 18 tribes, but note that the overall quality of these important plans is less than meets the eye. More funding for actual on the ground monitoring and surveys, which includes real public participation is needed. Also, application of GIS and the best data sets available to the Assessments needs to be done more uniformly and this will take more funding going out to the States. Though the UAW targets and priorities restoration dollars, more dollars need to be made available for restoration and antidegradation activities. Polluted runoff has been identified as a huge clean water priority, accounting for about 60 percent of the problems in assessed waters, yet the $200 million in grants provided by EPA is but the proverbial drop in the bucket compared to the money infrastructure commands. Also, allowable funding of nonpoint and pollution prevention problems by the States under their SRF programs are horribly underutilized. The coastal runoff control program, one of the few enforceable programs in our pollution fighting kit bags is also underfunded. Finally, the CSO and SSO problems faced by our communities around the country are not well address either in the current plan or in the Administration's future request.
- Given the overall clean and safe water funding "gap" using limited SRF funds as grants may be problematic—EPA has publicly recognized that a huge funding gap exists for dealing with existing clean and safe water needs. Some estimates put the combined funding gap at well in excess of $200 billion over the next 20 years. The two State SRF accounts will obligate some $200 billion over the next 20 years so there needs to be a doubling of the rate of spending just to keep up with current needs let alone plan for new regulations to address problems that are looming on the horizon. Without expanded funding, however, we oppose converting a full 20 percent of the State SRF into grants, believing that will represent a fundamental weakening of the integrity of the SRF accounts that are doing so much good. Instead, we support full funding of the SRF accounts (especially a restoration of the $500 million cut to the Clean Water SRF proposed by the Administration), more Federal share and a polluters pay funding option.
- Mechanisms to assure effective public participation in setting funding priorities are lacking. Taxpayers and ratepayers are not effectively at the table when funding priorities are being made either at the Federal or State level. Public interest and citizen groups are poorly represented if at all in stakeholder meeting and public processes dealing with funding. Two good examples of this are the effective "barring" of citizens from the States' CWSRF & DWSRF Intended Use Plan (IUP) process. Big water utilities, favored elected officials and municipalities, and engineering consultants dominate the process and politics; drinking water consumers, recreational water users, and those who make their living off the water get left out. With all the Federal funds flowing into the SERF and PWSS accounts, States should be required to set-aside a small amount of money to find and get to the table ordinary people and their representative organizations. This should be true for the upcoming "Watershed Forums" as well.
- Performance criteria lack teeth—often giving way to bean-counting substitutes—leaving us with the impression that some of the dollars are unmandated funds that will go down the proverbial rathole and are not accountable. Much of the work done under the banner of the 319 program has not resulted in real improvements in water quality. Lack of an enforceable backstop is at the center of the problem. We do not support programs that just throw money at the problem but expect results for our tax dollars. Good baseline monitoring data along with a strong TMDL program will crate the type of assessment and water quality goal setting that may result in real improvements in getting to fishable, swimable and drinkable waters.

STATEMENT OF JACQUELINE SAVITZ, EXECUTIVE DIRECTOR, THE COAST ALLIANCE AND MEMBER OF THE CLEAN WATER NETWORK

I would like to submit this testimony on the Clean Water Action Plan to the committee on behalf of the Coast Alliance and the Clean Water Network.

COASTAL RUNOFF

With regard to Coastal Protection Issues, the Clean Water Action Plan hones right in on the primary remaining source of water pollution, polluted runoff, and reaffirms the Administration's commitment to addressing runoff through existing programs. In our recent report, *Pointless Pollution*, Coast Alliance discusses the plethora of problems being caused on every coast, (and even in some non-coastal States) by this diffuse but ubiquitous pollution problem.

Whether the source is agricultural runoff, sloppy forestry practices or uncontrolled urban runoff, control over the continued onslaught from polluted runoff is long overdue. Besides contributing to the closure of nearly three million acres of the Nation's shellfish beds, polluted runoff is also credited with degrading at least a third of surveyed rivers and streams, and causing a "Dead Zone" covering more than 6,000 square miles in the Gulf of Mexico. Polluted runoff also promoted the toxic *Pfiesteria* outbreaks on the Mid-Atlantic Coast, made swimmers sick on beaches in California, and clogged important shipping channels in the Great Lakes and elsewhere.

The most common source of pollution, runoff comes from thousands of diffuse sources, such as farms, logging areas, new and existing developments, natural waters, marinas, septic systems, dams and other sources. Together they create a serious and ubiquitous water pollution problem.

The efforts described in the CWAP are not unpopular, they include research, monitoring, education, partnering, and technical assistance. In addition the Plan touts efforts to help States in a number of ways that will address runoff. There is discussion of using existing enforcement authorities to help States reduce pollutant discharges that are contributing to harmful algae blooms. Support to States to implement the Coastal Non-Point Pollution Control Program (of the CZARA) is part of the program, and in the CWAP the administration reiterates its commitment to this very important problem. Further, the Plan commits to bring closure to the State planning process so that States investments in planning can be brought to fruition.

These efforts to support and move forward with the Coastal Non-Point Pollution Control Program are the least we must do if we are to address beach contamination, Dead Zones, Harmful Algae Blooms, sedimentation in ports and harbors, and other results of polluted runoff gone awry. In truth, much stronger programs may be needed. However, the Coastal Non-Point Program must be given a chance to work.

We need your help to secure funding for the States to make solutions to these problems a reality. Historically, the Coastal Non-Point Program has not been adequately funded. The States, that are required to develop and implement these programs, need more financial support from Congress. Last year Congress appropriated $8 million for the program, one million of which is now in jeopardy of being rescinded. This year, Congress has the opportunity to fold the Coastal Non-Point Program into the Coastal Zone Management Act Reauthorization, which would give it a home, and make it a stronger candidate for limited Federal funding. Language to do this is currently included in a House Bill, and will hopefully be included in a Senate Bill to reauthorize the Coastal Zone Act as well. We look forward to working with all of you on this issue.

CONTAMINATED SEDIMENTS

Also in the spirit of cooperation, the Clean Water Action Plan contains an action item on contaminated sediments. Contaminated underwater muds exist in nearly every major watershed in the country. They are major contributors to contaminated fish, which are also all too common, and they create havoc when harbors require maintenance dredging or deepening. Here the CWAP commits to funding five demonstration projects to move forward on the State of the art for decontaminating these materials. This is an important step. Additional funding to clean up these underwater toxic sites as was sought by Senator Levin in the past, is critical to insuring Americans have access to clean safe seafood and fish.

We need your help to ensure funding is available for cleanups. We also need your help to minimize the amount of sediments that are dredged for harbor maintenance and deepening. One way to minimize this is to minimize Federal subsidies for dredging. The House WRDA bill calls for increased subsidies for deep dredging, the Senate version does not. We need your help to ensure that the conference reverts to the Senate language on this issue.

Thank you for considering my testimony.

STATEMENT OF MARY WELLS, POLICY ANALYST, EARTH JUSTICE LEGAL DEFENSE FUND AND MEMBER OF THE CLEAN WATER NETWORK

The Clean Water Network applauds the Clean Water Action Plan's commendable goal of a 100,000 acre net gain in wetlands by the year 2005. Natural wetlands are important filters of surface and ground water, they help retain flood waters and provide habitat for birds and wildlife. Unfortunately, the Administration has not demonstrated yet a serious commitment to achieving their previous wetlands goal of ''no net loss,'' let alone the new net gain goal. The most recent Draft Report to Congress on Status and Trends of Wetlands by the U.S. Fish and Wildlife Service found that from 1985 to 1995 an average of 117,000 acres of wetlands were lost each year. Despite this alarming figure, the Administration continues to promote certain policies and projects that destroy more wetlands than they protect.

Regarding policy, the Administration needs to replace the much abused Nationwide Permit 26 with permits that truly cause only minimal impacts and close any remaining loopholes in the program. In addition, the Administration also should end the current widespread destruction of wetlands due to the ''Tulloch rule'' court decision and act quickly to clarify the definition of ''discharge of dredged material'' under the ''Tulloch rule.'' Finally, the Administration should more carefully scrutinize Federal projects which result in wetland destruction. For example, three current projects in Mississippi—the Yazoo basin pumps, the Big Sunflower dredging, and the St. John's Bayou project—together could destroy up to 200,000 acres of wetlands. These expensive Federal projects deserve an interagency review to limit the amount of wetland destruction at the expense of Federal taxpayers. The Administration's current policies and practices regarding wetlands must be changed for the Clean Water Action Plan's goal of a 100,000-acre gain in wetlands ever to be realized. In addition, Congress must fully fund the restoration programs outlined in the Clean Water Action Plan if we are to reach the laudable goal of achieving a net gain of wetlands in the future.

STATEMENT OF ROBBIN MARKS, SENIOR POLICY ANALYST FOR NATURAL RESOURCES DEFENSE COUNCIL AND MEMBER OF THE CLEAN WATER NETWORK

These comments are submitted on behalf of the Natural Resources Defense Council Inc., (NRDC), a national environmental organization with more than 400,000 members residing in all 50 States. NRDC's institutional purposes include the protection of water quality and NRDC has long been active in efforts to reduce polluted runoff, control point source discharges and promote sustainable agriculture.

THE NEED FOR A COMPREHENSIVE CLEAN WATER ACT APPROACH FOR FACTORY FARMS

The Clean Water Act (CWA), enacted in 1972, works to help solve water pollution problems that are national in scope. Pollution from large scale animal confinement operations is a national problem, affecting more than half of the States in the United States. Pollutants gushing into waterways or wafting airborne do not stop at State boundaries. Moreover, the current State specific approach has led to patchwork of State livestock programs, some regulatory, some not; and pollution shopping by industry to seek out the States with the weakest controls.

As a key component of the President's Clean Water Action Plan, this spring the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) gave long-overdue recognition to the problems of factory farm pollution in their ''Unified National Strategy for Animal Feeding Operations'' (referred to here as the EPA–USDA Strategy). In addition to embracing enhanced voluntary approaches for the vast majority of livestock operations, the plan calls for the implementation of a national Clean Water Act program.

THE STRATEGY IMPLEMENTS EXISTING CLEAN WATER ACT AUTHORITY

More than 20 years ago, the Clean Water Act identified feedlots as point sources of pollution (and thus required to obtain National Pollution Discharge Elimination System (NPDES) permits), but very little has happened since then. Focusing its attention on more traditional point sources of pollution, EPA all but ignored factory farm pollution for decades. In 1992, the General Accounting Office estimated that 6,600 livestock facilities were large enough to qualify for Clean Water Act permits,

but less than 2,000 of those facilities had obtained permits.[1] Today, EPA estimates that there are at least 10,000 large scale animal feeding facilities, and several thousand have not obtained NPDES permits.

A national permitting system for large scale feedlots is not only required by the Clean Water Act; it is also needed to create greater consistency and protection across the Nation than is offered by the current patchwork of State programs. As is currently the case under the Clean Water Act, States would be free to adopt more environmentally protective standards but could not sink below the "floor" of Federal technology and permitting standards. While some States now issue permits to feedlots under a variety of State laws, only Clean Water Act permits provide the consistent environmental protection and procedural rights needed to control pollution from confined animal feeding operations (CAFOs): (1) Clean Water Act permits are designed to insure that water quality standards are attained. State permits are not necessarily based on this goal.[2] (2) Under the Clean Water Act, if a nearby water body becomes polluted by feedlots and other industrial sources, EPA establishes pollution reduction goals for each polluter.[3] (3) Under the Clean Water Act, citizens have the right to bring lawsuits against polluters to enforce the Clean Water Act.[4]

EPA HAS CLEAN WATER ACT AUTHORITY TO REGULATE THE LAND APPLICATION OF MANURE

One of the best features of the EPA–USDA Strategy would require CAFOs to protect soil and water from pollution through the land application of too much manure. Recognition has been growing that spreading vast quantities of manure on land can be as much of a pollution threat as a leaking manure lagoon. EPA clearly has authority under the Clean Water Act to regulate land application within a NPDES permit. For example, *Concerned Area Residents for the Environment* v. *Southview Farm*, 34 F.3d 114 (2d 1994), *cert. denied*, 115 S.Ct. 1973 (1995)[5] held that manure spreaders are point sources. The Clean Water Act, 33 U.S.C. §1362(14) holds that a point source includes drainage tiles and ditches from which a pollutant flows.

While the EPA–USDA Strategy clearly asserts that Clean Water Act permits for CAFOs must include proper land application of manure, the Strategy is unclear about what the specific requirements will be. Additionally, it appears that CAFOs will have years to develop Comprehensive Nutrient Management Plans (CNMPs) and several years thereafter to implement them, so the benefits of these plans will not occur for years to come. Finally, although the CNMPs are recommended as core features of Clean Water Act permits, for facilities issued general permits, the public is given no say on their terms. It appears that the plans will only be available to the public after they have been approved by USDA and EPA.

EPA SHOULD NOT ISSUE CLEAN WATER ACT PERMITS TO ANY NEW AND EXPANDING LARGE SCALE CONFINEMENT OPERATIONS UNTIL STANDARDS ARE UPGRADED

The current Clean Water Act standards under which factory farms operate are woefully inadequate. For example, the technology standards allow factory farms to build football-field sized, open-air manure cesspools. These manure lagoons have burst, leaked and overflowed—polluting waterways across the country.

Under its new strategy, EPA is proposing to issue hundreds of permits to new and expanding large scale animal confinement operations. But these permits would be issued under the same antiquated technology rules that have allowed many CAFOs to pollute.

EPA should impose a moratorium on permits for new and expanding animal factories that currently qualify as CAFOs. This moratorium should stand until EPA upgrades its standards regarding animal waste technology, and until EPA tightens its rules to insure comprehensively that all large scale animal confinement operations of all animal types are required to obtain a permits. This time-out would also allow States to assess the water quality effects of existing CAFOs before new operations are built or existing operations are expanded. The wisdom of a temporary

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[1] U.S. General Accounting Office, *Briefing Report to the Committee on Agriculture, Nutrition and Forestry, U.S. Senate, Animal Agriculture, Information on Waste Management and Water Quality Issues*, GAO/RCED 95–200BR, Washington, D.C. (1995), pp. 58–61.

[2] Clean Water Act, Sections 101(a) and 402.

[3] Clean Water Act, Section 303(d).

[4] Clean Water Act, Section 505.

[5] Concerned Area Residents for the Environment, et al. vs. Southview Farm and Richard Popp, 834 F. Supp. 1410 (W.D.N.Y. 1993), Defendant's Motion for Judgment as a Matter of Law, 834 F. Supp. 1422 (Cir. 2, 1993), (rev'd 34 F. 3d 114 (2d Cir. 1994) (reversing defendant's motion)), cert. denied, 115 S. Ct. 1793 (1995).

time-out has been recognized by States all over the country at one time or another, including North Carolina, Kentucky, Mississippi, Missouri, Georgia and Oklahoma. Unfortunately, the EPA–USDA Strategy does not include a moratorium.

LOCAL CITIZENS SHOULD BE ALLOWED TO PARTICIPATE FULLY IN THE DECISION AS TO WHETHER A FACTORY FARM IS ALLOWED TO LOCATE IN THEIR COMMUNITY. AND CITIZENS SHOULD HAVE THE OPPORTUNITY TO HELP DECIDE WHAT POLLUTION CONTROLS ARE NEEDED ON FACTORY FARMS TO PROTECT THEIR COMMUNITIES. ONLY INDIVIDUAL SITE-SPECIFIC PERMITS CAN ACCOMPLISH THIS FOLLOWED BY STRICT WATER QUALITY MONITORING BY LIVESTOCK OPERATORS AND TOUGH ENFORCEMENT AGAINST CLEAN WATER ACT VIOLATORS.

Despite the risk that CAFOs pose to water supplies and to public health, citizens in most States do not have the right to be notified before such a facility moves into their community. Once citizens are faced with the prospect of a huge animal factory that will generate more waste than several of their small towns put together, there is rarely anything they can do to stop the facility from operating. And once an animal factory has been established, there is little citizens can do to ensure stricter pollution controls. The lack of citizen participation in basic decisions about how to protect their communities from huge potential polluters is a basic feature of the general permit, which is the type of permit most commonly employed by States.

Rather than allow general permits for factory farms, the EPA should require that all factory farms be subject to more stringent individual permits. Individual permits require public notice before a factory farm can be permitted, set site-specific permit terms and may require an on-site evaluation prior to permit issuance. Site-specific permit terms might, for example, require the siting of a manure storage facility in the least ecologically vulnerable location on a property, despite the owner's plans to put it elsewhere. An individual permitting system might have prevented the location of a controversial factory farm within close proximity to a wildlife refuge in Mississippi.

Unfortunately, the EPA–USDA Draft Strategy relies upon the use of general permits for many CAFOs, especially for existing operations. The strategy identifies a list of certain types of factory farms that should receive individual permits, such as new and significantly expanding operations and operations known to pollute or likely to pollute. This is a good starting point but not enough. All factory farms should receive individual permits. If a break or leak from a manure storage facility occurs or manure is over applied on the land, drinking water wells can become contaminated, fish can be killed and public health can be threatened. The potential consequences are simply too grave to authorize fast track permits for CAFOs of more than 1,000 animal units.

EPA has recognized the limitations of general permits in addressing specific pollutant concerns in its call in the Strategy for watershed-based permits, but especially in a watershed-based context, individual permits make sense because they impose site-specific conditions.

Finally, Clean Water Act permits for factory farms must be backed up with meaningful compliance. Most industries that are issued Clean Water Act permits must monitor receiving waters and periodically report the results to EPA. However, factory farms, which are not currently required to follow these water-testing requirements, should be required to follow them. A strict regimen of enforcement is needed, such as periodic and unannounced inspections and penalties for violations that will ensure compliance.

EPA SHOULD BAN THE USE OF OPEN-AIR MANURE CESSPOOLS FOR FACTORY FARMS AND THEIR SPRAYING OF MANURE AND URINE INTO THE AIR. ENVIRONMENTALLY FRIENDLY FARMING SYSTEMS SHOULD BE ENCOURAGED.

Factory farms generate so much manure and urine in one place that, unlike livestock operations on a smaller scale, their manure storage and land application practices are often more a matter of waste disposal than of fertilizing crops. These systems have resulted in enormous pollution problems. Recently, NRDC and the Clean Water Network published a report entitled, *America's Animal Factories: How States Fail to Prevent Pollution from Livestock Waste.* This report documented pollution problems across America attributed to the lagoon and sprayfield system including:

- A North Carolina study of nearly 1,600 wells adjacent to hog and poultry operations showed that 10 percent of the wells tested were contaminated with nitrates

above the drinking water standard, and 34 percent were contaminated with some level of nitrates.[6]

- In Indiana, animal feedlots were responsible for 2,391 spills of manure in 1997.[7]
- Sixty three percent of Missouri's CAFOs (over 1,000 animal units) handling wet manure that were inspected between 1990 to 1994 by the State's Department of Natural Resources had illegally discharged animal waste.[8]
- During the past 4 years in Iowa, there were 51 manure spills into the State's streams, rivers and lakes that were serious enough for financial penalties, resulting in more than 1.1 million fish being killed. Overflowing manure storage lagoons were the source of the biggest spills, while application of liquid manure onto fields caused the most frequent spills.[9]

Open air lagoons and aerial spraying by factory farms should be banned. They should be replaced with technologies that do not rely upon open air storage of vast quantities of liquid manure, or that store manure in a drier form. Additionally, environmentally friendly and more humane farming systems should be encouraged, including composting and pasture systems. These systems, as well as an innovative system in which hogs are raised on straw, have been proven to work in Europe and in the United States. North Carolina passed legislation that required the State Department of Agriculture to develop a plan to phase out lagoons and sprayfields, but the Department's plan has failed to comply with this mandate. The EPA–USDA Strategy barely mentions more sustainable approaches. The strategy appears to support the continued use of liquid manure systems in the short-term, and while alternative approaches will be studied during the process of considering new effluent guidelines, the Strategy does not commit to banning lagoons and sprayfields in the long-term.

EPA SHOULD ENSURE THAT THE NATION'S WATERS ARE PROTECTED FROM POULTRY MANURE. CHICKEN FACTORIES SHOULD BE REGULATED UNDER THE CLEAN WATER ACT IN THE SAME FASHION AS OTHER ANIMAL OPERATIONS

According to the U.S. General Accounting Office, close to 2,000 poultry operations were of sufficient size to warrant a permit in 1992, but only 39 operations had them.[10] The historic rationale that has been used by EPA for exempting these operations was that poultry litter is dry. Yet even dry manure, when applied in excess quantities to the land, can create polluted runoff. Poultry factory farms should be issued Clean Water Act permits, whether the manure generated is dry or wet. In the initial round of permits under the EPA–USDA Strategy, it is not clear whether all dry litter factory farms will be regulated in the same fashion as other animal operations.

THERE IS A NEED TO ENSURE THAT CORPORATIONS THAT OWN LIVESTOCK ANIMALS SHARE RESPONSIBILITY FOR PAYING THE COSTS OF WASTE DISPOSAL AND CLEANUP

Large corporations often contract with smaller producers to raise their chickens and swine but do not take responsibility for disposing of the animals' waste. In many cases, farmers raising animals under contract are forced to become polluters because the major food corporations that own the animals will not provide enough acreage to apply wastes properly. As a result, small contract growers are often forced to over-apply manure to the fields that they have available. To its credit, the EPA–USDA Strategy requires that the corporations that exercise substantial control in the operations are co-permittees along with the producers who raise the animals.

