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WATER QUALITY

HEARING

BEFORE THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

ON

WATER QUALITY

FEBRUARY 23, 2000

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WATER QUALITY

WEDNESDAY, FEBRUARY 23, 2000

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC.

The Committee met, pursuant to notice, at 9:02 a.m., in room SR–332, Russell Senate Office Building, Hon. Richard Lugar, (Chairman of the Committee), presiding.

Present or submitting a statement: Senators Lugar, Coverdell, Fitzgerald, Harkin, Baucus, and Lincoln.

OPENING STATEMENT OF HON. RICHARD G. LUGAR, A U.S. SENATOR FROM INDIANA, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

The CHAIRMAN. This hearing of the Senate Agriculture Committee is called to order.

Before we commence our hearing on the issues before us this morning, the chair would like to announce, before we get into those issues, some of the pending business of the Committee in coming days. Members of staff will hopefully inform senators who are not here and those of the press who are following these issues may want these heads-ups.

The Crop Insurance Risk Management mark-up will occur on March 2, which is a week from tomorrow, and that day of mark-up may very well include consideration of Senator Allard's bill on interstate shipment of birds in the cockfighting situation. We may also consider approval of a Texas watershed project. Because of the size of the Federal contributions, it requires at least some scrutiny and thought by our committee.

The issue of interstate shipment of state-inspected meat will not be considered during the mark-up of March 2, but we will have a hearing scheduled on that matter. A number of senators wish to be heard, as do other parties. So, as opposed to a more immediate action by the Committee, we will have a hearing in the near time frame.

In January, after a hearing which we had on consolidation, I wrote a letter to the Justice Department which conveyed many of the themes of that hearing, asking for their clarification. Specifically, we asked about the Hart-Scott-Rodino premerger applications filed over the last 5-years, a five-year trend line of useful resources, both financial and personnel, which the Antitrust Division has allocated to these agribusiness cases, allocation and use of the premerger fee and a number of issues of this variety. We are advised that the Justice Department will respond now within the

next 10-days. So for those following the consolidation merger issue, that will be a timely response and we will proceed from there.

Finally, I would mention that there is interest in the Committee on the soybean sign up, which of course came about in the farm legislation of last year. We are advised that the sign up will continue until March 31. Once the sign up period is complete, USDA will determine the exact payment amounts for each producer who has signed up. Currently it is estimated that a producer with about 100 acres of soybeans would receive a check approximately of $333 if all 850,000 soybean producers sign up. So this is still pending, an aspect of unfinished business from the last farm bill.

I will give a short opening statement. Senator Thomas has asked to be heard and if he appears, he will then give a statement just after mine. Then we will have a distinguished administration panel for extended testimony following that, and then finally a panel of states and local industry witnesses.

The Committee meets today to discuss the issue of water quality as it pertains to agriculture and forestry. Our particular focus this morning is the Environment Protection Agency's proposed changes with regard to the Total Maximum Daily Load Program and the subsequent changes in the National Pollutant Discharge Elimination Systems Program. Many in the agriculture and forestry community have concerns about how these proposed regulations will affect their businesses, as well as their involvement in ongoing watershed restoration.

Under the Clean Water Act, states have utilized voluntary programs and approaches to protect water quality. We want to hear today about the effectiveness of this approach. The states are concerned that the proposed EPA regulations represent a major significant shift away from historic voluntary and collaborative efforts toward watershed-based approaches. These collaborative watershed strategies are the basis for voluntary incentive-based solutions to control nonpoint source pollution.

State water quality agencies, the Defense Department's Clean Water Act Services Steering Committee, the Department of Agriculture and the United States Chamber of Commerce, representing more than 3-million U.S. businesses, along with many forestry and agricultural groups, question EPA's proposed revisions. They claim the proposals would exceed EPA's authority, undermine states' rights, and impose exceptional costs and impede economic development.

We also want to address today EPA's legal authority to regulate nonpoint source pollution. The Congressional Research Service, in a legal memo prepared for the Agriculture Committee, has stated it does not appear that EPA has legal authority to regulate nonpoint sources under the Clean Water Act. EPA appeared to concede this point at a House hearing last week, but we shall hear more about that this morning.

Meanwhile, the water quality challenges remain, and agriculture and forestry's downstream neighbors will, with justification, expect progress. The question then is how can we best work together to improve our nation's water quality? Is it best done by command and control or by further commitment to incentive-based watershed

approaches, which may not have had either the time or the investment to work thus far?

This Committee has offered leadership on incentives for water quality efforts. The 1996 farm bill was one of the most environmentally responsive and responsible farm bills in our nation's history. It included the Environmental Quality Incentives Program [EQIP]. Senator Leahy and I were co-authors of that in a bipartisan push.

Now, this is a highly successful program that is targeted to states with environmentally sensitive areas. EQIP provides producers with flexibility needed to address nonpoint source problems, which vary within a state, from state to state and from watershed to watershed. These problems can also vary from season to season and from year to year. nonpoint source pollution is very site-specific and EPA should incorporate maximum flexibility into any revision of the proposed regulations.