ADDITIONAL FUNDING IS NEEDED, BUT IT SHOULD NOT SUBSIDIZE FACTORY FARMS

To its credit, the Clean Water Action plan recommends additional Clean Water Act funding. However, we strongly oppose the use of Section 319 funds, State revolving loan funds or Environmental Quality Incentive Program funds to assist CAFOs

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[6] Memorandum from Dr. Kenneth Rudo, toxicologist to Dr. Dennis McBride, State Health Director, North Carolina Department of Health (August 1998).

[7] Kyle Niederpruem, "Short Staffing Makes Policing Polluters Harder," *Indianapolis Star* (April 21, 1998).

[8] Missouri Department of Natural Resources, Press Release, *DNR Takes Action on Mega Farm Hog Waste Releases*, Division of Environmental Quality (October 20, 1995).

[9] Department of Natural Resources Database, Iowa Department of Natural Resources, "Prohibited Discharges at Iowa Livestock Operations Resulting in Monetary Penalties and/or Restitution for Fish Kill Being Proposed, Collected or Pending—1992 to Present" (November 24, 1999).

[10] U.S. General Accounting Office, *Briefing Report to the Committee on Agriculture, Nutrition and Forestry, U.S. Senate, Animal agriculture, Information on Waste Management and Water Quality Issues*, GAO/RCED 95–200BR, Washington, D.C. (1995), pp. 58–61.

with meeting the costs of environmental compliance. By failing to address the true environmental costs of their operations, CAFOs have been subsidized for decades. These operations are well financed and have the resources to pay for environmental improvements. Scarce public dollars should be directed instead, to small and moderate sized animal feeding operations, and to research and facilitate the transfer of sustainable livestock practices.

STATEMENT OF ROSS WILSON, VICE PRESIDENT, TEXAS CATTLE FEEDERS ASSOCIATION, ON BEHALF OF THE NATIONAL CATTLEMEN'S BEEF ASSOCIATION

Chairman Chafee, Mr. Baucus, members of the committee, good morning and thank you for inviting The Texas Cattle Feeders Association (TCFA) to be part of this hearing looking into the President's Clean Water Action Plan. TCFA represents cattle feeders in Texas, Oklahoma and New Mexico, an area that feeds 30 percent of the Nation's fed cattle. We are a State Affiliate of the National Cattlemen's Beef Association (NCBA). Mr. Chairman, I am Vice President of TCFA and serve on the Clean Water Working Group for NCBA, which has been working closely with EPA and USDA on all of the regulations and policies affecting the cattle industry. We in the cattle industry appreciate this opportunity to provide our insights on the Clean Water Action Plan and specifically the USDA/EPA Unified Strategy for Animal Feeding Operations.

Cattle feeders and family ranchers, play an integral role in protecting the environment. TCFA and many other NCBA State affiliates have implemented proactive programs to protect the environment. Some examples of TCFA's efforts include (1) 25 years of environmental research with universities to determine proper land application rates for manure and wastewater, groundwater quality testing and coring of lagoons to document liner adequacy; (2) development of the Environmental Quality Assurance Program to help feedyards comply with regulatory requirements; (3) development of a model Pollution Prevention Plan with Texas A&M University, which received a 1994 Environmental Excellence Award from EPA Region 6; and (4) a TCFA staff engineer that works daily with our feedyard members.

Our industry is dependent upon the land and water and if we are to pass this onto future generations it is crucial that both are kept in excellent condition. However, not only is it important to protect the environment but in order to be successful as producers and as a Country we must maintain a strong livestock industry—so essential to the Nation's economic stability, the viability of many rural communities, and the sustainability of a healthful and high quality food supply for the American people.

Mr. Chairman, our industry welcomes the opportunity to work with EPA and USDA on determining the best solutions to any potential problems that may exist. NCBA has worked closely with EPA to educate them on the cattle industry. TCFA took the EPA officials rewriting the effluent limitation guidelines on a tour of feedlots in Texas and Oklahoma and NCBA has been assisting them throughout the country. We welcome these opportunities because we want regulations and policy written on well-founded facts and data.

The cattle feeding segment of the beef industry has been regulated for more than 20 years. The Concentrated Animal Feeding Operations are held to a "zero-discharge" standard. Thus, we are not allowed to discharge into the waters of the United States, except in the 25-year 24-hour storm event. The implementation of this requirement has not been totally consistent from State to State but nor has any other aspect of the Clean Water Act. Forty-three States have been delegated the authority to implement this program and have done so with great success. Texas, Kansas and Nebraska account for nearly 70 percent of all the beef cattle currently being fed. Each State has a required State permit program for CAFOs adhering to Federal requirements, but retain the right to impose more stringent standards if the appropriate State authorities determine it is warranted. Each State has a manure management plan requirement, as well as restrictions for the land application of the natural organic fertilizer on land owned or controlled by the CAFO. I mention these three States because they are successful examples of Congress's intent when writing the Clean Water Act, to give the States the autonomy and authority to protect the waters of the United States.

The USDA/EPA Unified Strategy for Animal Feeding Operations has a broad goal and extremely ambitious timetable to minimize water quality and public impacts from Animal Feeding Operations (AFOs). We agree with this goal and as the primary stewards of the land, we attempt to accomplish this everyday. Unfortunately, due to some politically driven messages, the average urban citizen has absolutely no idea about the efforts and dollars already spent by cattlemen to protect the envi-

ronment. Citizens are inundated with data that is lacking in completeness and/or is so dated it is no longer considered accurate. The U.S. Geological Survey (USGS) in their 1993 scientific assessment of nation water-quality trends stated that the National Water Quality Inventory (State 305(b) reports) is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends.

The Clean Water Action Plan makes enormous assumptions and accusations based on this very data. It bases its conclusions on stream data that represents only 19 percent of the rivers and streams in the United States and only 40 percent of the lakes. Even with such a limited amount of data, it appears that the Administration is able to determine the source of all the pollution and is ready to go down a regulatory path that will put numerous livestock producers out of business and cost hundreds of millions if not billions of dollars. I do not want you to think the cattle industry does not recognize in some places there are areas of concern that need to be addressed. However, we ask that when addressing those problem areas that EPA use sound science, base their decisions on accurate and complete data, and consider economic achievability and impacts in selecting technologies and implementation schedules.

At this point I would like to address some general concerns we have with the Unified Strategy for Animal Feeding Operations.

As the title states this is a Strategy for "Animal" feeding operations and thus applies to *all* livestock. The problem with this "one-size-fits-all" approach is that the various livestock operations are run with extremely different management practices. Pork, poultry and cattle are produced differently from the beginning of the process all the way to the end. As I am sure all of you know, the cattle industry involves grazing operations and feeding operations of all sizes. The Strategy fails to recognize these key management differences. For example, the Strategy mentions storing dry manure in production buildings or otherwise covering the manure from precipitation. This may work for an indoor facility but anyone that has seen a cattle feedlot would quickly recognize this is practically and economically impossible, due to the numerous acres of the operation. Indoor, covered storage has little or no environmental benefit when runoff is collected and the site does not produce any leaching. But even more importantly, from an environmental perspective, we believe our industry is achieving the goals of the Clean Water Act without EPA dictating every specific requirement.

Just like the Strategy is a "one-size-fits-all" or livestock the same approach was taken when considering regional landscape and climate differences. The Strategy fails to take into account the regional climate, hydrological and topographic conditions of an operation. Mr. Chairman, we have some cattle feedlots that are located 10 miles from surface water and are located on a 300-foot deep ground water table, while others may be 400 yards from a stream and over a shallow, 20-foot ground water table. These two operations are clearly different in their management practices due to the various risk factors, however in this Strategy they are treated the same. This does not make any sense, especially if the goal of the Strategy is to protect the surface waters of the United States. The Strategy must recognize regional differences, especially when some of the key factors in determining risk include rainfall and soil type.

This leads into the next area of concern with the Unified Strategy and that is the assumption that somehow the size of the operations equates with the amount of environmental risk. As stated above, cattle operations are located in a wide range of climates and landscapes. In some cases a 2000 head feed yard may have a greater potential to harm the environment than a 70,000 head feed yard. In reality, it all depends on location, design and management practices. However, the Strategy does not recognize this and basically states that no matter where you are located nor how arid or moist of a climate you are in, the key indicator as to the potential harm to the environment, is the number of cattle in that feed lot. We do not interpret the Clean Water Act to make determinations on size with no other considerations. States need to be provided with statutes and regulations that have flexibility so as to avoid these very rigid "one-size-fits-all" demands. We would encourage EPA to take environmental risk into account when considering who should be permitted and the type of design and management practices needed, rather than arbitrary numbers.

The size of a cattle feedyard is also used when EPA determines if an operator should have a general permit or individual permit. In Texas we have been under a rigorous general permit that I think most would say has been extremely successful. It covers all aspects of the operations and in my eyes would be determined to be a "functionally equivalent" (to use terms from the Strategy) NPDES program. However, after many years of success Region 6 EPA has come back and said excep-

tionally large operations may need to be placed under an individual permit. This determination is made purely on size and does not look at the potential risk to the environment based on site-specific conditions.

Mr. Chairman, this is exactly what the Strategy is proposing, in that no matter how successful you may have been under a general permit, EPA's position is that due to your size you should have an individual permit—no other considerations, just size. This once again seems to defy logic when our goal is to protect the environment, not put overly burdensome regulations on large operations based solely on an arbitrary number.

On the other end of the spectrum is the discussion on watershed permits for clusters of feedlots in an impaired watershed. EPA removed from the Draft Strategy the portion stating that merely by your location in an impaired watershed you would need a permit. However, the final Strategy does call for watershed permits where CAFOs, smaller than 1000 head, are located in a watershed that is impaired due to the aggregate of these operations. It is our opinion that there needs to be scientifically-based, site-specific determination that each one of the AFOs in the watershed, that are required to get a permit, are proven to be a source of the impairment. Otherwise this is merely an arbitrary determination based on nothing but location. This is extremely concerning when we know many States have determined waters to be impaired purely on visual data and no scientific testing.

The Strategy calls for Comprehensive Nutrient Management Plans (CNMPs) for all AFOs by 2009. USDA and EPA stated that there would be flexibility as to what is included in a CNMP, however it is our impression that all operators will have the same basic requirements. One of those that is mentioned is feed management. While EPA has backed off on dictating feed management, it is still included in the strategy and there is a concern that down the road there will be mandatory feed requirements in the permits. As many of you know, feeding practices vary regionally and even seasonally and the goal is efficiency and productivity. For example, in Idaho many of the lots feed potato by-products and even feed french fries that are rejected from fast food restaurants. These examples of variations in feed would make it extremely difficult to regulate and should not be addressed under the Clean Water Act.

A second area of great concern in the CNMP is the discussion on land application of manure. This is an extremely important issue to the cattlemen and deserves great attention. At the beginning of this discussion land application of manure must be placed in two categories: (1) land application on the land owned or operated by the CAFO operator and (2) offsite land application. In Texas, the manure from feedlots is sold to third party contract haulers who then sell to farmers the product and service of applying the manure on their land. Texas permits require record keeping which includes: name of the contract hauler, amount of manure, and occasional nutrient testing. It is our concern that EPA would propose to hold the CAFO operator liable for off-site land application. To hold the operator liable for a product that has been sold and taken miles away from the CAFO would not only be extremely burdensome and costly, but may exceed the jurisdiction of the Clean Water Act. Farmers purchase manure fertilizer to improve soil condition and crop productivity. It would be cost prohibitive and in some cases decrease crop productivity for them to apply excess manure or commercial fertilizer.

As we interpret the Clean Water Act, the agriculture stormwater exclusion and the flow return from irrigation place this in the non-point source category and thus outside of the jurisdiction of the Federal regulatory agencies. Mr. Chairman, we ask that EPA respect this exclusion.

The Strategy states in the guidance section that for offsite land application the owner operator would be required to do one or more of the following:

- Provide data on nutrient content to the off-site recipient;
- Record the recipients of the animal manure and wastewater being transferred off-site;
- Obtain a certification from the off-site recipient that it has a CNMP.

The third option could potentially destroy the market for manure because this would place liability and an enforcement mechanism on the CAFO operator to make sure the farmer 10 miles down the road has a CNMP. This also seems to only apply to the application of manure; thus the farmer next door could over apply commercial fertilizer with no regulatory limitations or repercussions. If EPA goes forward with this idea and decides to regulate commercial fertilizer then the store or plant that sells or manufactures the product would be liable, just as the CAFO operator may be held liable for land application of manure.

Mr. Chairman this gets to the crux of the issue. The market for manure versus commercial fertilizer is a very fragile and competitive one and if EPA were to put regulatory restrictions on the land application of manure we would see many farm-

ers switch to commercial fertilizer. This would be extremely detrimental to the CAFO operator and to the farmer because he would no longer get the organic material and other nutrients that make the use of manure so beneficial. This is not an area to regulate without making careful considerations and realizing the real world effects. We do not believe that EPA has documented problems related to land application of manure fertilizer by third-party farmers on land that is not associated with the CAFO.

As this committee looks to reauthorize the Clean Water Act it is clear that the administration will push for EPA regulatory and enforcement authority over non-point sources. One of the reasons for this is so EPA can regulate land application of manure without any jurisdictional impediment. EPA holds a tremendous amount of power in this area with their ability to reject State plans and to make grant determinations. We feel the States have done an excellent job handling the non-point source pollution, with their limited resources. We recognize there is still a long way to go. However, as compared to a point source, end of the pipe pollution, this is a much more difficult area to control and there has been limited economic resources put into this program. The data, science and technology, that would allow us to clearly identify the sources and magnitude of this pollution and the most cost effective way of controlling it is still evolving.

Mr. Chairman and committee members, we would ask that you let States remain in control of non-point sources and let the data evolve before allowing EPA to place huge regulatory burdens upon non-point sources.

As I stated at the beginning, the proposed Strategy is an extremely aggressive plan with very stringent timetable. The Strategy states there are 450,000 AFOs and EPA has set a goal of having every AFO with a CNMP by 2009. This would require the help of NRCS, private technical assistance and enormous economic resources. EPA would like to have the CAFOs designated as priorities (15,000 to 20,000 CAFOs) with permits by January of 2000. The models for these permits are to be finalized by August 1999 leaving 3 months to issue 20,000 permits. It is these unrealistic timetables that concern our industry. However, not only are these ambitious timetables of concern but so is the lack of economic resources we are seeing for technical support. The administration proposed to cut its State Revolving Fund (SRF) funding and the EQIP dollars have not been enough to cover the requests. To force AFOs and all CAFOs to hire consulting engineers to meet unrealistic deadlines adds to the economic hardship that exists today in our industry. This proposal almost assures that only the largest operations will survive. It seems illogical to propose an extremely cost intensive Strategy and then reduce funding.

Mr. Chairman, the Strategy also outlines incentives for operators to participate in the voluntary aspect of the program. The first incentive allows AFOs, which were placed in the regulatory program because of its location in an impaired waterway or because of a direct discharge, to exit after 5 years, if the problems have been corrected. This is not incentive because if the problems have been corrected the operator would be allowed to exit under current law, absent any incentive. The second incentive that allows the good faith operator a pass on a one-time discharge is one we would hope exists in all the programs EPA administers. Finally, the tax incentives are an excellent idea and at some time one will be extremely useful. The only problem is that many, if not most cattle producers are currently suffering financial losses, and cannot utilize any type of tax incentive at this time. We need to work together to put some real incentives in place that will truly encourage operators to participate in the voluntary program. Mr. Chairman, we would welcome the opportunity to sit down with EPA and attempt to draft some real, tangible incentives for producers.

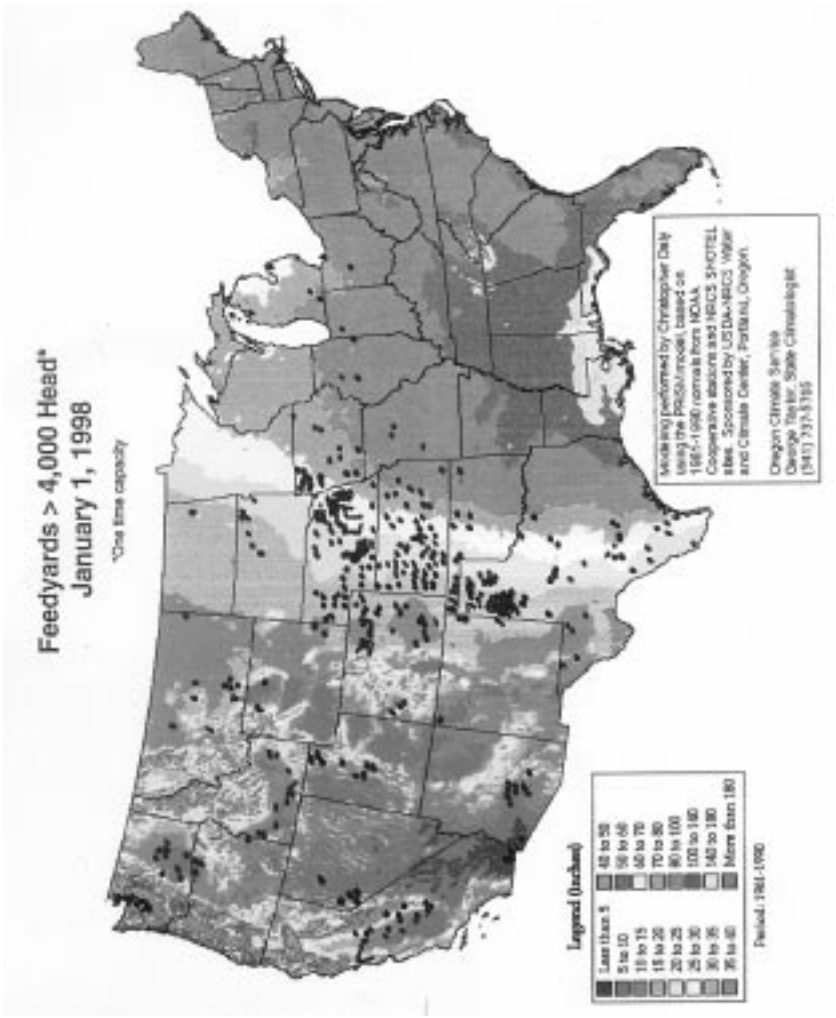
Finally, Mr. Chairman, the cattle industry has a long history of working with USDA and there has been a level of trust built between the producers and the employees in the field. Secretary Glickman called for a "fire wall" between the voluntary and regulatory program to protect this relationship. While we appreciate the Secretary for his work in trying to establish this firewall, the cattle producer would rather see this placed in the statute to provide a statutory "clear wall."

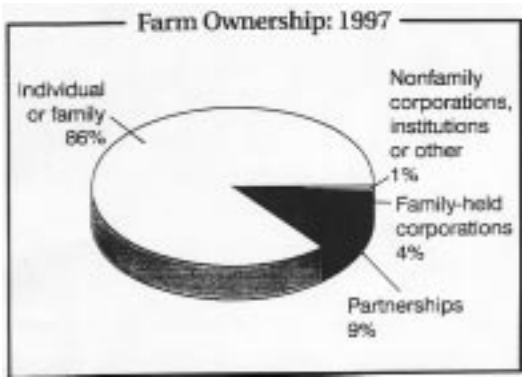
Mr. Chairman, many environmental groups pushed for this Strategy. They used terms like "factory farming" or "corporate farming" to describe large operations that they feel are damaging the environment. Senators on this committee have spoken in recent weeks on the floor, asking for protection of the small farmer from the trend to consolidate agriculture. Well Mr. Chairman, this Strategy may do just that. It will force the small- to medium-size operations to expand or go out of business because of increased compliance costs and put much more pressure on larger operations to consolidate. On top of that, the issue that we should be talking about is not size but environmental protection. From an environmental protection perspective, the large operators have been regulated, will continue to be regulated and have

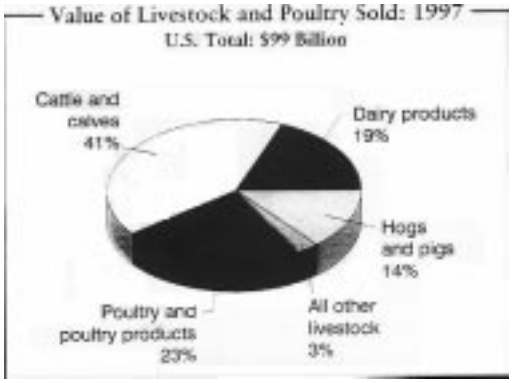
the resources to protect the environment under current laws and regulations. Mr. Chairman, members of this committee, we need to ask ourselves and those individuals pushing this new Strategy: What is the goal?

Mr. Chairman, members of the committee, let me reiterate the cattlemen's position. Our industry plays a crucial role in protecting the environment. Our livelihood depends upon the quality of the land and water. EPA has been regulating our industry for over 25 years. EPA admits that the current regulations have not been fully implemented and in some States the regulations have lagged behind others. However, EPA must also recognize many States are doing an excellent job and are going beyond what EPA requires under its regulations. With that in mind, we would recommend that EPA focus on the States that have not implemented the existing programs before implementing an entirely new Strategy which will place costly and unnecessary regulatory burdens on many producers.

This concludes my testimony. The Texas Cattle Feeders Association wishes to thank Chairman Chafee, members of the committee and specifically Senator Hutchison for this opportunity to testify. I would be happy to answer any questions you or other members of the committee may have.







NATIONAL CATTLEMEN'S BEEF ASSOCIATION
January 19, 1999.

DENISE C. COLEMAN,
Program Analyst,
Natural Resources Conservation Service,
Washington, D.C. 20013–2890.

RE: COMMENT ON THE UNIFIED NATIONAL STRATEGY FOR ANIMAL FEEDING OPERATIONS

The National Cattlemen's Beef Association (NCBA) appreciates the opportunity to comment on the Draft Unified National Strategy for Animal Feeding Operations, published on September 21, 1998 (63 Fed. Reg. 50192) hereinafter referred to as the "Strategy." NCBA represents the many cattle feeders and family ranchers, all of who have a stake in protecting the environment. But we must also weigh these protections against maintaining a strong livestock industry—so essential to the nation's economic stability, the viability of many rural communities, and the sustainability of a healthful and high quality food supply for the American public. We believe that common sense, cost effective and affordable principles can be applied to livestock production to achieve water quality protection.

Initiated in 1898, NCBA is the marketing organization and trade association for America's one million cattle farmers and ranchers. With offices in Denver, Chicago and Washington, D.C., NCBA is a consumer-focused, producer-directed organization representing the largest segment of the nation's food and fiber industry. As representatives of family farmers and ranchers with a vested interest in protecting the environment, we are pleased to provide the following comments.

OVERVIEW COMMENTS

The Strategy sets out the joint USDA/EPA plans for dealing with so-called "polluted runoff" from animal feeding operations (AFOs) and the land application of animal manure and wastewater. The Strategy calls for the implementation of com-

prehensive nutrient management plans (CNMPs) by operators of cattle, dairy, hog and poultry facilities to minimize adverse environmental impacts. The Strategy also acknowledges several regulatory and enforcement initiatives now underway at EPA, and describes the relationship between voluntary and regulatory programs.

The Strategy's broad goal is to minimize water quality and public impacts from AFOs. NCBA agrees with this goal and recognizes that cattlemen, as one of the primary stewards of many of our nation's natural resources, have been successfully striving to accomplish this goal for numerous years. However, it is extremely difficult for the average citizen to see that effort when confronted with unsupported claims of non-point source pollution from animal agriculture. The data supporting those claims are lacking in completeness and/or are so dated they are no longer considered accurate. The U.S. Geological Survey (USGS) in their 1993 scientific assessment of national water-quality trends stated that the National Water Quality Inventory (State 305(b) reports) is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends. NCBA depends on sound scientific and statistical data when analyzing the methods in minimizing water quality impacts. Before we require large economic investments by animal feeding operations into minimizing water quality impacts, we feel accurate data must be collected and analyzed to truly determine to what extent an impact exists and will the proposed solutions cure this possible impact. Collecting and updating this data should be the initial goal of any strategy affecting the waters of the United States.

The Strategy is focused on the livestock industry as a whole. However, due to the maturity in the industry, the various species of livestock are being produced with extremely different management practices. For example, the pork and poultry operations are produced in almost entirely enclosed facilities. The cattle industry involves both grazing operations that can span over hundreds of acres and feed lots that are in open, outdoor penned facilities. The Strategy does not acknowledge these management differences. For example, the Strategy mentions storing dry manure in production buildings or otherwise covering the manure from precipitation. That may work for a pork or poultry operation, which is already indoors, however a great majority of the beef feedlots store manure in the cattle pens prior to being hauled out and land applied. Thus, covering the dry manure would involve placing roofs over the entire feedlot. This is economically and practically infeasible. It is very difficult to apply a broad-based Strategy to the entire livestock industry without some appreciation of the many different management practices. NCBA suggests a need to recognize in the Strategy the different management practices of the livestock species.

Just like species are managed in a different manner, so are operations in the various regions. USDA and EPA must always take into consideration the regional climate, hydrological and topographic conditions of an operation. As I am sure you are aware, some cattle feedlots are on land that may be many miles from surface water and located over a 150-foot deep ground water table, while others may be 200 yards from a stream and over a shallow, 20-foot deep ground water table. These two operations are clearly different in their management practices due to the various risk factors and potential management strategy differences. A national Strategy addressing water quality issues must acknowledge these regional differences.

The Clean Water Act states that CAFOs are point sources and defines what a CAFO is in the regulations at 40 C.F.R. 122.23. Through the Strategy, it appears that EPA expands the definition of CAFOs to include operations that under the regulations are considered AFOs. We feel EPA should follow the Administrative Procedures Act and do a rulemaking, open for public comment, prior to changing these definitions.

Finally, the Strategy makes various predictions on the number of feed lots that will be placed in the regulatory program versus participating in a voluntary program. These predictions were made with the current definition of AFO and CAFO. However, as I am sure you are aware, EPA is rewriting the Effluent Limitations Guidelines (ELG) for livestock and in that process looking at the definition for CAFOs. If this definition were to change, there would be a dramatic effect on the predictions of voluntary versus regulatory participants of this national Strategy. The current regulatory definition of a CAFO should remain the same for beef cattle and NCBA is conveying this point to the EPA officials rewriting the ELG. NCBA is extremely concerned that grazing, cow-calf, and temporary winter operations could be pulled into the CAFO designation if it were to change. The EPA officials working on the ELG will see that these operations do not pose a risk to the environment and it would be economically infeasible to regulate these operations. The definition of CAFO should be addressed in the ELG process and not this Strategy.

COMPREHENSIVE NUTRIENT MANAGEMENT PLANS

The Strategy establishes a performance expectation that all AFOs nationwide should develop and implement technically sound, economically feasible, and site specific Comprehensive Nutrient Management Plans by 2008, which should address, at a minimum, feed management, manure handling and storage, land application of manure, land management, record keeping, risks from pathogens and other pollutants, and include a schedule for implementing the management practices identified. The National Resources Conservation Service (NRCS) Field Office Technical Guide will be the primary technical reference for the development of CNMPs for AFOs, and technical assistance will be provided through Soil & Water Conservation Districts (SWCDs), Cooperative Extension Service, USDA Service Centers and the private sector. NCBA believes some form of plan is needed for any operation, however the plan needs to be productive and address those operations specific issues. Operators that are in different regions or vary in size could and should have substantially different plans. Currently many operators have a Pollution Prevention Plan in place that covers many if not more issues discussed in the CNMP. NCBA would urge EPA and USDA to work to incorporate these plans to avoid any duplication.

The Strategy discusses the need for feed management. NCBA believes that feed should be managed by each operator due to the various economic and nutritional issues involved with feeding cattle. We are clearly aware of the phosphorus and nitrogen balance, however there are other issues when it comes to feed such as production and costs. To require operators to manage their feed through a permit would be extremely onerous and perhaps greatly hinder their profitability. NCBA suggests that feed management should not be a requirement of a CNMP, especially with the lack of research that has been done on this issue from an environmental perspective.

A major portion of the CNMP focuses on manure storage, handling and application to land. As addressed above, this is an issue that species and regional differences must be considered. It would be very difficult and not very effective to outline specific storage and handling aspects to be included in a CNMP without considering the vast regional differences in land and proximity to water. The Strategy fails to discuss the differences between manure applied on land owned by the feeding operation versus manure sold, traded or given away to be applied on land not owned by the feedlot.

NCBA is very concerned that this Strategy attempts to expand the legal authority of EPA to regulate the proper land application of all manure through CNMPs and/or NPDES permits. We do not agree with EPA's position that stormwater runoff from fields on which animal wastes have been properly applied should lose the stormwater exemption in the absence of a certified CNMP and be defined as a point source of pollution. We are concerned that attempts to strictly link offsite land application practices of third parties to a CAFO operators' NPDES permit will destroy the current markets for manure as a farmland fertilizer. Today farmers and others often purchase manure and spread it on their crops as an important source of nutrients. Their willingness to do so will likely change if excessive record keeping and restrictions are placed on their actions. We are very concerned with the fact that if land application were pulled into the NPDES permitting system we would see a massive increase in citizen suits, many of which would be frivolous and costly. These types of legal actions do nothing to protect the environment but can very easily force an operator to close.

It is clear that AFO owners and operators will need substantially increased access to technical and financial assistance to meet the performance expectations of the Strategy. Since perhaps 300,000 new or revised CNMPs will be required, the Strategy recognizes that availability of private and public sector specialists to assist will potentially limit the successful completion of the Strategy. We urge the agencies to strongly support this need with the programs described in Section 5.0, Strategic Issue #1, and with additional Federal budget initiatives to ensure success. We especially support the suggestions that USDA develop agreements with third-party vendors similar to the 1998 agreement with the Certified Crop Advisors (CCAs), and both EPA and USDA to place on their websites computer expert systems for use by producers in development of CNMPs. We also suggest that the agencies support the educational efforts of NCBA and other industry organizations.

VOLUNTARY PROGRAMS

For the majority of AFOs (estimated to be about 95 percent of all farms), the Strategy suggests that voluntary efforts will be the principal approach used by the agencies for CNMP implementation. NCBA believes this number will be substantially different should the definition of CAFO change during the ELG process and

this needs to be mentioned in order to avoid misleading producers. The Strategy also suggests that CNMPs developed and implemented through voluntary action by operators may be less comprehensive and implemented over longer time periods than CNMPs required for compliance with a regulatory program. This sounds reasonable, but we also urge the agencies to factor in the regional climatic, hydrologic, and topographic differences that exist.

The Strategy indicates that AFO owners and operators participating in voluntary programs must agree to develop and implement a CNMP before receiving financial assistance. We can understand why the agencies would want to apply this restriction to funds targeted to animal feeding operations, but we strongly hope that the agencies do not intend to apply this restriction to all Federal financial assistance potentially received by a farm raising both crops and animals. This needs to be kept a voluntary program and not turned into a regulatory program with financial assistance being the catch.

NCBA recommends increasing the range and magnitude of the incentives to participate in the voluntary program. EPA and USDA need to meet with the stakeholders to-discuss what incentives could be placed on this voluntary program that would entice operators to participate while giving them the reassurance that this is not a pseudo regulatory program.

REGULATORY PROGRAM

The Strategy estimates that only 5 percent of the total number of AFOs will be in mandatory programs, under the proposed Strategy this will likely include all CAFOs. NCBA questions the accuracy of this percentage and the statement that only 2,000 CAFOs have NPDES permits. Does this include CAFOs that have state permits equal to or exceeding NPDES permit requirements? Does this include each individual general permit?

The Clean Water regulatory program is going through a dramatic change with the rewrite of the ANPRM for water quality standards and effluent limitation guidelines for livestock; NCBA would encourage the USDA/EPA to acknowledge these changes in the Strategy.

The Strategy calls for an increase in the number of permits issued to CAFOs. The Strategy proposes to inspect all priority CAFOs within 3 years and all CAFOs within 5 years. In addition, it seeks to "significantly expand" permitting by targeting the largest CAFOs by 2003 and all others by 2005. Not only are these extremely lofty goals, but we seriously question whether the Federal agencies and the states have sufficient financial and personnel resources to accomplish these goals. Currently, many states have been delegated the permit authority and are struggling with the limited state budgets. Clearly, the agriculture industry does not have the resources to accomplish such demands. We would ask EPA and USDA to reconsider their lofty goals in light of the economics or to clearly outline the source of increased continual funding to accomplish these goals.

The Strategy implies that the current regulatory program is not working and thus this new Strategy is needed. EPA acknowledges that the current regulatory program has not been fully implemented. NCBA would encourage EPA to implement existing programs and evaluating their success or failure before initiating an entirely new program or Strategy.

The Strategy states that "large facilities (those greater than 1000 animal units) produce quantities of manure that are a risk to water quality and public health whether the facilities are well managed or not. " NCBA takes issue with this extremely broad accusation and we would ask that such an accusation be backed up the sound scientific evidence. This statement disregards the need for science and fact-based decisionmaking, in favor of an arbitrary analysis. NCBA is concerned with such accusations, not only because it accuses a well managed feedlot of impacting water quality purely based on its size, but also such broad, unproven statements can cause great public concern.

The Strategy states that animal feeding operations that remove manure from feedlot pens and stack it in areas exposed to rainfall or near an adjacent watercourse have established a crude liquid manure system for process wastewater that may discharge pollutants, and therefore would be subject to the CAFO regulations. These facilities are then point sources under the NPDES program if the number of animals confined at the facility meets the regulatory definition at 40 CFR Part 122. Appendix B. or if the facility is designated as a CAFO after an onsite inspection. Although many cattle feedlots far exceed 1000 animal units in size and generally operate under NPDES permits, NCBA is concerned that EPA not prevent temporary in-field manure stacking. This is a common practice necessitated by the large quan-

tities generated whenever the feedlot pens are cleaned. In the weeks that follow, manageable-sized quantities are withdrawn for land application from these stacks.

The Strategy also suggests that the finding that an operation generates more dry manure than it has land to spread it on could also trigger a permit requirement. NCBA is concerned that EPA not apply this consideration to AFOs which sell or give away the manure produced on their facilities. In many cases, cattle feeders own little if any crop land for spreading manure.

The Strategy discusses the denial of the agricultural stormwater exemption for land application. Case law has established circumstances under which the CWA's agricultural stormwater exemption can be denied for land application of manure. The exemption is intended to exempt fertilization of crops and pastures and the courts have held that it does not apply if manure is over-applied (e.g., Concerned Area Residents for the Environment v. Southview Farm, 34 F.3d 114 (2d Cir. 1994), cert. denied 115 S. Ct. 1793 (1995)). However, over application cannot be subjectively evaluated. NCBA believes that EPA exceeds its authority to deny the agricultural stormwater exemption for all runoff associated with the land disposal of manure originating from a CAFO, or from AFOs for which the land application occurred without a CNMP developed by a public official or a certified private party or in a manner inconsistent with the CNMP.

SMALLER CAFOS EXIT REGULATORY PROGRAM

NCBA would like EPA/USDA to clarify their requirements for smaller CAFOs to exit the regulatory program. NCBA interprets this section to describe a smaller CAFO (less than 1000 animal units) that was originally regulated due to the fact that it was discharging into navigable waters through a manmade ditch; pollutants are discharged directly into waters of the U.S. which originate outside of and come into direct contact with the animals; or is considered a significant contributor of pollution to the waters of the U.S. If the reason for the CAFO designation no longer exists than under current regulations that operation would be an AFO and not subject to the regulatory program. The Strategy states the operation "must" fully implement a CAMP to exit the program. If the permit expires and the reason for the CAFO designation no longer exists then it is NCBA's conclusion that EPA would no longer have jurisdiction to require them to have a CNMP.

NCBA agrees that incentives are needed for development of CNMPs by AFOs, but it is not enough to simply promise the opportunity to exit an enforceable permit program in 5 years. There needs to be a true incentive for AFOs, one that includes those AFOs that do not discharge or are not permitted due to the storm exemption. Also, these incentives should not be strictly tied to the size of the feed lot. A large AFO in a very arid region may be less of a risk than that same size feed lot in a high rainfall region. Risk factors are a very important consideration and the limiting factor should not be based solely on size.

GOOD FAITH INCENTIVE

The Strategy acknowledges that existing provisions of the CWA and related EPA regulations provide authority for including a significant number of AFOs in the permit program beyond those that now have permits. This will mean that many smaller AFOs will be regulated as CAFOs. NCBA concurs with the EPA/USDA's conclusion that many AFOs are currently taking voluntary action in good faith to manage manure and wastewater in accordance with a nutrient management plan. NCBA supports the incentive that small AFOs that have a discharge will be offered an opportunity to address the cause of the discharge before the agency considers their designation as a CAFO.

NCBA believes that the good faith incentives offered small AFOs should be provided to all operations. Thus, all operations should be offered an opportunity to address management problems or the cause of any discharge before the agency considers their designation as a CAFO.

STRATEGIC ISSUES

Strategic Issue #1. The development and certification of CNMPs will be a very important and time-consuming process. NCBA would encourage USDA/EPA to examine programs that would put NRCS and feedlot operators together to serve as partners in certifying programs. This would provide the technical knowledge of NRCS with the practical knowledge of operators. NCBA feels that the feedlot operators, state and national associations need to play a role in this certification process along with USDA/NRCS.

We are concerned the Strategy has adopted nutrient management planning goals that are entirely inconsistent with the private sector technical assistance delivery

system's ability to support the planning effort. It is impossible for the combined efforts of the existing and anticipated public and private sector delivery system to prepare good quality, effective nutrient management plans for more than 300,000 operations by 2008. The Strategy must be changed in this regard, and we stand ready to work with you to identify voluntary nutrient management planning goals or develop a process that will accelerate training and education efforts that are truly consistent with the public-private delivery system's anticipated capacity to provide quality technical assistance.

If EPA and USDA ignore the fact that they have overestimated the technical assistance delivery system's ability to meet this demand, inadequate or poor quality plans will be prepared, and the credibility of the newly created private system will be greatly injured. As noted in the Strategy, there is an extensive and growing network of more than 12,000 private and certified crop advisors and crop consultants who provide technical assistance services today. There is no question that this private component of the technical assistance delivery system will only grow in future importance to the country's efforts to support conservation activities in agriculture. But the future of the private sector system will be jeopardized if it is asked to handle the workload and timeframe laid out in the Strategy.

Strategic Issue #2. USDA, EPA and the various stakeholders need to expand the voluntary incentives provided in this Strategy. NCBA agrees that the individual owners and operators have a duty to control the potential release of pollutants. However, NCBA does not think EPA has the authority to regulate "companies and industries" feed lot operators are involved with, in order to minimize the release of pollutants. Feed lot operators should not be the legal connection to regulate or place voluntary pressure on industries or businesses otherwise not regulated under the Clean Water Act.

NCBA looks forward to developing voluntary programs and working closely with USDA and EPA to establish incentive programs. These ideas and programs will demand adequate and long-term financial incentives that apply equally to feed lot operators. NCBA does not feel existing programs will suffice in accomplishing the lofty goals of developing and implementing CNMPs for all AFOs by 2008. Flexibility will be needed in determining who is certified to develop CNMPs. Thus, NCBA welcomes working with USDA and EPA in developing new programs.

Strategic Issue #3. Starting in the spring of 1999 in Round I of a two phased permitting program, EPA proposes to work with NPDES-authorized States to use Best Professional Judgment (BPJ) to issue Statewide general NPDES permits to cover all CAFOs with greater than 1000 animal units (A.U.s) and CAFOs with between 300 and 1000 A.U.s that have unacceptable conditions. This is consistent with existing Region 6 general permit policy. However, the Strategy also proposes that individual NPDES permits be issued for exceptionally large facilities, new or expanding operations or operations with a history of discharges. No definition of "exceptionally large" was given. NCBA strongly disagrees with this arbitrary discrimination, for a large part of the cattle feeding industry has successfully operated for many years under general permits. Roughly 33 percent of the U.S. cattle feeding industry is located in EPA's Region 6, and the general permits have worked well. Now is not the time to undertake the expense and lost time needed to develop and approve individual permits for existing "large" facilities. We urge EPA to rethink this part of the plan.

Similarly, in Round I, EPA proposes to work with States to develop watershed general permits for selected watersheds not meeting clean water goals due to aggregate water quality impacts from AFOs on a watershed scale. The draft Strategy suggests that EPA may regulate AFOs that, as a group, may cause or contribute to watershed impairment. Under this scenario, an AFO making even minor pollutant contributions could be regulated if it is located in a watershed impaired from the cumulative impacts of many sources. NCBA is troubled by this proposed action. Current EPA regulations only give the Agency the authority to regulate AFOs as CAFOs if three specific conditions are met: (1) the AFO is individually a significant contributor of pollution to waters of the U.S.; (2) the AFO discharges through a manmade system, and (3) the waters into which the pollutants are discharged originate outside of the facility. Furthermore, a determination that these conditions are met must be made on a site-specific basis through an onsite inspection. NCBA believes that EPA lacks the authority to convert such a case-by-case consideration of individual AFOs to one based on cumulative impacts of numerous AFOs and CAFOs on the watershed. NCBA would request EPA to define what it considers to be a significant contributor.

In Round II of the two phased permitting program (about 2005), EPA proposes to incorporate newly developed effluent limitations guidelines (ELG) and nutrient criteria into NPDES permits. ELG development is underway now, and NCBA is

working to facilitate EPA's understanding of the industry, collection of data, visits to representative facilities. EPA expects that revisions to the effluent guidelines will, among other things, evaluate options for regulating dry manure handling systems and be closely coordinated with any changes to the NPDES permitting regulations. NCBA is concerned that attempts to strictly link offsite land application practices of third parties to beef feedlot operators' NPDES permits will destroy the market for dry manure. Today farmers and others purchase manure and spread it on their crops as an important nutrient alternative to commercial fertilizer. Their willingness to do so will change if excessive record keeping and restrictions are placed on their actions. NCBA is concerned with the fact that if land application were pulled into the NPDES permitting system we would see an abusive use of citizen suits, many of which would be frivolous and costly.

EPA will revise the NPDES permit program regulations regarding CAFOs: The Strategy states that by 2001, EPA intends to revise existing permitting regulations to clarify expectations and requirements for CAFOs as well as to reflect the changes in the industry. EPA also intends for the new livestock ELGs to be wholly consistent with these permit regulations. NCBA is working closely with EPA in the new livestock ELGs. Some of the key permitting issues that EPA intends to consider during this process are cause for concern by NCBA. They include:

(a). requirements for effective management of manure and wastewater from CAFOs whether they are handled onsite or offsite. NCBA urges EPA and USDA to cooperate with states to find nonregulatory methods to encourage the proper offsite management of manure. Corporate producers cannot be directly responsible for the actions of third-party manure applicators;

(b). exploring alternative ways of defining CAFOs, including reducing the animal thresholds involved. NCBA asks EPA to carefully consider numerous factors when analyzing the definition of CAFOs. The size of a feedlot is not the sole risk factor and thus should not be the sole determining factor in placing an operation in a regulatory program. The current definition is successful in separating feeding operations from grazing operations and this is important. To accomplish this, 40 CFR 122.23(b)(ii) that discusses the lack of crops, vegetation forage growth or post-harvest residues as a condition for CAFOs, must remain part of this definition. This is an area that species differentiation must also come into consideration. The economic burden the regulatory program places on the small operator is immense and would have a damaging effect on the cattle industry if all the factors above were not carefully considered. As stated above, this definition determination should be left to those rewriting of the ELG.

(c) providing for expedited designation of smaller AFOs in watersheds identified for watershed general permits. NCBA reminds EPA that designation of smaller AFOs as CAFOs must occur on an individual basis, following onsite evaluation of potential adverse environmental effects. Many operations located in watersheds identified for watershed general permits will not be contributing to the problem, and any onsite evaluation will likely reveal this.

(d) removing the exemption from permitting for AFOs that only discharge during a 25-yr, 24-hr storm. The agencies assume in the Strategy that all CAFOs will discharge sometime, regardless of their design and skill of management. Thus they wish that all CAFOs (by definition or designation) be required to operate under an NPDES permit. They argue that the permit provides a shield in the event a rare 25-year, 24-hour storm occurs. Current law provides the incentive for operations to construct facilities of sufficient capacity and in geographic locations which make a discharge highly unlikely. NCBA is concerned that EPA not remove the 25-year, 24-hour storm design criteria or known as the "Acts of God" safety net.

Strategic Issue #4. The Strategy calls for a coordinated research, technical innovation, compliance assistance, and technology transfer relative to the environmental management of AFOs. USDA and EPA, together with other Federal partners, will establish coordinated research, technical innovation, and technology transfer activities, and compliance assistance, and establish a single point information center. NCBA fully supports this coordinated effort by USDA and EPA. Many times the problem with research is not the lack of, but the inability to locate the information. This will not only be helpful to the industry but to the various government agencies that are seeking information. However, there must be full cooperation from all parties, otherwise the gaps are merely smaller in size.

Strategic Issue #5. The cattle industry has been a leader in the livestock industry for over a century. We have been stewards of the land prior to the development of most other industries and regulatory bodies. This Strategy needs to reflect that history if it is going to be a representation of the livestock industries past and future. NCBA has long history of working closely with state and Federal Government officials. . Currently, NCBA is helping EPA with the ELG guidelines and will continue

to provide them with information and data. Other livestock species have entered into a "Dialogue" for a host of reasons that are not present in the cattle industry. NCBA has been and will continue to participate in the process and welcomes the leadership role. Our members pride themselves as stewards of the land and have pioneered much of the voluntary environmental practices that exist today.

Strategic Issue #6. The USDA has a long history of collecting data, providing technical support, and establishing voluntary programs with the livestock industry. This government/industry relationship depends on a high level of trust. In order for the voluntary programs, outlined in this Strategy, to be successful some form of "firewall" between the voluntary and regulatory programs must exist.

Strategic Issue #7. The Strategy outlines performance measures to gauge the success in implementing this Strategy. NCBA would welcome the opportunity to work with USDA and EPA in determining those performance measures. NCBA feels the cattle industry has a history of environmental stewardship and should be involved with determining the performance measures for the cattle industry.

ROLES

The Strategy calls for the involvement of a number of groups and individuals to play key roles in order to successfully carry out this Strategy. NCBA agrees with this statement, however we are concerned with some language in this section because in many cases it does not separate voluntary and regulatory roles. The line between the voluntary or regulatory program needs to be very clear. NCBA is very concerned with the section on environmental groups where it states: "Environmental groups can provide "onsite" reports about specific environmental quality concerns and can educate its members, the general public, the agricultural community and the media. . . . " The Clean Water Act does not grant jurisdiction to environmental groups to do any type of onsite reporting on private property owner's land. This has the potential to open a host of legal issues ranging from forming a private attorney generals provision to trespass on private property.

We appreciate the opportunity to comment on the Draft Unified National Strategy for Animal Feeding Operations. As an industry, we support the goal of minimizing water quality and public impacts from AFOs. We hope that the EPA and USDA will take our comments under careful consideration.

Sincerely,

JIM MCADAMS, CHAIR,
Property Rights & Environmental Management Committee,
National Cattlemen's Beef Association.

U.S. SENATE,
February 18, 1999.

The HONORABLE DAN GLICKMAN, SECRETARY,
U.S. Department of Agriculture,
14th Street and Independence Avenue,
Washington, DC 20250.

DEAR SECRETARY GLICKMAN: It is our understanding that the final proposal for the USDA/EPA Unified National Strategy for Animal Feeding Operations will be released on Friday, February 19. Mr. Secretary, U.S. producers have always taken a leading role in pursuing and implementing environmentally sound conservation and water quality practices. At a time of continued low prices in the livestock sector, we believe that many of the proposals contained in the draft strategy will place unnecessary and costly regulations on U.S. livestock producers.

Producers have expressed serious concerns to us, and we urge your careful consideration of the these issues, including the following:

Definition of CAFO and AFO. We urge EPA/USDA to withhold changes to these definitions without first providing for a formal public comment period.

Comprehensive Nutrient Management Plans. As you know, many variables go into feed management. We ask that you provide producers with the proper flexibility to adjust to these variables when designating permit requirements.

Land Application. We urge that land application of manure not be pushed into the National Pollutant Discharge Elimination System (NPDES) permitting process. Such an action could destroy many environmentally beneficial systems that are already in place.

Record Keeping. We urge that any plan adapted take into account any reporting requirements already in place in order to avoid duplicative and costly paperwork requirements.

NPDES permits. We are concerned with any proposal to issue individual permits on arbitrarily determined size qualifications that have no basis in sound, scientifically proven data.

Limited Resources. Based upon the Administration's most recent budget request, it does not appear that adequate finding will be available to meet implementation guidelines outlined in the draft strategy. We assume a plan exists for implementing the strategy if inadequate financial and personnel resources exist.

We agree that water quality is an important issue that must be addressed. However, agricultural producers have taken a leading role in this process through regulatory programs and more importantly their own voluntary improvements and the assistance of state programs that promote a cooperative approach to this issue. Any strategy put forward should buildupon the existing voluntary, incentive based system in which producers, state arid local government, and the Federal Government work together on environmental quality issues. Command and control polices with the heavy hand of government intervention are counter-productive and will riot have the desired effect that occurs when producers and government of finials work together to address these issues.

As you move forward to develop a final strategy, we urge you to carefully consider the effect any final decision will have on our livestock producers. We look forward to working with you to ensure that producer interests are given a fair voice in this process.

Sincerely,

PAT ROBERTS,
U.S. Senate.

SAM BROWNBACK,
U.S. Senate.

BEN NIGHTHORSE CAMPBELL,
U.S. Senate.

CHUCK HAGEL,
U.S. Senate.

PAUL D. COVERDELL,
U.S. Senate.

WAYNE ALLARD,
U.S. Senate.

LARRY E. CRAIG,
U.S. Senate.

JAMES INHOFE,
U.S. Senate.

KAY BAILEY HUTCHISON,
U.S. Senate.

U.S. HOUSE OF REPRESENTATIVES,
March 18, 1999,

The HONORABLE AL GORE,
Vice President of the United States,
White House,
Washington DC 20505.

DEAR MR. VICE PRESIDENT: We are writing in regard to your announcement of the Unified National Strategy for Animal Feeding Operations (the Strategy). We will continue to scrutinize this very closely.

You are undoubtedly aware of the long-term hardship endured by most livestock producers due to low market prices. In the short term, the situation has been particularly acute for pork producers, as evidenced by your announcement of $50 million in direct payments during your recent trip through Iowa. During a February 10, 1999 hearing before the House Agriculture Committee regarding livestock prices, witnesses testified that regulatory burdens, whether its food safety, environmental protection, or price reporting, add costs to doing business. As price takers in livestock markets, producers are unable to transfer these costs and must bear them entirely. Furthermore, costs added elsewhere are typically shifted back to producers. In all cases, we need to thoroughly understand these costs and who will pay them.

We believe strongly that the American livestock industry wants to ensure that any future environmental degradation is prevented from resulting from their operations and that any past degradation is mitigated as quickly and efficiently as possible. However, we know that most livestock operations do not have the financial resources available to comply with burdensome requirements. Further, taxpayers should not and will not tolerate unnecessary expenditures of government money devoted to environmental efforts that are not efficient and are not truly based on legitimate need and sound science.

We are very interested in the effect that this Strategy will have on livestock operations, as well as EPA and USDA workload and activities. We realize that you have indicated that this Strategy will be based on voluntary incentives and that the Administration's budget includes a request for additional resources devoted to the Environmental Quality Incentives Program (EQUIP). Is the Administration contending

that this funding is paid for in your budget? Many of the Administration's proposals for increases in agriculture expenditures are intended to be offset by the imposition of several user fees. We consider this proposal unrealistic and will oppose it If these user fees were to be unposed it would result in new spending for Administration initiatives as this "Strategy" being shifted to the private sector. Therefore, private industry would be indirectly forced to fiend such new spending. Congress has consistently rejected this proposal for several years now and we would expect the same rejection this year.

The Clinton Administration and some in Congress have said several times that any new spending that is not offset by cuts in existing programs in effect would come from funds needed for Social Security. We see no evidence of corresponding reductions in the budget of the EPA to pay for these increased voluntary incentive programs to meet these environmental goals. Without the costs of these programs being imposed on the Agriculture industry through the imposition of user fees how are you proposing to pay for these additional costs?

Please provide to the Committee on Agriculture a detailed breakdown of how the Administration intends to monitor and implement the voluntary and regulatory program described in this announcement. Please also provide to the Committee a description of how much of the finding for these programs will come from the budget of the EPA and how much from the budget of the USDA and where corresponding reductions in the budgets of either of the two agencies would be recommended.

Further, we strongly believe that the costs of any program that is mandated by the EPA should be paid for by reductions in the EPA's budget and should not come at the expense of any current programs under the budget of the Agriculture Department. Implementation of these voluntary incentive programs refeed to in the Strategy would require Finding for assistance directly to livestock operations as well as to cover He administrative costs of the increased workload of their administration. Can you assure us that these costs will be paid for from He EPA's budget? If not, would you support delaying any action that would affect livestock operations or agency workloads until such finding is provided?

We look forward to your response.

Sincerely,

LARRY COMBEST, *Chairman,*
House Committee on Agriculture.

RICHARD K. ARMEY, MAJORITY LEADER,
U.S. House of Representatives.

JOE SKEEN, CHAIRMAN,
Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies.

LARRY COMBEST,
Member of Congress.

JOE SKEEN,
Member of Congress.

JOHN BOEHNER,
Member of Congress.

NICK SMITH,
Member of Congress.

SAXBY CHAMBLISS,
Member of Congress.

HELEN CHENOWETH,
Member of Congress.

GIL GUTKNECHT,
Member of Congress.

DOUG OSE,
Member of Congress.

ERNIE FLETCHER,
Member of Congress.

MIKE SIMPSON,
Member of Congress.

BILL BARRETT,
Member of Congress.

JO ANNE EMERSON,
Member of Congress.

GEORGE NETHERCUTT,
Member of Congress.

JOHN HOSTETTLER,
Member of Congress.

WES WATKINS,
Member of Congress.

DOC HASTINGS,
Member of Congress.

DAN BURTON,
Member of Congress.

KEVIN BRADY,
Member of Congress.

ROBERT ATERHOLT,
Member of Congress.

JIM NUSSLE,
Member of Congress.

ED WHITFIELD,
Member of Congress.

RON LEWIS,
Member of Congress.

RON PAUL,
Member of Congress.

TOM LATHAM,
Member of Congress.

RICHARD BAKER,
Member of Congress.

ROBIN HAYES,
Member of Congress.

WALLY HERGER,
Member of Congress.

RICHARD ARMEY,
Member of Congress.

JOHN COOKSEY,
Member of Congress.

JERRY MORAN,
Member of Congress.

GREG WALDEN,
Member of Congress.

RICHARD POMBO,
Member of Congress.

BOB RILEY,
Member of Congress.

BOB GOODLATTE,
Member of Congress.

JOHN SWEENEY,
Member of Congress.

RAY LAHOOD,
Member of Congress.

JOHN THUNE,
Member of Congress.

HENRY BONILLA,
Member of Congress.

JOHN DOOLITTLE,
Member of Congress.

BILL JENKINS,
Member of Congress.

MARK GREEN,
Member of Congress.

PETE SESSIONS,
Member of Congress.

BILL THOMAS,
Member of Congress.

ASA HUTCHINSON,
Member of Congress.

GREG GANSKE,
Member of Congress.

ROY BLUNT,
Member of Congress.

CHARIES TAYLOR,
Member of Congress.

STEVE BUYER,
Member of Congress.

BOB SCHAFFER,
Member of Congress.

CHIP PICKERING,
Member of Congress.

MAC THORNBERRY,
Member of Congress.

GEORGE RADONOVICH,

U.S. HOUSE OF REPRESENTATIVES,
April 16, 1999.

The HONORABLE ALBERT GORE,
Vice President of the United States,
White House,
Washington, DC 20500.

DEAR MR. VICE PRESIDENT: We are writing in response to your recent announcement of the final USDA/EPA Unified National Strategy for Animal Feeding Operations. While we appreciate the Strategy's recognition of Me many practices farmers and ranchers have employed to improve our nation's water quality, we do have some concerns about the Strategy itself.

We know the Administration is aware of the significant hardships being endured by most livestock producers as a result of current low prices. Given this financial stress, we are concerned that some provisions in the Strategy will create art additional financial burden on our already struggling farmers and ranchers. Additional resources for financial assistance through the Environmental Quality Incentives Program (EQIP), as proposed in the President's budget, would help to address some of this need. However, it is presently unclear how you propose to make the necessary offsetting reductions in spending to accommodate this increase. Given past Congressional actions, the Administration's current proposal to fund increases in agricultural expenditures through new user fees is unrealistic.

We are also very conceded that the accelerated permitting of Confined Animal Feeding Operations (CAFOs), described in the Strategy and the development of Comprehensive Nutrient Management Plans (CNMPs) for all AFOs, will result in dramatically increased workloads for state agencies and USDA field staff. Many of

the livestock producers targeted by the Strategy will look to USDA's Natural Resources Conservation Service (ARCS) for assistance in writing CNMPs. Even with assistance from private sector consultants, this EPA policy change will create a tremendous cost-burden for USDA, as well as for producers. In fact, to date neither USDA nor EPA has been able to provide us with requested information on the workload specifics of the Strategy or the potential financial impacts on livestock operators.

We see no way for ARCS to keep up with other ongoing conservation work, while also trying to meet He increased workload that the Strategy will create. On the one hand, this Strategy calls for an increased level of technical assistance to meet the implementation schedule. On the other hand. your budget officials have called for an overall reduction in ARCS staff in the fiscal year 2000 budget. They mint say that conservation operation funds are increased in the President's budget, but on closer examination it becomes clear that you've actually proposed a level below fiscal year 1998 figures.

In attempting to meet your goals under the AFO Strategy, the current proposal seems destined to produce a crisis while causing other important conservation work to fall behind. We would like to know how you intend to provide additional resources to USDA to accomplish all of the tasks assigned to them regarding natural resource conservation.

We look forward to your response and to working with you to maintain and enhance ongoing efforts by our farmers and ranchers to protect and improve U.S. water quality.

Sincerely,

CHARLES W. STENHOLM,
Member of Congress.

JOHN S. TANNER,
Member of Congress.

RONNIE SHOWS,
Member of Congress.

JAMES A. BARCIA,
Member of Congress.

IKE SKELTON,
Member of Congress.

KAREN L. THURMAN,
Member of Congress.

MARTIN FROST,
Member of Congress.

BART GORDON,
Member of Congress.

DAVID D. PHELPS,
Member of Congress.

COLLIN C. PETERSON,
Member of Congress.

EVA C. CLAYTON,
Member of Congress.

VIRGIL H. GOODE,
Member of Congress.

PAT DANNER,
Member of Congress.

TED STRICKLAND,
Member of Congress.

LEONARD L. BOSWELL,
Member of Congress.

CALVIN M. COOLEY,
Member of Congress.

SANFORD D. BISHOP,
Member of Congress.

CHRISOPHER JOHN,
Member of Congress.

CIRO D. RODRIQUEZ,
Member of Congress.

BENNIE G. THOMPSON,
Member of Congress.

MAX SANDLIN,
Member of Congress.

MIKE THOMPSON,
Member of Congress.

JIM TURNER,
Member of Congress.

RESPONSES BY ROSS WILSON TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. You acknowledge that implementation of the zero discharge standard has not been totally consistent from State to State. Should CAFOs be subject to the requirements of the strategy in watersheds where agriculture is established to be a major contributor to water pollutions

Response. Senator Chafee, the Clean Water Act as it applies to the cattle industry, has not been applied consistently from State to State for some of the following reasons: State priorities, lack of funding, limited staff resources, lack of knowledge of the industry and the variations in State laws. Texas, Kansas and Nebraska, which amount for nearly 70 percent of all the beef cattle currently being fed, have State programs that in some cases are much more stringent than the Federal pro-

gram. It is TCFA's position that CAFOs should be subject to the effluent limitation guidelines (ELG) established by current regulations which require retention of all process generated waste water plus all runoff from a 25-year, 2-hour storm. A discharge is permitted only when rainfall from a chronic or catastrophic stone exceeds this standard. However, if a CAFO can prove that it will not discharge into the waters of the United States, it should not be permitted because there is no jurisdiction under the Clean Water Act. Individual CAFOs should be held accountable for impairment caused by the identified CAFOs not other sources of agricultural or non-agricultural impairment. Much of the data collected to date is nutrient specific but not source specific. We do take exception to EPA arbitrarily designating all AFOs in an impaired watershed as CAFOs without any site-specific determination of contribution to that impairment.

Question 2. One of your concerns is that EPA will classify operations under 1000 Animal Units as CAFOs because they are located in an impaired watershed. What type of evidence would you require to prove an operation is a source of impairment?

Response. EPA or State regulators should use current monitoring data, recorded discharge occurrences, on-site inspections and sound scientific determinations of the source of the pollutants prior to making the determination that an AFO should be regulated as a CAFO. EPA should not make arbitrary determinations on data that is incomplete and lacking in credibility.

Question 3. What action should EPA take if they can establish that a water body is being impaired by agriculture, but they lack the resources to conduct site-by-site inspections of every operation?

Response. The cattle producer is only one aspect of agriculture and only one of many possible contributors of nutrients. There are the numerous urban contributors and other agricultural operators that may be contributing to the impairment It would not only be unfair but economically devastating and an arbitrary and capricious decision by EPA to place a cattle rancher into the regulatory arena with no evidence of site-specific impairment because they lack the resources to make the determination. Our laws were written on the premise that we are innocent until proven guilty and this type of action would fly in the face of this premise which our legal system is based upon. EPA should not be given the authority to shift the burden of proof due to lack of resources. EPA would need to focus their resources and prioritize their inspections on a logical determination such as proximity of the operation to the waterbody. EPA could work with State and local officials to screen operations. Other groups which can assist with inspection activities might include soil and water conservation districts, producer groups with trained personnel or qualified consultants.

Question 4. You state that regulating the land application of manure would place manure fertilizer at a competitive disadvantage compared to commercial fertilizer. How many operations purchase off site manure for land application?

Response. TCFA has information on the number of feedyards which sell manure as fertilizer but not how many farmer customers purchase manure from each feedyard. Virtually all TCFA member feedyards in Texas, Oklahoma and New Mexico (210 feedyards) which marketed over seven million head of cattle in 1998 (30 percent of the Nation's fed cattle supply) market their manure as fertilizer to farmers. This would also be true of cable feeders in many pads of Kansas, Colorado and Western Nebraska.

Question 5. What is the market price difference between manure and chemical fertilizer?

Response. Fertilizer market price is variable based on geographic location, fertilizer form, and nutrient composition. Nitrogen and phosphorus and the two primary nutrients purchased by farmers. At current market prices, it would cost about $50/acre to apply either manure or chemical fertilizer for application on corn farmland. Manure has other agronomic benefit beyond that of chemical fertilizer, such as organic matter, micronutrients and increased soil water holding capacity. However, any additional regulation of manure would encourage most farmers to trade the secondary benefits of manure for the opportunity to use an unregulated nutrient source—chemical fertilizer.

Question 6. What is your estimate of the revenue generated for cattle operations from the sale of manure?

Response. Most feedyards that sell manure as fertilizer generally sell their manure to a company which provides the service of cleaning pens, then hauling and distributing the manure fertilizer to farmer customers, i.e. a contract manure hauler. Some of these companies also compost the product which increases the total cost

of the end product. Most of the revenue generated in manure removal, hauling and distribution is absorbed by contract manure haulers who have developed both the feedyard and farmer clientele for manure marketing and utilization. On the average, the process of pen cleaning, transporting and distributing the manure results in an end product cost of $5 to $6 per ton to the farmer. A normal application rate of 10 tons per acre (for irrigated corn in the Texas High Plains) results in a cost to the farmer of $50 to $60 per acre for manure fertilizer.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

Farm Bureau and its affiliated State organizations represent the interests of producers of all commodities nationwide. We are committed to improving water quality and share the public's concern about the quality of our water resources. Farmers and ranchers have made great strides in addressing water quality concerns. Today, more than two-thirds of our Nation's waters now meet their designated uses. We believe that market forces, technology, and incentive-based programs such as the Environmental Quality Incentive Program, the Wetland Reserve Program, and the Conservation Reserve Program, have lead to water quality improvements and will, over time, make additional contributions in improved water quality in rural areas. Our bottom line is, that despite commonly held perceptions, water quality trend lines are moving in the right direction, in large part, due to the success of American farmers and ranchers.

When problems and solutions are identified and well-defined, farmers and ranchers have demonstrated a great willingness to solve problems. Over the past decade, agricultural producers have restored millions of acres of wetlands and have achieved an annual net gain in wetland conservation. We have protected over 36 million acres of fragile soils in the Conservation Reserve Program and another 135 million acres of highly erodible soils are protected through the use of conservation plans. Various forms of conservation tillage and crop residue management are used on more than 60 percent of cropland in the country. The conservation revolution that has occurred on farms and ranches across the country is a remarkable accomplishment in a relatively short period of time. Farmers and ranchers have proven that incentive-based partnerships work. We believe that nutrient management can and should be approached in a similar manner.

Farm Bureau is troubled that much of the justification for the administration's Clean Water Action Plan (CWAP) is drawn largely on the EPA's National Water Quality Inventory.[1] This report indicates that agriculture is responsible for over 70 percent of the pollution in our Nation's surface water. A closer look at the numbers in this report indicates that they are deceiving, scientifically indefensible, and result in strong biases against agriculture.

The U.S. Geological Survey in their 1993 scientific assessment of national water-quality trends indicated that the National Water Quality Inventory (State 305(b) reports) is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends. However, the EPA continues to use State 305(b) reports even though they readily admit the use of drive-by assessments and the existence of biased data. The misperceptions continually left by their reports show that there is a national water quality crisis, that inconsistent and inadequate State programs are failures, and that agriculture pollutes 70 percent of the Nation's streams.

Farm Bureau has carefully reviewed EPA's 1990, 1992, 1994 and 1996 National Water Quality Inventories and our analysis shows that what the EPA doesn't tell, and/or glosses over, in their reports is more revealing than the perception EPA tries to leave with the casual observer. In fact, Table 1 shows that EPA has no data for the seven agricultural subcategories in 35 States, tribes, and territories, but still publicizes a total for the number of miles of streams and rivers supposedly impaired by agriculture.

In EPA's report to Congress,[2] it acknowledges that the assessment methods used by the States are terribly lacking. In fact, EPA's report is largely devoid of scientifically defensible data. Despite the original intent, the U.S. Geological Survey scientists in an article in *Environment*,[3] indicated that EPA's National Water Quality Inventory is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends. Farm Bureau is very concerned

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[1] The inventory is a summary of State reports more commonly known as the 305(b) reports. These reports are required every 2 years by section 305(b) of the Clean Water Act.

[2] *National Water Quality Inventory*, 1992, Report to Congress, Chapter 1, pages 6–7.

[3] *Environment*, Vol. 35, Number 1, January/February, 1993, pages 19–20.

that if the data used to develop the Inventory is so severely flawed and unscientific that it can not be trusted, policy makers likewise should reserve policy decisions based on such faulty technical information.

Unfortunately, as with many issues, perception and reality often tend to reach different conclusions. Despite the misperceptions, all indications are that surface water quality is improving and the trend will more than likely continue in that direction for some time. (See Attachment #1—Summary—Trends in Stream Water quality in the United States.[4])

Recently, both livestock and crop farmers have come under attack for supposedly contributing excessive amounts of nutrients to the Nation's streams and rivers. If nutrients from agriculture were contaminating our rivers and streams on a large scale and doing so in increasing amount and frequency then it would be reasonable to expect that the nutrients would be showing up in increasing amounts at the mouth of the Mississippi River. However, since 1983, the nitrate trend in the Mississippi River has been just the opposite. In fact, the total mass of nitrate-nitrogen delivered to the Gulf has been decreasing.

The decline in nitrate cannot be attributed to publicly owned treatment works (POTWs), precipitation or wildlife populations. POTWs are serving an increasing population but, with few exceptions, have no restrictions or requirements for treating or reducing nitrate. Those that are required to treat ammonia simply convert it to nitrate and discharge it. Overall, the nitrate contained in precipitation (atmospheric deposition) should have stayed the same or increased since the average amount of precipitation has increased.[5] Wildlife populations have increased also, so their output of nitrogen has increased. Therefore, since nitrate from these three sources has increased, there must have been a clear decrease in one or more of the other four major potential sources of nitrate, i.e., nutrients from manure, oxidation of the soil's natural organic matter, nitrogen from legume crops and/or nitrogen fertilizer.

Since the POTWs, precipitation, and wildlife are increasing their output of nitrogen to the streams, that means that farmers are the only ones that have done anything at all to reduce the amount of nitrate flowing into the Gulf of Mexico. Farmers have learned to do things better, faster, cheaper and more efficiently compared to the way they did things in the 1960s and 1970s. All of this reduction occurred as a result of incentive programs and market forces rather than rigid compliance with Federal permits.

There are three distinct periods of nitrate-nitrogen flux entering the Gulf of Mexico from the Mississippi River since 1955. The first period is for 12 years, from 1955 to 1966. Loadings ranged from 0.44 to 0.18 million metric tons per year. Interestingly, the trend for that period was headed down, see Figure 1.[6] Each year during this first decade, the nitrate-nitrogen levels decreased by an average of 17 thousand metric tons (this is the slope of the trend line).

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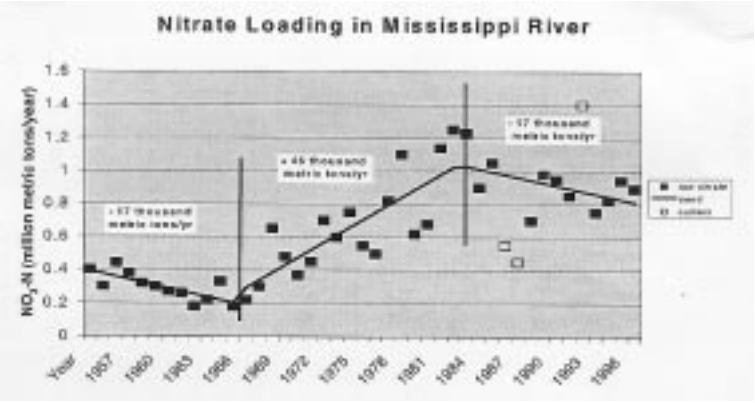
[4] "Stream Water Quality in the Conterminous United States—Status and Trends of Selected Indicators During the 1980s," by Richard A. Smith, Richard B. Alexander, and Kenneth J. Lanfear, U.S. Geological Survey, 1993.

[5] Williams, J., M. Nearing, A. Nicks, E. Skidmore, C. Valentin, K. King, and R. Savabi. Using soil erosion models for global change studies. Journal of Soil and Water Conservation, 51 (4): 381–385.

[6] This trend line utilizes indicator variables to reference the three time periods and has a coefficient of determination, or r^2, of 0.82. The closer the r^2 is to 1.0, the greater the relationship between the independent variable (years) and dependent variable (nitrate loadings).



However, things changed in the mid-1960s and the nitrate-nitrogen loadings, while varying from year to year, increased steadily and dramatically to about 1.25 million metric tons per year by 1983.[7] During this 17-year period, nitrate-nitrogen loadings increased annually, on average, by 46 thousand metric tons (slope of the line).

Almost as suddenly as conditions had changed in 1966, the situation changed again in 1984. Scientifically-monitored data from U.S. Geological Survey indicates that nitrate-nitrogen loadings have fallen dramatically. In other words, except for the flood of 1993, the trend has been downward since 1984 (the slope returns back down to an annual decrease of 17 thousand metric tons each year)[8]. This data indicate nitrate-nitrogen loading began to decrease more than 15 years ago and appears to indicate that there is not a nitrate crisis in the Mississippi River.

So what happened? At least three major factors converged in the early 1980s and began to play themselves out together:

1. The farm economy was very volatile. Many farmers overextended their land holdings during the high interest rates of the 1970s as they planted to meet the growing demands of a world market. Then an embargo was placed onto grain exports to Russia. Meanwhile, energy prices escalated rapidly and increased the cost of fertilizer causing farmers to pay closer attention to the amount of nitrogen fertilizer they applied. Farm debt load was high, grain crops were in surplus and prices were low. Variable expenditures, such as fertilizer, were one of the few things that farmers could control and they watched these expenses carefully. Nitrogen fertilizer use leveled off at 10 to 12 million tons per year and has stayed around that level ever since.

2. Corn researchers continued to produce hybrids that increased yield and increased their ability to use nitrogen fertilizer. In fact, on a 5-year rolling average, the number of pounds of nitrogen fertilizer applied to grow a bushel of corn has declined 22 percent from a high of 1.31 lbs. N/bushel produced in 1984, down to 1.02 lbs. N/bushel in 1998.[9]

3. In the late 1980s, research produced a new late spring soil nitrogen test and began to show when farmers need not apply additional fertilizer and to what degree to apply it if it was needed. This test has received widespread use in Iowa.[10] The results of using the test may be beginning to show up as a part of the downward trend in the concentration of total nitrogen in the Iowa River. This finding was part of a recent report published by the U.S. Geological Survey which analyzed 20 years of river data from 1974–1994.[11]

Farm Bureau believes these examples exemplify market-based approaches and financial incentives which provide the proper foundation.

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[7] Source: U.S.G.S.

[8] For this period, the drought years of 1987 and 1988 were treated as extreme events as was the flood year of 1993. These three data points were treated as outliers.

[9] Sources: Phosphate and Potash Institute, and USDA.

[10] Iowa State University. Nitrogen fertilizer recommendations for corn in Iowa. Pm–1714, May 1997.

[11] Lurry, D.L. and D.D. Dunn. Trends in nutrient concentration and load for streams in the Mississippi River Basin, 1974–1994. U.S. Geological Survey. Water Resources Investigations Report 97–4223.

In conclusion, there is growing awareness that cooperative approaches are likely to be more effective in producing further gains in environmental compliance and improvements. "Quite simply, it is more effective to prevent pollution than to punish violations after they occur, to harness market forces rather than to rely solely on command-and-control directives, and to respond affirmatively to firms that seek partnerships to advance environmental priorities in harmony with economic activity."[12]

It is critical that adequate Federal resources be allocated to address remaining water quality challenges. Collectively, we have spent over $100 billion over 26 years in dealing primarily with urban point sources of pollution, which, by all accounts, have only achieved a 35 percent reduction in total nitrogen discharges from POTWs. As priority now shifts to nonpoint sources, resources should shift as well. The State Revolving Loan Fund should be retargeted to rural areas and additional funding should be allocated to better water quality monitoring, technical assistance and cost-share programs rather than new regulatory programs at the Federal level that compete for already scarce dollars.

STRATEGY FOR ANIMAL FEEDING OPERATIONS

EPA and USDA–NRCS have issued their *Unified National Strategy for Animal Feeding Operations*. This strategy would expand permit-based regulation to an increased number of livestock farms and would also require them to prepare and implement nutrient management plans. This strategy also encourages all farms with livestock to engage in a voluntary nutrient management program with cost assistance. The strategy targets for regulation those concentrated animal feeding operations (CAFOs) that have not yet been regulated, other livestock farms that do not comply with best management practices for water quality and farms that are located in "sensitive" watersheds. These last two criteria can be used to increase the number of livestock facilities being designated as CAFOs and subject to a permit, by including farms that have fewer than the CAFO definition of 1,000 "animal units" on a farm.

Comments submitted by AFBF express farmer concerns about the increased scope of regulatory authority, the expansion of permit-based regulation, and the adequacy of the water quality data. The voluntary, incentive-based portion of the strategy recognizes the needs of agricultural businesses and can work to protect and improve water quality if properly funded. The financial burden on farmers to develop and implement nutrient management planning, whether required or voluntary, is a major limiting factor. At this time of low commodity prices farmers are unable to invest in capital-intensive water quality protection. Enhanced Federal and State resources are necessary for NRCS staffing and for cost-share assistance to farmers. The strategy's approach for expanding regulation over a greater number of farms makes accurate water quality data a crucial concern to farmers across the country.

Our comments to EPA and USDA on the *Strategy* and to EPA on the Region 6 general permits are attached.

What is needed are additional resources better targeted to impaired watersheds and directed at on-the-ground activities and practices that will result in further water quality improvements. Agricultural research, technical assistance and conservation initiatives are keys to continued agricultural abundance. We look forward to working with members of this committee to develop the concepts and framework needed to achieve balanced resource conservation.

ATTACHMENT 1

SUMMARY

TRENDS IN STREAM WATER QUALITY IN THE U.S.

The United States Geological Survey, in a study, *Trends in Stream Water Quality in U.S.*,[1] has found that traditional indicators provide evidence of improvement in stream water quality during the decade of the 1980s, when the economy and popu-

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[12] Reinventing EPA Enforcement, Theodore L. Garrett, Natural Resources and Environment, American Bar Association.

[1] "Stream Water Quality in the Conterminous United States—Status and Trends of Selected Indicators During the 1980s," by Richard A. Smith, Richard B. Alexander, and Kenneth J. Lanfear, U.S. Geological Survey, 1993.

lation showed significant growth. The scientific assessment of national water quality from 1980 to 1989 by USGS indicates:

- The National Water Quality Inventory (State 305(b) reports) is severely flawed and scientifically invalid. EPA's inventory cannot be used to summarize water quality conditions and trends.
- Dissolved-oxygen concentrations changed little from 1980 to 1989, but streams in urban areas showed slight improvement in dissolved-oxygen conditions, possibly reflecting improvements in point-source controls. Among the four land-use types (agriculture, forest, range and urban) the average concentration of dissolved oxygen were lowest at stations in urban areas.
- Nitrate concentrations and yields remained nearly constant nationally, but they declined in a number of streams draining agricultural areas where nitrate levels have been historically high.
- Total-phosphorus decreased slightly in all land-use classes. Decreases in total-phosphorus yield were greatest in the agricultural and range land-use areas.
- Suspended-sediment concentrations and yields decreased slightly in most of the country, and the quantity of suspended sediment transported to coastal segments decreased or remained the same in all but the North Atlantic region. The steepest declines occurred in areas dominated by range and agricultural land.
- Concentrations of the toxic elements arsenic, cadmium, and lead and the organic compounds chlordane, dieldrin, DDT, toxaphene, and total PCB's all declined significantly.
- Trends suggest that control of point and non-point sources of fecal coliform bacteria improved over the course of the decade.
- Downward trends of dissolved solids were especially common in the central part of the country, the Pacific Northwest, and far southwestern United States, whereas upward trends were most common in drainage to the Gulf of Mexico and Atlantic Ocean.

Table 1. Agricultural Sources of Pollution in Surveyed Rivers and Streams, 1996 **

State, Tribe, Territory, or Commission	Total Miles Surveyed	Percent of Impaired Miles "Evaluated"	River Miles Impaired by Agriculture	Nonirrigated Crops Miles	Irrigated Crops Miles	Range land Miles	Pasture land Miles	Feedlots Miles	Animal Operations Miles	Animal Holding Areas Miles		Sum of Miles in the 7 Sub-categories
Other	1,586	na	512	na	na	na	na	na	na	na		0
New York	52,337	?	2,724	-	-	-	-	-	-	-		0
Delaware	735	?	-	-	-	-	-	-	-	-		0
Alaska		-	Not File Report	-	-	-	-	-	-	-		0
Idaho		-	Not File Report	-	-	-	-	-	-	-		0
Oregon		-	Not File Report	-	-	-	-	-	-	-		0
Vermont	5,283	83%	549	-	-	-	-	-	-	-		0
Colorado	35,112	72%	2,086	-	-	-	-	-	-	-		0
Alabama	14,770	70%	1,818	-	-	-	-	-	-	-		0
Missouri	21,015	68%	7,130	-	-	-	-	-	-	-		0
North Carolina	33,931	44%	3,390	-	-	-	-	-	-	-		0
Kentucky	9,219	43%	1,106	-	-	-	-	-	-	-		0
Massachusetts	1,301	42%	69	-	-	-	-	-	-	-		0
California	15,110	42%	4,091	-	-	-	-	-	-	-		0
Arkansas	8,668	39%	3,275	-	-	-	-	-	-	-		0
Maryland	17,300	37%	1,969	-	-	-	-	-	-	-		0
Iowa	10,139	29%	3,345	-	-	-	-	-	-	-		0
Georgia	8,187	28%	48	-	-	-	-	-	-	-		0
Florida	11,403	25%	2,815	-	-	-	-	-	-	-		0
Pennsylvania	24,462	22%	633	-	-	-	-	-	-	-		0
Indiana	8,364	16%	740	-	-	-	-	-	-	-		0
Utah	6,580	13%	1,031	-	-	-	-	-	-	-		0
Maine	31,672	12%	76	-	-	-	-	-	-	-		0
Connecticut	893	10%	83	-	-	-	-	-	-	-		0
South Dakota	3,584	4%	3,121	-	-	-	-	-	-	-		0
New Jersey	3,815	0%	-	-	-	-	-	-	-	-		0
Puerto Rico	5,385	0%	114	-	-	-	-	-	-	-		0
Texas	14,177	0%	366	-	-	-	-	-	-	-		0
Washington	2,645	0%	1,431	-	-	-	-	-	-	-		0
Mississippi *	39,787	93%	36,840	18,884	16,917	-	786	12,815	-	-		49,512*
Nebraska	8,584	73%	5,400	-	-	-	-	-	-	87		87
Hawaii *a	32	69%	10	2	10	-	10	-	-	2		24*
Montana *	17,822	66%	11,187	1,880	7,251	6,858	916	-	100	171		17,177*
Minnesota *	7,783	64%	3,460	5,676	1,368	-	5,813	-	3,594	4,099		18,557*
Wisconsin	19,888	61%	6,198	808	133	0	1,540	0	0	755		3,347
New Mexico	4,381	59%	3,315	-	-	3,148	-	-	-	-		3,148
Arizona *	5,410	57%	2,205	-	551	1,753	-	-	-	-		2,304*
Wyoming *	6,781	57%	3,842	678	2,547	3,842	1,373	-	189	208		9,240*
Illinois	26,454	55%	11,387	7,218	8	0	1,866	124	-	307		9,643
North Dakota *	11,913	47%	3,814	3,112	23	313	1,142	-	-	-		4,590*
Tennessee *	57,436	24%	6,580	2,609	642	1,094	1,094	-	-	1,132		6,661*
Louisiana	15,623	22%	5,480	1,747	1,207	407	1,260	157	-	100		5,100
Rhode Island	532	19%	80	-	20	-	-	-	7	-		28
New Hampshire	10,881	13%	0	0	0	0	0	0	0	0		0
Kansas *b	19,330	11%	15,828	12,726	5,803	-	-	-	7,794	-		26,327*
Virginia *	31,852	8%	1,757	866	-	-	-	-	1,073	-		1,940*
Nevada	1,453	5%	532	-	-	24	-	-	-	-		24
West Virginia	6,044	1%	2,217	490	-	-	677	-	6	240		1,409
Oklahoma *	6,053	0%	3,130	3,117	1,882	3,081	3,050	754	-	1,011	Total	12,865*
Michigan	20,575	0%	586	151	32	15	73	8	-	25	Impaired	254
Ohio	6,560	0%	1,471	600	32	-	112	38	-	24	By	806
South Carolina	19,467	0%	2,775	-	-	-	1,229	-	280	-	Livestock	1,509
Total River Miles	693,905	40%	173,630	81,990	37,562	20,316	19,765	13,994	12,835	8,176	75,081	
All Livestock Problems (c) as a % of 693,905 Surveyed River Miles						3%	3%	2%	2%	1%	11%	
Miles Reported as "Major" Problems due to Livestock c						3,192	2,320	346	7,156	1,158	14,070	
"Major" Livestock Problems as a % of 693,905 Surveyed River Miles						0.5%	0.3%	0.0%	1.0%	0.2%	2.0%	

EPA's Black Hole of Data

- Not reported in a quantifiable format or unknown
a Entered 1994 data because the State did not report data in its 1996 Section 305(b) report.
b Assessment of streams with beneficial use designation include chronic aquatic life support and contact recreation as described in the Kansas Water Quality Assessment, 305(b) Report, 1996.
c Numbers reported here are the sum of Major, Moderate, Minor and Unknown levels of impairments as reported by the states
* States where the sum of the seven agricultural subcategories is greater than total for River Miles Impaired by Agriculture
** Source: 1996 Section 305(b) reports submitted by States, Tribes, Territories, and Commissions, in conjunction with EPA's Total Waters Database

RE: COMMENTS ON THE UNIFIED NATIONAL STRATEGY FOR ANIMAL FEEDING OPERATIONS

The American Farm Bureau Federation is the Nation's largest general farm organization, representing producers of virtually every commodity grown or raised commercially in the United States. Our members are concerned about our environment and have a long history of implementing sound conservation practices in partnership with government. Agriculture has made substantial investments over the last dozen years through numerous incentive-based programs that are paying significant dividends in improved water quality. We believe that the trend is in the direction of continued improvement in water quality. While there may be site-specific problems in the livestock sector, these problems are manageable and we therefore ques-

tion the need and authority for a ''significant expansion'' of regulatory efforts as proposed by this strategy.

The draft AFO strategy raises a number of specific concerns and questions that must be addressed if we are to achieve the desired goal of protecting water quality in the most economical, most practical, and least burdensome way for farmers and ranchers. A more detailed account of these concerns follows.

IMPROPER REDEFINITION OF AFO AND CAFO

The Clean Water Act (CWA) conferred broad power upon the EPA to regulate point sources and that CAFOs are deemed to be point sources under the CWA. On the other hand, AFOs are largely unregulated, and EPA does not have the statutory authority to regulate them. The CWA does not define the terms ''CAFO'' or ''AFO.'' Rather, EPA defined both the terms through regulations. Through the AFO strategy, it appears that EPA is planning on expanding the definition of CAFOs to include operations that have not historically been treated as CAFOs but rather as AFOs or simply as agricultural stormwater runoff. To the extent that this can be achieved lawfully, EPA must go through the formal rulemaking procedures. However, EPA's ability to expand the definition of CAFO is restricted by congressional intent.

In the CWA Congress intended to control the release of ''end-of-pipe'' effluents from CAFOs, in that only those CAFOs which would collect and concentrate waste for discharge through a definite point source outlet would qualify as point sources under the definition and be subject to the NPDES permitting program. Accordingly, the AFO strategy is unlawful to the extent that it seeks to treat runoff from precipitation as a type of discharge that can be regulated under the NPDES program. Indeed, it is our position that a facility may not be deemed to be a CAFO simply because precipitation-induced runoff from fields upon which animal wastes have been applied leads to pollutants entering waters of the United States. The proposed strategy seeks to regulate the application of manure by a farmer to his fields.

EPA's proposal to condition permits on the adoption of certain best management practices, such as the application of manure at agronomic rates, clearly exceeds the authority delegated to the agency by Congress to address nonpoint sources of pollution. EPA's position that stormwater runoff from fields on which animal wastes have been applied represents a point source of pollution is clearly unreasonable in light of the overall regulatory focus of the CWA. Any move by EPA to include such conditions in NPDES permits would therefore be an unlawful circumvention of Congress' implicit prohibition against the control of nonpoint sources of pollution through direct Federal regulation.

CONFUSION REGARDING THOSE WHO ARE REGULATED

There is confusion and a lack of awareness by individual producers about the requirements of the NPDES program and any obligations with which they might have to comply. This is largely due to the view held by most States that the CAFO requirements did not apply to agricultural livestock operations, regardless of the number of animals, if they produced crops and feed on the farm and had sufficient land to spread the manure. According to the prevailing view, these were simply dairy, hog, poultry and other types of farms, not ''animal feeding operations.'' The draft AFO strategy seems to indicate otherwise and does not make clear how these producers are supposed to definitively determine whether they are subject to regulation.

The confusion surrounding the definitions of AFO and CAFO naturally leads to differing interpretations and the draft AFO strategy simply exacerbates this confusion. The draft AFO strategy should aim to clarify the definitions of AFO and CAFO and the obligations of those subject to the corresponding regulations. Otherwise, with the CWA's dual administrative and enforcement authority whereby both EPA and those properly delegated states may administer and enforce the NPDES program, farmers are likely to be caught in the middle of a fight between the States and the Federal Government regarding their obligations under the CAFO regulations.

EXPANSION OF THE NPDES PERMITTING PROGRAM

We are concerned about the intention to expand current NPDES permitting to include a larger number of facilities below the 1,000 AU threshold. While EPA currently has the regulatory authority to require certain AFOs to obtain NPDES permits, we believe that this authority is limited to the very few AFOs that discharge pollutants from their confinement areas to waters of the United States. We also believe that the draft AFO strategy's intent to regulate a significant number of AFOs

below the 1,000 AU threshold is neither justified nor is it the most effective means to achieve progress on the ground. Indeed, the magnitude of such a change would require significantly more resources for a program that has been historically a low priority of the States because of the lack of adequate resources. EPA and USDA have set up the States and farmers for failure. It will be a monumental task for State water quality agencies to permit those confinement operations above 1,000 AUs, let alone permit operations with fewer than 1,000 AUs. The financing for farm assistance and for necessary staff is not available to accomplish this goal.

Furthermore, the development of the Unified Watershed Assessment ties future nonpoint source funding from EPA to those watersheds listed as impaired. With the amount of watersheds that have been listed by States, the connection between the Unified Watershed Assessment and the AFO strategy means that more livestock operations will be subject to regulation, putting a greater strain on resources.

NEED FOR IMPROVED WATER QUALITY DATA

Data collection is given a very high priority in the AFO strategy. This data and "information" is ostensibly collected for several reasons, including better decision-making, enforcement and public information. The AFO strategy proposes to collect information on the location, characteristics, size, type of animals and environmental impacts of animal feeding operations from a variety of databases, including the Department of Agriculture. This information will then be cross-referenced with data on impaired and priority water bodies. We are concerned from two standpoints about this approach.

First, the collection of data on animal feeding operations (farms and ranches) is a general cause for concern from the standpoint of an individual's right to privacy and the potential misuse or abuse of data and other information.

We are very troubled about the potential for abuse and or misuse of this information by individuals or groups with other agendas or who simply do not understand agricultural practices. Furthermore, the information collected and made available to the public will not be limited to just those operations over the 1,000 AU threshold, thus potentially subjecting all farms with livestock to criticism or harassment over their farming practices. We strongly support an approach that protects private information as a necessary component to the development of efforts to protect agricultural water quality.

Second, the collection of data on livestock farming operations via the USDA database of farm program participants presents another very serious concern. The EPA has attempted to obtain information about livestock farming operations from databases of participants in USDA programs such as NRCS technical assistance and the Environmental Quality Incentives Program (EQIP). This is very disturbing and presents a serious threat to the continued success of voluntary incentive-based programs like EQIP, the Wetland Reserve program, the Conservation Reserve Program and other similar initiatives. The great conservation gains in the recent years that will have direct long-term benefits for water quality have come through voluntary, incentive-based approaches associated with farm programs, not through regulatory programs under the CWA. The success of those initiatives is due in large part to the long history of voluntary partnerships between farmers, ranchers and the Department of Agriculture. Over the last half-century, a unique relationship has developed between the USDA, specifically the Natural Resources Conservation Service (NRCS), and farmers and ranchers. It is a relationship built and sustained on trust, confidential advice, information and technical assistance. That unique relationship is seriously breached when access to confidential, voluntarily provided farm-specific information is granted to other agencies for regulatory purposes or for the purpose of generally informing the public. Additionally, NRCS's traditional role must be protected. NRCS autonomy must be clearly established with relation to the regulatory role of other government agencies. We appreciate the NRCS-issued policy statement that prohibits the release of site-specific information in conservation plans and case files.

Lastly, while we generally agree with the approach of targeting priority watersheds first, the water quality data on which this approach is premised is inadequate. Farm Bureau has extensively reviewed the agency's 1990, 1992, and 1994 National Water Quality Inventories. In the agency's subsequent report to Congress, it acknowledges the weakness in the assessment methodology. The U.S. Geological Survey has stated in published reports that the National Water Quality Inventory data is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends. The fundamental problem with the information from the State section 305(b) reports is the overall low priority and lim-

ited resources States place on water quality monitoring. The reasons the National Water Quality Inventory report numbers are so contentious is because:

(1) There is no scientific, national random sample taken to assess river miles;
(2) States tend to assess water bodies with suspected problems;
(3) Scientific monitoring accounts for less than 40 percent of the reported data;
(4) More than 42 percent of the data is based on visual evaluation of a water body;
(5) Data may be several years old;
(6) Data is often double- and triple-counted;
(7) There is unscientific source attribution;
(8) No consideration is given to natural background levels; and
(9) No assessment is made of stream morphology (natural erosion).

Unfortunately, as with many issues, perception and reality often tend to reach different conclusions. Despite the perceptions, all indications are that surface water quality is improving and the trend will more than likely continue in that direction for some time. For these reasons, we are concerned that this data is not reliable and that policy decisions surrounding the AFO strategy should be made very carefully and with the fundamental weakness of the National Water Quality Inventory in mind. The agency should make all efforts to support its decision-making with scientifically valid monitoring data.

RESOURCES AND IMPLEMENTATION

The AFO strategy proposes to inspect all priority CAFOs within 3 years and all CAFOs within 5 years. In addition, it seeks to "significantly expand" permitting by targeting the largest CAFOs by 2003 and all others by 2005. We seriously question whether the agency and the States have sufficient financial and personnel resources to accomplish that task within those time frames. But we strongly believe the industry does not have the resources to meet those goals. We have spent over $100 billion in the last 26 years to address point source discharges from primarily urban and suburban facilities, principally publicly owned treatment works. The resources devoted to rural point and nonpoint efforts have come largely through the agricultural programs and some CWA section 319 grants to States. The spending has been woefully inadequate. Given the enormity of the task, it is inappropriate to establish such an ambitious time frame for compliance and enforcement without the necessary resources to accomplish the task.

REGULATION VS. INCENTIVES

We strongly believe that the approach of significantly expanding the CAFO program moves in the wrong direction. Not only do we believe the agency's recent efforts to expand the scope of regulated activities goes beyond congressional intent, but we believe as a matter of policy it is more appropriate to address these inherently nonpoint source issues through incentive-based programs rather than through increased regulation and permitting. The voluntary program as outlined in the AFO strategy can work to assist farmers in their efforts to improve water quality. The usual problem is in securing the necessary financial commitment of government assistance to allow the farmer to implement a CNMP. We are strongly concerned that farmers will bear the blame for a plan's failure, when in reality the problem is the result of a lack of government resources and financial incentives.

Additional sources of funding to assist producers must be developed. Existing authorities, such as the section 319 grants program, the Clean Water State Revolving Fund, and the Environmental Quality Incentives Program (EQIP) must be directed and funded to meet the growing need for assistance.

STATE PRIMACY

The efforts of farmers, conservationists, local governments, and State governments must not be undermined or hampered by the development and implementation of this strategy. Individual States have responded strongly to water quality issues and are working cooperatively with their agricultural community on effective programs to improve water quality while maintaining farm businesses. In New York, the New York City Watershed Agricultural Program and the Skaneateles Lake Watershed Agricultural Program and in Iowa the Raccoon River Watershed Program are working examples of cooperative, voluntary, and incentive based programs formed for the purpose of maintaining public drinking water quality. Other States are engaged in similar watershed based efforts source pollution in the Clean Water Act must be recognized.

CONCLUSION

Agricultural producers have achieved extraordinary conservation gains through voluntary, incentive-based programs to conserve fragile soils and wetlands and to protect water quality and wildlife habitat. We urge the agency to rethink its approach outlined in the draft AFO strategy and to expand the use of its incentive-oriented program to address the larger issue of nutrient management and nonpoint source runoff. The solution to livestock environmental problems is to develop policies which completely utilize all organic residuals as resources. This will not happen under the draft AFO strategy. The draft strategy incorrectly assumes that *more* of the current regulatory system will solve the problems. We can only improve water quality protection in agriculture when a farmer-oriented plan that is based upon economic reality and properly supported by government incentives is developed and implemented.

STATEMENT OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA REGARDING CLEAN WATER ACTION PLAN BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

The Associated General Contractors of America (AGC) appreciates the opportunity to submit testimony questioning the Administration's Clean Water Action Plan. The plan, as announced by President Clinton in the 1998 State of the Union address and detailed in the president's budget submission should concern all Americans. This proposal would divert money from the successful State Revolving Fund (SRF) programs and limit each State's ability to utilize SRF money to address the most important environmental problems in the State. More importantly, this diversion of funds from proven, successful and needed programs that provide clean water to new less tangible programs could restrict each State's ability to meet Federal drinking and wastewater treatment standards.

The Clean Water Action Plan (CWAP) would change the Nation's wetlands policy from "no net loss" to increasing wetlands by 100,000 acres. It also focuses on agricultural runoff as a source of pollution. Most of these activities are already eligible for funding from the State revolving funds, but at the State's discretion. States are free to use their revolving funds to create and implement non point source management programs and to preserve and protect estuaries under the national estuary program. The CWAP would simply limit each State's ability to determine priorities. The SRFs have been successful programs. Do not let them be hamstrung by another dictate from Washington.

The Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) were created by Congress to provide for the treatment of wastewater and to provide safe drinking water to all areas of the country. These programs have had a dramatic effect, providing wastewater treatment to 190 million people and safe drinking water to an estimated 243 million people.

Despite the obvious successes, the estimated 20-year needs for these programs continue to grow. In 1988, EPA estimated that it would require $83.5 billion to meet the country's projected wastewater needs. In 1996, EPA estimated the country's 20-year (2016) wastewater needs to be $139.5 billion. Unofficial EPA estimates for 1999 show about $200 billion in wastewater needs (a 240 percent increase in estimated needs since 1988). Private estimates of wastewater needs are even more staggering—$330 billion, or four times the 1988 estimates. Private estimates of drinking water needs are $325 billion. However, the Federal commitment thus far would address little more than 2 percent of the combined wastewater and drinking water needs. By 1997, Federal capitalization of this program has been $ 13.2 billion, which States have grown to $24 billion through bond issues and payments of principles.[1] Clearly the needs of this program have overrun original estimates, but the overall goal of providing communities with wastewater treatment facilities is succeeding. These programs are stretched thin to meet the demonstrated needs and should not be seen as a piggy bank to finance new programs.

Despite the extensive needs and tremendous support from the American people, President Clinton's fiscal year 2000 budget proposed cutting the Clean Water State Revolving Fund from $1.35 billion to $800 million, a $550 million reduction. It is unthinkable that as needs continue to grow President Clinton would cut the funding by 41 percent. The President should have recommended an increase not a decrease in these funds.

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[1] "State Revolving Fund: A Decade of Successful SRF Performance 1987–1997" Council of Infrastructure Financing Authorities and Environmental Financial Advisory Board.

The second assault on the State revolving fund programs was the proposed Clean Water Action Plan. The proposed plan was drafted as a legislative rider to the appropriations bill, not as part of a needed reauthorization of the Clean Water Act, which expired in 1994. It would focus on nonpoint source issues, which are already eligible for funding from the State revolving funds. EPA's proposal would actually restrict the States' ability to address their own most pressing environmental needs. In addition, EPA is asking Congress to sanction a program EPA has been promoting for years. Since the lapse in the Clean Water Act authorization, AGC has been highly critical of the Administration's failure to support reauthorization legislation, and to stonewall Congressional initiatives.

Equally disturbing is a new proposal by Senator Ron Wyden to direct "a significant portion" of the CWSRF funding to promote "smart growth" of cities and suburbs. Senator Wyden has said the plan would "set aside a portion of clean water dollars and then invite applicants to produce creative homegrown solutions to urban sprawl."[2] With the mounting wastewater needs, this is hardly the time to divert the precious and limited funding from these critical State revolving funds. This program is too important to short-change in favor of the latest political campaign fad.

AGC believes that the Nation's clean water program should be viewed for what it truly is—an investment in the future health and economic viability of the Nation. Each $1 billion invested in the construction of wastewater facilities generates some 52,000 new jobs. Even more importantly, wastewater treatment creates opportunities for economic development in communities by allowing new industries and new homes to locate there. These facilities are fundamental elements of the Nation's environmental infrastructure. At this time, when our global competitors are recognizing the importance of infrastructure as the vital foundation on which future economic growth is based, the United States must provide the needed capital investment to allow our Nation to thrive.

The 1972 Clean Water Act created a Federal grant program that was, in 1987, transformed into the Clean Water State Revolving Fund program to fund the construction and modernization of municipal sewage plants. Congress recognized that simply funding grants was not leveraging the government's funds effectively. Low-cost loans are provided to local governments to finance needed facilities. The loans are then repaid and new loans are made from the CWSRF.

The Drinking Water State Revolving Fund originated in the Safe Drinking ter Act Amendments of 1996. The program, which operates like the Clean Water State Revolving Fund, assists public water systems to finance the costs of infrastructure needed to achieve or maintain compliance with the Safe Drinking Water Act requirements and to protect public health.

AGC is proud of the role the construction industry has played in improving water quality. Our members build and rehabilitate the facilities financed by these two programs, both of which have been responsible for significant water quality improvement. Since enactment of the Clean Water Act in 1972, water quality has improved significantly on over 50,000 miles of waterway. Streams and lakes, once devoid of fish and other aquatic life, now support abundant and varied populations. The foundation for many of these environmental improvements is in the construction grants program and the SRF programs.

The needs, however, are still staggering. In the Environmental Protection Agency's (EPA) first report to Congress in January, 1997 entitled *Drinking Water Infrastructure Needs Survey*, the EPA reported that the Nation's 55,000 community water systems must invest a minimum of $138.4 billion over the next 20 years to install, upgrade, or replace the infrastructure. Of this total, $12.1 billion is needed immediately to meet current Safe Drinking Water Act (SDWA) mandates. The EPA's report is a conservative estimate because many of the systems surveyed were unable to identify all of their needs for the full 20-year period.

In fact, a more complete and independent study released in October of last year by the American Water Works Association (AWWA) found that the capital investment needs for the water supply community over the next 20 years is $325 billion.[3] The EPA's emphasis in their survey was on identifying the utility investment needed to comply with the Federal mandates issued under the Safe Drinking Water Act Amendments (SDWAA), so that Congress could better understand the costs imposed by Federal drinking water regulations. The objective of the AWWA investigation, on the other hand, was to examine the longer-term infrastructure investment require-

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[2] Senator Ron Wyden's comments to the Environmental Media Services news breakfast.

[3] American Water Works Association: Infrastructure Needs for the Public Water Supply Sector, October, 1998.

ments of U.S. water utilities, regardless of whether they are directed at current or future needs over the 20-year period.

Even if we use EPA's estimates, the water infrastructure needs are overwhelming. EPA's report indicates that the largest category of need is installation and rehabilitation of transmission and distribution systems—$77.2 billion. Aging, deteriorating pipes can allow water in the distribution system to become contaminated, leading to illnesses from ingestion of waterborne pathogens as well as interruptions in water service. Most needs in this category involve the extraction and replacement of existing pipe.

The second largest category is treatment, constituting a total 20-year need of $36.2 billion. Storage needs are the third largest category at $12.1 billion. The fourth category of need is source rehabilitation and development, estimated at $11.0 billion. An additional $1.9 billion in need is categorized as "other."

In addition to the extensive capital needs, the American public is very concerned about water quality and supports the Federal Government investing in the effort to clean up our water supply. In a recent survey commissioned by the Rebuild America Coalition, 66 percent of the American people from all regions and areas of the country describe spending on America's infrastructure as a "strong investment in America." 74 percent are even willing to pay 1 percent more in taxes if it meant you could guarantee a safe and efficient sewage and water treatment system. The support transcends party lines, carrying overwhelming support from Republicans, Independents and Democrats (see attached document).

AGC believes in these times of economic prosperity, and with the increasing needs in our Nation's drinking water and wastewater, now is not the time for the Federal Government to lessen its commitment to clean water. Toward that end, AGC urges Congress to appropriate stable annual funding for the Clean Water State Revolving Fund and for the Drinking Water State Revolving Fund. In addition, this funding should not reduce the State's flexibility to spend this money its individual priorities.

ATLANTA AUDUBON SOCIETY,
June 2, 1999.

GEORGIA FORESTRY ASSOCIATION,
Norcross, GA.

DEAR GEORGIA FORESTRY COMMUNITY: On behalf of Audubon, I commend Georgia's Forestry community on the completion of the recent revision of voluntary forestry Best Management Practices (BMP). The effort was the most comprehensive review of forestry BMPs ever undertaken in Georgia and included input from some members of the conservatin community as well as the forest products industry, Federal, and State biologists and officials.

The new Georgia BMPs for forestry are a step in the right direction, significantly strengthening protection of the State's water quality related to the potential impact of timber harvesting and other activities. By working together:

- We agreed to stop clear cutting the Streamside Management Zone;
- We added protection for ephemeral streams;
- We improved protection for trout streams;
- We included recent Federal law for site preparation in wetlands and stream crossing requirements. And clearly distinguished legal requirements from voluntary practices by the use of the Justice Scales symbol;
- We provided greater flexibility for on-the-ground professionals to apply their management judgement;
- We included a strong recommendation for written plans with basic lay-out and planned actions to improve communication between the landowner and forest professionals;
- We included recommendations on other management objectives for Wildlife Management, Protected Species, Aesthetics and Sensitive Sites in addition to protecting water quality.

As compared with other southern States, the industry has recorded a high level of compliance with forestry BMPs in the past. We look forward to continued emphasis on educating landowners, loggers and others to obtain greater compliance in the future with these more stringent BMPs.

As Georgia's population continues to grow, there will be continued pressures on land use and the State's water quality. As members of the conservation community, we urge the forest products industry and other industries in the State to continue to review their activities for their potential impacts on the quality of Georgia's water and total environment.

We join the forestry community in supporting voluntary Best Management Practices to protect our environment because it reduces regulation and government costs and allows greater flexibility to utilize new equipment and techniques.

Sincerely,

LOLLY LEDERBERG,
President, Atlanta Audubon Society.

LETTER FROM MICHAEL EVANS

May 11, 1999.

Senator JOHN CHAFEE,
Environment and Public Works Committee,
Washington, DC.

DEAR SENATOR CHAFEE: I am writing to comment on the Clean Water Action Plan and it's implementation. First of all, I live in Wyoming, was born and raised here. My wife and I operate a small cattle ranch that has been in the same family for 103 years. We are both involved with State environmental organizations, and I am an elected supervisor for the local conservation district.

These locally-controlled districts seem to be given the opportunity of implementing CWAP. I think it is a great chance for conservation districts to actually address water quality issues. I am disppointed that there has not been very much communication between representatives from EPA/USDA and local districts. I do not recall nor can I find any record of our district ever receiving any correspondence from anybody involved with CWAP at the Federal agencies.

There are some conservation districts in Wyoming that have been monitoring water quality for several years. I am proud to say ours is one of them. For example, we are also involved in a collaborative effort involving 5 districts known as the Tri-County Watershed Assessment project. This is a significant effort to monitor some of the water bodies, in three major watersheds, that are on the 303d impaired list. The information obtained will be used to identify any problem areas that may exist and cooperative efforts established between the districts and land owner/producers to insure clean water quality. This project was established before CWAP came along. There are other watershed-based projects in Wyoming that districts arid CRM groups are involved in. It seems to me that what is already taking place in many Wyoming watersheds is what CWAP is all about. It would not take but a little effort, to expand on what is in place. These efforts should be credited and acknowledged by the powers to be in our benevolent Federal agencies. The lofty and desirable goals put forth in CWAP are what local conservation districts are all about.

I think we are all missing the chance to involve Federal support and expertise with local commitment and effort. CWAP gives us a pretty good framework to work with, if there is any attempt, by all parties to avoid power and turf battles, some positive results would take place. I do think there is real commitment by the local districts, that I am aware of, to implement the Clean Water Act and not just get out of doing what needs to be done. There will always be the "fox guarding the chicken house" syndrome just as there will be the "feds should leave us alone" sentiment.

I do not support the Wyoming Association of Conservation Districts directed litigation against CWAP. Like I said above, I think we are missing a chance to establish good working relationships which will hopefully lead to the protection and, if necessary, clean up of our water bodies. I also resent my local property tax dollars being used to sue Federal agencies which I help fund. I would also like to say that most Federal agency folks do not know what clean water looks like until they come and see it in Wyoming.

I hope your oversight hearings strengthen the commitment to our water resources by involving both Federal and local conservation efforts. If you can come up with a process that actually implements CWAP through locally-led efforts I am all for it. I may be naive and Pollyanna about this but it seems possible to me. There are many analogies and lessons to be learned from the events taking place in Kosovo today. Ranchers in the west are but a small enclave. Too many of us are unwilling to change let alone admit that change is needed. Yet we have obviously done a pretty good job of stewardship, otherwise our land would not be coveted by all the folks who have gelded their region to the point where they require a change. Sadly that change is an easy escape for them, to simply move. For me, their choice requires major changes on my part. I personally am willing to make some of those changes. I and most people who live and work with the land know that in order to sustain a livelihood, we must protect the quality of all of our natural resources. Today for

example while I was feeding my cows in one of our typical spring snow storms I had the privilege of observing Northern Goshawks. They along with a pair of Peregrine Falcons find this place good enough to tolerate along with my family.

Regardless of what you and your committee hearings come up with, most people in Wyoming and their elected conservation district officials do care for the quality of our water and can and will do the best we can to maintain that quality. Perhaps with a little gentle prodding, CWAP can be implemented in the west. Remember, this is arid country, and if you are thirsty enough you will drink most any water. Especially if you work for EPA, are on a continental divide trail trekking vacation and the support vehicle with the Evian got lost. With that, I do not hope to be taken too lightly. I do hope that political considerations are set aside and with the use of credible water quality data this State's and this Nation's water is protected. Again CWAP is a good beginning.

Good luck in your deliberations and thank you for considering my comments.

Sincerely,

MICHAEL EVANS.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY,
May 12, 1999.

Hon. JOHN H. CHAFEE, *Chairman,*
Senate Environment and Public Works Committee,
Washington, DC.

Hon. MAX BAUCUS, *Ranking Member,*
Senate Environment and Public Works Committee
Washington, DC.

DEAR SENATORS CHAFEE AND BAUCUS: I understand that the Senate Environment and Public Works Committee has scheduled a hearing with regard to the Clean Water Action Plan. I would like to share with you Michigan's comments which address concerns we have about a component of this plan—the final United States Department of Agriculture (USDA)/United States Environmental Protection Agency (USEPA) Unified National Strategy for Animal Feeding Operations (Strategy) that was released on March 9, 1999.

Michigan supports the concept of minimizing water quality and public health impacts, ensuring the long-term sustainability of animal agriculture, building on the strength of existing programs, and focusing technical and financial assistance to support animal feeding operations as outlined in the guiding principle of the Strategy. Although the Strategy suggests that the emphasis will be on voluntary efforts to achieve these goals, there are specific concerns that Michigan has with the final Strategy. These concerns include the Strategy's lack of flexibility to implement functionally equivalent measures that result in environmental protection and the fact that the Strategy places too much emphasis on a 'command arid control' regulatory approach. The Strategy is very prescriptive and permit oriented and thus does not lead to the establishment of a Federal and State partnership that is necessary for successful implementation. The Strategy will divert limited staff resources from higher priority programs. The Strategy also does not clearly define the environmental benefits and outcomes it is designed to achieve.

STATE FLEXIBILITY AND FUNCTIONALLY EQUIVALENT PROGRAMS

The Strategy does not provide for the flexibility to recognize functionally equivalent State programs that meet environmental goals and standards. The Strategy only recognizes functional equivalency "where a State can demonstrate that its program meets the requirements of an NPDES [National Pollutant Discharge Elimination System] program." This is a process, not an environmental goal. The establishment of a national performance standard is the best way for the USDA and the USEPA to promote and measure environmental protection.

Michigan believes that all States must have the flexibility to implement their own functionally equivalent State strategies based on measures of environmental performance, not the mandated Federal process. Michigan supports the establishment of a national performance standard to promote and measure environmental protection. The 25-year, 24-hour storm exemption is a well-recognized national standard and design criteria that provides a realistic and environmentally protective performance standard.

Attachment 1 outlines what Michigan believes should be the components to determine a State program that is functionally equivalent. Basing a program on these

components would provide more meaningful environmental protection than prescribing a "one-size-fits-all" permit process.

ENVIRONMENTAL BENEFITS AND OUTCOMES

Michigan does not believe that addressing water quality issues associated with animal feeding operations should require a reprioritization of our water quality programs. Michigan is very concerned that the permit effort will be much greater than envisioned by the USEPA. Based on USEPA estimates, implementing the Strategy could require an additional 1,000 permits in Michigan, which would almost double our individual permits issued. We are not certain that the additional effort for permitting will provide any greater reduction in pollutant loading than would occur in the highly utilized voluntary program that we are developing. Michigan has concerns about the overall impact on water quality programs and if the States are forced to permit these animal feeding operations, an actual degradation of water quality may occur by the shifting of resources from other higher priority areas.

The Strategy attempts to use the Clean Water Act to address other non-environmental issues associated with animal feeding operations. We do not believe it is appropriate to use an environmental permit process in this manner.

For your information, I have included a letter (Attachment 2) on the draft Strategy signed by all USEPA Region 5 Environmental and Agriculture Directors. A majority of the concerns expressed in this letter have not been resolved in the final Strategy.

We appreciate the opportunity to share our perspectives with you on this important issue and respectfully request that you add our comments to the hearing record. The new Strategy must allow the States flexibility to implement functionally equivalent programs that meet stated environmental goals and focus on the implementation of strong voluntary programs—not processes. Michigan has a strong partnership with agriculture, and is proceeding with an environmentally sound approach to deal with animal feeding operations of all sizes. If you have any questions, please contact me.

Sincerely,

RUSSELL J. HARDING,
Director.

ATTACHMENT 1

REQUIRED COMPONENTS OF A FUNCTIONALLY EQUIVALENT ANIMAL FEEDING OPERATION PROGRAM

1. Legally Established Performance Standard
2. Voluntary Program
   (a) Education
   (b) Technical Assistance
   (c) Financial Assistance
3. Complaint Response
4. Spill/Release Response
5. Enforcement Provisions
6. Proactive Inspections
7. Statewide Water Quality Monitoring

ATTACHMENT 2

Ms. DENISE C. COLEMAN,
U.S. Department of Agriculture,
Natural Resource Conservation Service,
Washington, DC.

DEAR MS. COLEMAN: The Environmental and Agriculture Directors of the U.S. Environmental Protection Agency (EPA) Region 5 States of Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin (States) have jointly compiled the following comments concerning, the U.S. Department of Agriculture (USDA)–EPA Draft Unified Strategy for Animal Feeding Operations (Strategy). With 20 percent of livestock operations in the United States occurring in the Region 5 States, this is a very important issue. While signing this letter together, individual States may also be submitting comments concerning the Strategy.

The States support the guiding principles of the draft Strategy. However, there are specific issues with which the States have concern. The Strategy does not allow

enough flexibility for the States to implement functionally equivalent measures that result in environmental protection. The Strategy is very prescriptive and permit-oriented and thus does not lead to the establishment of a Federal and State partnership that is necessary for successful implementation. The Strategy does not clearly define the environmental benefits and outcomes it is designed to achieve.

STATE FLEXIBILITY AND FUNCTIONAL EQUIVALENT PROGRAMS

The States believe that any national Strategy for Animal Feeding Operations must be sufficiently flexible to recognize State implementation of functionally equivalent programs that result in the meeting of a national performance standard. The establishment of a national performance standard is the best way for the USDA and EPA to promote and measure environmental protection.

The States support the concept of nutrient management plans that focus principally on the collection, storage, and utilization of manure as an organic fertilizer. The States believe the existing effluent guidelines offer opportunities to work with landowners and reduce the potential impact they have on States' water quality. The States support and recognize the importance of inspection programs to provide some review of pollution control activities. The nature of these inspection activities must allow the States sufficient flexibility to individually tailor these programs. The States strongly support the education and training promoted in the Strategy through the voluntary USDA programs and encourage enhancing these programs, both technically and financially, to increase participation.

PRESCRIPTIVE AND PERMIT ORIENTED

The States have several concerns about the overall impact on water quality programs. If a significant shift is forced upon the States to permit Animal Feeding Operations, an actual degradation of water quality may occur by taking resources from other higher priority areas.

Sincerely,

REBECCA DOYLE,
Director,
Illinois Department of Agriculture.

JOE PEARSEN,
Assistant Commissioner,
Indiana Office of the Commissioner of Agriculture.

DAN WYANT,
Director,
Michigan Department of Agriculture.

SHARON CLARK,
Acting Commissioner,
Minnesota Department of Agriculture.

FRED DAILEY,
Director,
Ohio Department of Agriculture.

BEN BRANCEL,
Secretary,
Wisconsin Department of Agriculture,
Trade and Resource Consumer Protection.

MARY A. GADE,
Director,
Illinois Environmental Protection Agency.

JOHN HAMILTON,
Commissioner,
Indiana Department of Environmental Management.

RUSSELL J. HARDING,
Director,
Michigan Department of Environmental Quality.

LISA THORVIG,
Acting Commissioner,
Minnesota Pollution Control Agency.

JENNIFER TRELL,
Interim Director,
Ohio Environmental Protection Agency.

GEORGE E. MEYER,
Secretary,
Wisconsin Department of Natural Resources.

STATEMENT OF SALLY YOZELL, DEPUTY ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

Good morning, Mr. Chairman, and members of the committee. I am Sally Yozell, Deputy Assistant Secretary for Oceans and Atmosphere of the National Oceanic and Atmospheric Administration (NOAA). I am pleased to be here today to discuss NOAA's role in the Clean Water Action Plan.

NOAA is proud to be a part of the Clean Water Action Plan. The Action Plan represents a major commitment by the Administration to improve the quality of our water resources by addressing problems of habitat degradation and polluted runoff through a collaborative approach among Federal agencies and in conjunction with State, tribal and local governments and affected interests.

THE PROBLEM

Water quality is an important issue in coastal areas. Runoff from sources far upstream, as well as those on adjacent lands, ultimately makes its way to the coasts and consequently our coastal waters are in jeopardy. Every year, degraded water quality causes warnings and thousands of days where beaches are closed to the public and nearly 30 percent of U.S. shellfish growing areas continue to be restricted or closed, resulting in substantial losses to tourism, recreation and seafood industries. Harmful algal blooms (HABs), which pose a serious threat to water quality, have impacted nearly every coastal State. The rapid expansion of HABs in the past two decades is responsible for economic losses approximating $100 million per year. Hazardous waste sites in certain coastal areas may also pose significant threats to coastal life and habitat.

The increasing frequency and magnitude of these problems demands that significant action be taken now to restore and the health of our vital waters. The Clean Water Action Plan is designed to mobilize Federal resources to assist States, tribes, local governments and private citizens to protect and restore America's waters on a watershed by watershed basis.

COLLABORATION UNDER THE CLEAN WATER ACTION PLAN

In the spirit of greater government efficiency, the Action Plan calls for a new way of doing business—moving away from single-focus programs to broad-based coordination to protect and restore water quality and natural resources on a watershed basis. NOAA is committed to this cooperative, collaborative approach.

As you have heard, States and some tribes have identified their priority watersheds—those in greatest need of restoration—through what is called the "unified watershed assessment" process. Through the Action Plan, the Federal agency partners are working together to assist them in these efforts. We are also coordinating our efforts to assist other public and private stakeholders and improve resource stewardship on Federal lands.

One of the ways we are doing this is by forming regional Federal coordination teams to coordinate Federal activities and streamline technical assistance to our State, tribal, local and private partners to undertake watershed restoration and other activities under the Action Plan. Federal coordination teams have been convened in 12 cities across the country and are meeting this week in Shephardstown, West Virginia to develop a strategy to coordinate their activities under the Action Plan and improve the delivery of Federal services to our non-Federal partners.

NOAA'S ROLE

NOAA is taking a leadership role on twelve coastal-related action items under the Action Plan to deal with problems of habitat degradation and polluted runoff in coastal areas. We are coordinating with local, State, tribal and private entities and other Federal agencies to make these actions items as effective as possible.

Today I would like to focus on three key elements of our role under the Plan: (1) helping to ensure that the best available science is employed to support the efforts under the Plan, especially regarding efforts to deal with harmful algal blooms and hypoxia; (2) supporting State-led efforts to reduce polluted runoff into coastal waters and estuaries, and (3) helping to ensure that cleanup actions at coastal hazardous waste sites protect and restore natural resources and result in cleaner coastal waters. I would like to describe the issue in each of these three areas, NOAA's role and what we have accomplished, and our plans for the year 2000.

1. Science for Preventing Harmful Algal Blooms and Hypoxia

a. What is the issue?

Harmful Algal Blooms (HABs) and hypoxia are increasing in magnitude and frequency. Hypoxic conditions (low oxygen) are found in 50 percent of the Nation's estuaries. The dead zone in the Gulf of Mexico is the most dramatic example of the problems associated with severe hypoxia along our coasts. HABs, such as red tides, brown tides, paralytic shellfish poisoning, and others, reoccur every year in every part of our coastal waters with each occurrence costing the local and National economy from $ 2 million to over $20 million. Although HABs are a naturally occurring phenomenal the linkage between their increased occurrences and pollution cannot be ignored. The need to better understand all the causes and continue to develop the most effective solutions for local and State managers for these hypoxia and HABs underpins NOAA's research efforts.

b. What happened and what is likely to happen?

In 1998, HABs were reported along the U.S. coast resulting in fish kills and mammal and bird mortalities as well as closures of shellfish harvests in several regions. For example:

- Over 50 sea lions died along California's southern coast and many deaths were associated with domoic acid poisoning resulting from localized blooms of the diatom *Pseudo-nitzschia australis* in and near Monterey Bay. Some researchers suggest that blooms of this diatom may have been linked to unusually high nutrient input from higher than normal river flow in the system. If this relationship proves to be correct, it would mark the first time that blooms of this diatom have been linked to nutrient enrichment of coastal waters through river inputs and therefore land-use. Domoic acid, the toxin responsible for the sea lion mortalities in California, was also found along the Oregon coast and the toxin was found at near record levels in Washington's shellfish.
- *Pfiesteria piscicida* was reported in the Neuse River, North Carolina, estuary and associated with fish kills and possibly with human health effects such as eye irritation in river watermen. However, the fish lesion and mortality events were not recorded in Maryland's eastern shore tributaries in 1998, even though conditions leading into the summer appeared ideal for expression of the toxic population. The absence of *Pfiesteria* outbreaks was attributed to low fish populations in the systems and the absence of summer storms and runoff, which possibly act as triggers.
- Paralytic shellfish poisoning (or PSP), which generally results from accumulations of the toxic dinoflagellate *Alexandrium* spp., continued closure of the Alaskan coast to shellfish harvest and caused additional closures along portions of the Oregon coastline to shellfishing in the summer of 1998. PSP-contaminated shellfish beds along Maine's coast were also closed to harvesting for several summer months.
- Blooms of the toxic dinoflagellate *Gymnodinium breve,* responsible for Florida's Red Tides, were again observed off the State's western coastline, while along the Texas coast, reports of thousands of dead fish coincided with blooms of *G. breve.*

In 1999, the summer will likely be typical of past summers, with events expected in the Gulf of Mexico and, likely, our West coast:

- Sea lions with symptoms similar to those observed in last year's domoic acid event on California's coast have already been reported in southern California, with the toxin reported in the urine of the ill animals.
- Paralytic shellfish poisoning (PSP) is very probable in Alaska, as this is a permanent problem.
- Shellfish closures along Maine's coasts from PSP are also highly probable due to potential seeding from local beds of resting stages of the toxic dinoflagellate as well as delivery of distant populations via coastal currents.

• Similarly, Red Tides-caused G. breve are likely to be observed on Florida's west shelf as blooms of this organism have been annual events in 23 of the last 24 years.
• Outbreaks of *Pfiesteria piscicida* in mid-Atlantic States are more difficult to predict as researchers are just beginning to identify the environmental conditions supporting expression of the cell's toxicity. However, high fish densities in some of the shallow, poorly-flushed coastal systems common along the Mid-Atlantic coast could trigger outbreaks.

c. What is NOAA's role and what have we accomplished?

NOAA's role in preventing HABs and hypoxia is to support research, monitoring, assessment and response, in cooperation with our State, Federal and academic partners. Specifically, FY 99 funding through the NOAA component of the Clean Water Initiative is supporting three innovative programs to address HABs:

ECOHAB, (The Ecology and Oceanography of HABs) is an interagency research program. Agencies involved include NOAA, EPA, ONR, NSF, and NASA.

• NOAA is contributing $1.15M for new projects on development of prevention, control, and mitigation practices to reduce HAB impacts on fisheries and mariculture; assessments of economic impacts of HABs; research on the Long Island brown tide organisms responsible for the collapse of the Eastern Long Island scallop industry; and studies of HAB ecology, physiology, and toxicity. The funding announcement for this year was recently published (ECOHAB 99).
• NOAA is also providing $2M in continuing support for ECOHAB 97 and ECOHAB 98 projects including the development of biological and physical HAB models in the Gulf of Maine and Gulf of Mexico, a means to control recurring blooms in these areas, and rigorous multi-disciplinary investigations of *Pfiesteria*'s biology, ecology, toxicity, and detection.
• ECOHAB research is also being used to develop forecasting models for HABs, which will be incorporated into State HAB monitoring programs and shared with the public, policy makers, and scientific and public health communities. Distribution of this information is expanding through use of national websites sponsored by the Coastal Ocean Program and National and State Sea Grant institutions.

EXPANDING NOAA-STATE PARTNERSHIP FOR MONITORING AND ASSESSMENT

• Operating continuously since 1997, NOAA, with EPA, continues to provide funds to mid-and south Atlantic, and Gulf States to expand existing State monitoring programs for *Pfiesteria* and fish health. The goal is to provide States with increased capabilities for pro-active detection of toxic events and to develop a national database to identify the environmental conditions required for toxic outbreaks of *Pfiesteria piscicida*.
• NOAA is working with the States of Maryland and Florida to initiate multi-year pilot studies to intensively survey areas of high outbreak risk. These studies include field testing of several promising sensors for continuous monitoring of the environmental conditions associated with HAB outbreaks.
• Funds are also being used for shared, cross-cutting activities such as a national list-server for distributing *Pfiesteria*/fish health information quickly, workshops on standardized sampling practices, training sessions for plankton and fish lesion characterization, and molecular detection of *Pfiesteria piscicida's* cells and toxicity.

DEVELOPING THE INTERAGENCY FEDERAL EVENT RESPONSE PLAN FOR HAB

• NOAA is leading the development of the Federal Event Response Plan for HABs to provide support to States experiencing major HAB events, including *Pfiesteria* outbreaks. Under this plan NOAA, EPA, FDA, and CDC have identified services and resources that they can provide to States for responding to *Pfiesteria* outbreaks and the plan will be expanded to cover other types of HAB events nationwide.
• FY 1999 funds will also support rapid response capabilities to supplement existing State programs and assist those States that have not yet implemented rapid response planning for HAB events.

The Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA), passed by Congress in 1998, recognized the importance of prevention, control, and mitigation of HAB impacts by authorizing multi-agency assessments of the occurrence, impacts, and costs of HABs in U.S. coastal waters and the options currently available for reducing those impacts. NOAA will continue to work with all of its partners to undertake these assessments and work to transfer this knowledge to improve coastal water.

NOAA is also working with other agencies to address the issue of hypoxia in our coastal waters. As part of a process of considering options for response to hypoxia, the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force was formed

during the Fall of 1997 in which NOAA is a participant. The Task Force asked the White House Office of Science and Technology Policy to conduct a scientific assessment of the causes and consequences of Gulf hypoxia through its Committee on Environment and Natural Resources (CENR). While NOAA has been asked to lead the CENR assessment, oversight is spread amongst several Federal agencies and the assessment itself is being conducted by teams that include academic, Federal, and State scientists from within and outside the Mississippi River watershed. The assessment of the causes and consequences of Gulf hypoxia is intended to provide scientific information that can be used to evaluate management strategies, and to identify gaps in our understanding of this problem.

d. What do we plan to do in 2000?

Continuation of these efforts in FY 2000 is critical for addressing prevention, control, and mitigation of HABs in U.S. coastal waters. With increasing threats to public health and safe seafood in U.S. waters, it is important for the U.S. to move to the next level in managing its coastal waters to reduce or eliminate HAB impacts.

Much has been learned about the incidence of HABs, including *Pfiesteria*-complex organisms. What is needed now is to determine what environmental conditions trigger blooms of potentially toxic algae; develop reliable and inexpensive methods for detecting bloom organisms and their toxins; and develop techniques for mitigating HAB impacts on coastal communities.

In FY 2000 NOAA plans to be able to initiate pilot studies in States whose waters are susceptible to toxic *Pfiesteria* complex outbreaks. NOAA plans to support studies to test the performance and reliability of improved methods and technologies to monitor the presence and toxicity of *Pfiesteria*-complex organisms during suspected outbreaks. NOAA also plans to implement the Federal Event Response Plan for HAB.

2. SUPPORTING STATE-BASED COASTAL NONPOINT PROGRAMS

a. What is the issue?

Increasing outbreaks of harmful algal blooms along all coasts, the dead zone in the Gulf of Mexico, closed shellfish beds and decreasing fisheries are all signs that coastal waters are being stressed by polluted runoff. According to State water quality reports, urban runoff and storm sewers together are the second leading source of pollution in the Nation's surveyed estuarine waters. States have also reported that agricultural pollution is the fifth leading source of pollution of surveyed estuarine waters. Coastal population continues to expand, exacerbating runoff pollution from new development and human related activities. For example, growth along the southern California coast from Santa Barbara to San Diego has averaged about 3,400 newcomers every week. In partnership with coastal States under the Coastal Zone Management Act (CZMA) and with EPA, as co-administrator of the Coastal Nonpoint Program, NOAA is directing a great deal of effort to combat polluted runoff and to conserve and restore coastal waters.

b. What is NOAA's role and what have we accomplished?

In 1990, Section 6217 of the Coastal Zone Act Reauthorization Amendments created a new State-based Coastal Nonpoint Pollution Control Program. The Coastal Nonpoint Program represented a departure from previous efforts to tackle polluted runoff in that it called on State CZM agencies to work together with State water quality agencies to pool their land management and water quality expertise to design programs to control polluted runoff from land-based sources into coastal waters. Patterned after the largely successful approach to controlling pollution from point sources such as pipes and outfalls, the Coastal Nonpoint Program established a technology-based approach for dealing with polluted runoff. This approach generally consists of implementing management measures to control nonpoint sources of pollution before they impact coastal waters. Management measures include techniques such as controlling erosion from construction activities, managing nutrients from fertilizers applied to agricultural land, reducing the impacts of stormwater runoff, and protecting areas that are particularly important for water quality. The measures are detailed in guidance developed by the Environmental Protection Agency (EPA), in consultation with NOAA, and address a broad spectrum of nonpoint pollution sources, including agriculture, forest harvesting activities, urban runoff, marinas, impacts associated with the construction and maintenance of dams and channels, and other alterations of natural systems. State coastal nonpoint programs were developed in accordance with this guidance and submitted to NOAA and EPA for approval. These State coastal nonpoint programs will be administered by a variety of State and local agencies through implementation of new and existing authorities, plans, and projects.

Under the Clean Water Action Plan, NOAA and EPA were asked to aim for completion of the review and conditional approval of the first 29 Coastal Nonpoint Programs by June 30, 1998. I am happy to say that we have met this deadline. While coastal States generally have made progress in addressing this difficult issue, some further program development efforts are needed. In addition, three new States (Texas, Georgia, and Ohio) have since joined NOAA's Coastal Zone Management Program and are in the process of developing their coastal nonpoint programs. A fourth State, Minnesota, is expected to have its CZM Program approved later this year. At that time, it too will begin the development of a coastal nonpoint program.

NOAA and EPA are working diligently with the coastal States to complete development of their coastal nonpoint programs and are providing technical and financial assistance to support effective program implementation. The funding that NOAA received in FY 99 under the Clean Water Initiative is being provided directly to the coastal States and territories to help them complete development and begin implementation of their Coastal Nonpoint Programs. This will substantially improve their ability to manage polluted runoff and reduce coastal water pollution.

For example,

- Through its Coastal Nonpoint Program, Rhode Island conducted a study that identified a significant threat to water quality from failing septic systems. As a result, last month the State adopted final revisions to the Salt Ponds Region and Narrow River Special Area Management Plans (SAMPs) to address nutrient loading from septic tanks. The Rhode Island Coastal Management Program also continues to implement its marina certification program and eight marinas and terminal operators have developed Operation and Maintenance Plans for controlling Nonpoint Source Pollution for upland portions of their facilities.
- The Massachusetts Coastal Zone Management Program (MCZM), through its Coastal Nonpoint Program, is developing and implementing a program to address nonpoint source pollution from marinas and boaters. MCZM's focus will be on the development of a guidance document, technical assistance, and education that will help marina operators and boaters control nonpoint source pollution.
- Oregon's Department of Environmental Quality (DEQ) has developed a Watershed Assessment Manual which is to be a diagnostic tool accessible to a non-technical audience. The manual will assist local and watershed councils to identify priority water quality and habitat issues which will help to target restoration efforts.

c. What do we plan to do in 2000?

In FY 2000 it is critical for the Federal Government to provide States with adequate financial resources to implement their coastal nonpoint program. It is also imperative that we provide our four new State coastal programs with the support they need to develop their coastal nonpoint programs and to support on-the-ground work by the original 29 coastal States and territories to implement pollution control measures and support locally-led restoration efforts, similar to those mentioned above. NOAA's efforts will complement the efforts of EPA and USDA, working with their partners, the State water quality and agriculture agencies, to provide a comprehensive program that relies on the combined strength of all resource management agencies. This innovative program is important to achieving the goals of the Clean Water Action Plan and is an example of the opportunities presented under the Action Plan to maximize efficiencies in providing resources and expertise to protect water quality and conserve and restore natural resources.

3. REDUCING POLLUTION FROM HAZARDOUS WASTE SITES

a. What is the issue?

Hazardous waste sites in the coastal zone degrade and destroy valuable marine, estuarine, and coastal habitat by contaminating the waters and sediments that support fish, shellfish, marine mammals, and other natural resources. There are many types of hazardous waste sites, from Superfund sites to Brownfield sites. Each hazardous waste site has its own set of contaminant issues that must be approached in a watershed context in order to restore and protect our valuable coastal waters.

b. What is NOAA's role and what have we accomplished?

NOAA's Coastal Resource Coordination (CRC) program works within the remedial process at hazardous waste sites with EPA and other lead cleanup agencies to develop remedies that protect coastal resources, supporting habitats, and human health. These activities result in more productive and diverse habitat for fish and wildlife, cleaner coastal waters, and healthier coastal ecosystems. Since 1985, the CRC program has ensured protection and enhanced recovery and restoration of coastal habitats at over 500 hazardous waste sites.

The Coastal Resource Coordination (CRC) program consists of a network of Coastal Resource Coordinators (CRCs) and a technical support group. NOAA's CRCs are environmental scientists, located in EPA coastal regional offices, that provide technical support in evaluating natural resource concerns at hazardous waste sites and improve coordination with Federal and State natural resource trustee agencies. CRCs and supporting staff evaluate ecological risk, recommend protective cleanup levels and strategies, and advocate remedies that prevent or minimize adverse effects to coastal resources and waters that support them.

The CRC program is primarily funded with Superfund program money that is passed to NOAA through an interagency agreement with EPA. Due to the nature of this funding, the range, extent, and priorities of NOAA's stewardship efforts at coastal hazardous waste sites are limited. With FY99 appropriations under the Clean Water Initiative, the CRC program has been able to continue its previous level of accomplishment at hundreds of waste sites across the country as well as serve a broader constituency, accelerating cleanups at a range of waste sites by building stronger relationships with States and local communities. The program is working on new sites that pose a significant risk to coastal natural resources, applying its expert to pressing environmental issues such as persistent toxic contamination in sediments and fish, and is working more closely with States and local communities on restoration of contaminated coastal habitats. Specifically, the CRC program has been:

- providing technical assistance and training on contaminant issues directly to States such as Massachusetts, New Jersey, New York, Florida, Illinois, Michigan, Louisiana, Texas, California, and Oregon.
- working with the Department of Defense and States to develop protective, cost-effective clean-up strategies and appropriate restoration of natural resources at Federal facilities.
- providing technical support to EPA and the States on ecological risk and other contaminant issues at active industrial facilities.
- developing watershed database/mapping projects in Hudson River/Newark Bay, NY/NJ; Lehigh River, PA; Anacostia River, Washington, DC, St. Andrews Bay, FL, Willamette River, OR, Kalamazoo River, MI, and Puget Sound, WA which will be used for designing sampling and cleanup strategies, and conducting restoration planning at a variety of sites, including four Brownfields pilot projects; and
- conducting studies in cooperation with Federal and State agency scientists to evaluate exposure and contamination in fish in order to address specific contaminant problems and improve the health of our coastal waters.

c. What we plan to do in 2000?

Continued support will allow NOAA to continue: (1) working on sites where States have the lead for cleanup activities, (2) working on non-National Priorities List industrial and military facilities and other non-Superfund sites, (3) conducting site-specific research studies, and (4) developing watershed mapping tools to improve remedial decision-making and restoration planning in partnership with States and other coastal resource managers. It will also allow the CRC program to continue providing technical assistance directly to States and local communities to accelerate restoration of hazardous waste sites and Brownfield sites, improving the health of our coastal waters and the resources they support. Coastal areas where these activities have been initiated include Long Island Sound, Newark Bay, Delaware River, Christina River, San Francisco Bay, Willamette River and Puget Sound.

ACCOMPLISHMENTS AND PARTNERSHIPS

The partnerships developed under the Clean Water Action Plan has allowed NOAA and other agencies to accomplish a number of items to improve our Nation's coastal waters. Beside the ones listed above, NOAA has made several noteworthy accomplishments over the past year:

- we completed a report and CD–ROM on the status of shellfish bed conditions nationally, the factors contributing to harvest limitations and the potential to restore impaired areas;
- we worked with Fishery Management Councils to identify Essential Fish Habitats in 38 Fishery Management Plans and proposed them for public comment;
- we developed two new interagency partnerships for wetlands restoration—with EPA and Forest Service—and plan to explore other opportunities to work more closely with other agencies;
- we worked with EPA, the Corps, NRCS and USFWS to develop draft guidance on wetlands restoration, creation and enhancement. This draft was made available to the public through the internet and this improved public access has proven to

be invaluable. Although this is a working draft undergoing peer review, we have already solicited and received extensive public input and plan another public review.

CLOSING

The Clean Water Action Plan is an innovative, cost-effective and coordinated effort to protect public health and restore America's waterways, by addressing problems at a watershed level, building on existing programs and forging new partnerships. The FY 2000 request for NOAA builds upon the strengthens of these program successes by asking for modest increases to continue improving our ability to understand HABs and develop HAB action plans, and to continue aiding the States in developing and implementing their nonpoint programs. We at NOAA are proud to be a part of this effort and we are committed to working with you, with our Federal partners, and with State, local, tribal and private stakeholders to make the collaborative vision of the Clean Water Action Plan a reality.

WIND RIVER ENVIRONMENTAL QUALITY COMMISSION,
Fort Washakie, Wyoming.

Hon. CRAIG THOMAS,
U.S. Senate, Washington, DC.

DEAR SENATOR THOMAS: As the Director of the Wind River Environmental Quality Commission (WREQC) of the Wind River Indian Reservation (Reservation) at Fort Washakie, Wyoming. I offer the following comments and questions regarding the Clean Water Action Plan (CWAP) to the Senate Environment and Public Works Committee.

1. The WREQC office is concerned that neither its staff or any other tribal environmental office were invited or notified of this hearing. This office and its counterparts around the Nation are responsible for the administration of many environmental programs, including several which fall under the auspices of the Clean Water Act—to which the CWAP has direct relevance.

2. The WREQC office is currently involved in the process of developing, water quality standards (WQSs) for the Reservation and has used the State of Wyoming WQSs as a template. The U.S. Environmental Protection Agency (EPA) Region VIII Headquarters Office has indicated that the existing Wyoming WQSs do not meet the minimum requirements of the Clean Water Act and must be modified to attain EPA approval. Because of the problems with the Wyoming WQSs, as identified by EPA, the WREQC office has been closely following both the WQSs revision(s) process and the Total Maximum Daily Load (TMDL) issue currently being undertaken by the State of Wyoming. The WREQC office has identified problems with the Wyoming WQSs and the proposed revisions as they relate to Reservation water quality. In addition, the TMDL issue has made the WREQC office aware of several errors and inaccuracies with the current 303(d) list (stream impairment listing) as submitted by the State to EPA. These problems include incorrect classifications of Reservation water bodies which may lead to a lack of protection for public drinking water supplies or, on the other hand, "overprotection" of water bodies which are not capable of supporting the beneficial uses as listed by the Wyoming Department of Environmental Quality (WDEQ).

3. As noted above in paragraph #2, the WREQC office is very concerned the WDEQ's lack of accurate information or credible data regarding State waters and the Reservation in particular. The WREQC office is mandated to provide the highest possible protection of the environment on the Reservation. It is the belief of the WREQC office that the WDEQ can not provide Reservation residents with adequate protection of its water bodies to ensure that they are "fishable and swimmable," as required under the Clean Water Act.

4. The State of Wyoming is the only State not to complete its United Watershed Assessment (UWA) which was required as part of the CWAP. This inaction has led to the State being ineligible for supplemental Non-point Source Water Quality funds from the EPA. Most of these funds ($1,000,000.00) would have been available to the State's 34 Conservation Districts. The WREQC office has initiated contact with the four conservation districts which coincide with Reservation's exterior boundaries. These contacts are essentially attempts to coordinate and cooperate with the districts to ensure adequate and comparable data collection activities. The WREQC office realizes that the inactivity of the State with regards to UWA has eliminated the funding opportunities which may have been available to these conservation districts. The WREQC office did complete its UWA for the Reservation and expects to access any supplemental funds which are made available as a result of the CWAP implementation.

CONCLUSION

The WREQC office would like to express its concerns that, with regards to the CWAP, tribal issues have not been identified and tribal involvement has not been solicited by the Senate Environment and Public Works Committee. Perhaps, in your capacity as a member of the Senate Committee on Indian Affairs, you would introduce this important subject to that committee. Tribal concerns regarding the CWAP must be clearly identified and tribal environmental offices and governments must be allowed to actively participate in these important public discussions. Thank you.

Sincerely,

DON ARAGON,
Executive Director for WREQC.

STATEMENT OF THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS, NACD WATER RESOURCES COMMITTEE

The National Association of Conservation Districts represents the Nation's 3,000 conservation districts and more than 16,000 men and women who serve on their governing boards. Established under State law, conservation districts are local subdivisions of State government charged with carrying out community-based programs for the protection and management of natural resources. Conservation districts work with nearly two-and-half million cooperating landowners and operators and provide assistance in managing and protecting nearly 70 percent of the private lands in the contiguous United States.

Conservation districts have a successful 60-year history of carrying out local programs to improve the quality of the Nation's land and water resources. Partnering with State water quality agencies, State conservation agencies, the U.S. Department of Agriculture (USDA), the U.S. Environmental Protection Agency (EPA), and other agencies and organizations, conservation districts are key players in implementing Federal, State and local water quality protection and enhancement programs. Thus, we have a keen interest in initiatives such as the Clean Water Action Plan (the Plan).

The Clean Water Action Plan, which the Vice President unveiled in February 1998, has more than 100 nationally identified resource priorities and many of the actions identified will affect local producers, conservation districts and local resource priorities. While we recognize that there will be many opportunities to implement voluntary components of the Plan through the conservation district delivery system and the locally-led conservation process, we are deeply concerned that the EPA and USDA developed the initial draft of the Plan with little, if any, public or State and local government input. The agencies indicate throughout the plan, however, that successful implementation of many action items will rely on stakeholders, local governments and State efforts and involvement. The Nation's conservation districts oppose the method by which the Clean Water Action Plan was developed based on a lack of local input and the regulatory overtones contained in the Plan.

We also have concerns over one of the Plan's key components that could have a serious impact on agricultural producers—the Unified National Strategy for Animal Feeding Operations (AFO Strategy). Many States have nutrient management and permitting programs that already address animal feeding operations. Although the final AFO Strategy, released March 9, addresses some of our initial concerns relative to State primacy in dealing with runoff from animal feeding operations, we feel strongly that the current authority for States to develop these programs must not be preempted or compromised by the AFO Strategy. Nor should the Federal Government add conflicting requirements to existing State programs. We strongly urge EPA to work with State and local governments in refining and implementing the AFO Strategy and allow existing State programs that are attaining and maintaining federally approved State water-quality standards to operate in lieu of new Federal requirements.

The AFO Strategy and other Plan components also will have a serious impact on the workload of the agencies implementing it, as well as that of their non-Federal partners. USDA's Natural Resources Conservation Service (NRCS), working with local conservation districts, will bear the primary responsibility for providing technical assistance to help operators develop some 450,000 comprehensive nutrient management plans called for in the strategy. Further, the Plan also calls for implementing integrated pest and crop management systems, developing non-AFO nutrient and animal waste management plans, installing practices to reduce erosion and runoff and restoring and/or enhancing 100,000 acres of wetlands per year by 2005.

While these goals are praiseworthy, we must caution that considerable increases in Federal, State and local resources will be required to achieve them. NRCS and conservation districts, both of which will be instrumental in achieving these objectives, are already critically short of resources needed to address their current conservation priorities. Our National Field Workload Analysis showed a gap of more than 7,000 staff years needed to address 1996 Farm bill priorities and the ongoing workload of NRCS, conservation districts and their partners. To absorb an additional workload of the magnitude envisioned in the Clean Water Action Plan without providing substantial increases in funding will seriously compromise our efforts to provide quality assistance to affected landowners and operators.

Although we are troubled with the way the Plan was developed, we do support a number of its individual initiatives. For example, conservation districts strongly support the President's budget initiative to increase funding for USDA's Environmental Quality Incentives Program, EPA's Section 319 program, the Forest Service's State and Private Forestry Programs to help address the increased workload. We also believe that the proposed EPA Better America Bond Fund offers considerable opportunities to help communities address water quality issues through preserving green space and redeveloping brownfields.

Conservation districts are committed to preserving our Federal-State-local partnership's voluntary, incentives-based approach in providing assistance to landowners and operators. We also support EPA's role as a regulatory agency within its current authority under the Clean Water Act. We do not believe that additional laws or rules are needed that would broaden EPA's regulatory and enforcement authority over animal feeding operations.

The Nation's conservation districts are committed to finding and implementing voluntary, site-specific solutions to water quality issues developed through partnerships with other local, State and Federal agencies. While it is important to have a regulatory framework in place to deal with point source water quality issues under Clean Water Act jurisdiction, we believe the Federal Government's primary role in addressing nonpoint source pollution should be to continue providing technical and financial resources to help farmers and ranchers to craft voluntary solutions. For every dollar we invest in conservation technical and financial assistance, American taxpayers receive multiple benefits, including cleaner and safer surface and groundwater sources.

There are none more committed to good land and water stewardship than America's 3,000 locally-led conservation districts. We welcome the challenge of restoring and maintaining the Nation's waters and stand ready to work with the Congress and the Administration to accomplish these goals.

We appreciate the opportunity to share conservation districts' views on the Clean Water Action Plan.

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