It is my hope that this hearing, in addition to being a forum for the airing of concerns about these particular proposed rules, will also be the start of a dialogue on how we can make progress in an incentive-based system to address water quality challenges associated with agriculture and forestry. This may involve more funding for our nonpoint source programs, such as EQIP, the Wetland Reserve Program, and the Conservation Reserve Program. We should also examine how to increase the use of other market-based approaches. It is through a combination of well-funded and innovative strategies that we will best address agriculture's water quality challenges.

[The prepared statement of Senator Lugar can be found in the appendix on page 54.]

I note the presence of the distinguished senator from Wyoming, Senator Thomas. Would you please approach the podium and we look forward to your testimony, as always, Craig. You are a good friend of the Committee.

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

Senator THOMAS. Thank you, Mr. Chairman. I appreciate the opportunity to be here. I appreciate the Committee holding this hearing and allowing me the opportunity to participate.

I applaud the Committee for examining how the Environmental Protection Agency [EPA] actions will impact agriculture producers and foresters. EPA's water quality proposal of total maximum daily loads [TMDLs], is an issue of great concern to me and to people in Wyoming and, I am sure, also of this Committee.

The most pressing threat considered by our farmers and ranchers in Wyoming is not the commodity price or market concentration as much as it is being regulated out of business.

As a member of the Environment and Public Works Committee, which has jurisdiction over the Clean Water Act, we have followed the administration's executive order initiating the Clean Water Action Plan. Many of us strongly are concerned and opposed to the use of executive orders to launch efforts as broad and far-reaching as the Clean Water Action Plan, essentially one-hundred-eleven "key actions" affecting Federal agencies, state and local govern-

ments. Several of these key actions are incorporated into the TMDL proposal, including key action number forty-three, restoration through enforcement, key action seventy-one, anti-degradation guidance for pollution run-off, and key action number seventy-six, link total maximum daily loads to air disposition.

Since the Clean Water Act leaves nonpoint sources largely unregulated, it is our responsibility to ensure that the action plan does not become a mechanism for agencies to overstep their statutory authority. However, based on how EPA has revamped the TMDL program, their actions explicitly seek to bypass the Congress.

Congress has spoken on how nonpoint source pollution should be addressed in the 1972 passage of the Clean Water Act and again in 1987 with respective amendments. Congress specifically limited EPA's authority to covering pollution stemming from point sources. Moreover, Congress created the TMDL program to reduce water impairment problems caused by point sources, and an alternative approach was taken for nonpoint source pollution, one focussed on voluntary and incentive-based measures.

Over the past 2-years, I have challenged the statutory authority of EPA to regulate run-off pollution for nonpoint sources. The EPA has responded by stating that Congress did not expressly prohibit the Agency from regulating nonpoint source pollution. Mr. Chairman, we have nonpoint source programs in place that have achieved significant environmental benefits and should be duly credited.

I firmly believe that Congress should stop this aggressive and unwarranted approach. If EPA wants to make program changes, the Agency should work with the Congress. I assure you the EPW Committee would not have endorsed this type of top-down prescriptive plan.

None of us disagree with the importance of improving our nation's water resources, of course. Nor would we disagree that some nonpoint pollution sources are impairing water bodies. However, we do not have sound water quality data that would provide an accurate portrayal of water bodies impaired by nonpoint source pollution. Unfortunately, what EPA and many states are using—nonquantitative assessments—are subjective evaluations. Without using sound, creditable science to assess the health of our waters, we can be sure this initiative and the taxpayers dollars will be questioned. Will they, in fact, reduce pollution?

Instead of forcing such an immense program on our states, I propose EPA would first accurately identify the problem. After collecting scientific data, if nonpoint sources are found to be a significant obstacle to clean water, I would urge the 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.

I believe the letter Under Secretary James Lyons sent to Administrator Browner could not have been more accurate in articulating how the EPA rules would adversely affect agricultural producers and foresters. Attempting to regulate agricultural and silvicultural activities in the same manner as point sources demonstrates a lack

of understanding or a complete disregard for the industry's production practices.

I am disappointed to see USDA abandoning its position on the proposed rule. USDA, through its Natural Resource Conservation Service, has done a commendable job, as a matter of fact, in reducing run-off and improving water quality with their limited resources. It is frustrating to watch the department fail to defend its own programs but instead, apparently sort of cave in to political pressure. Certainly if funding for nonpoint source programs was given as high a priority as point source programs, it is safe to say there would be a vast improvement in the quality of water.

More importantly, through NRCS's functions in a facilitory role with producers by providing on-the-ground technical assistance, these people have formed true partnerships with producers to resolve water impairment problems. But the EPA believes improved water quality is best achieved through regulation.

It is my strong belief these types of problems are more effectively addressed at local and state levels, rather than through the Federal mandates. Certainly we all have a responsibility to improve the water quality. The question is the approach and how do we approach the problem without placing an unfunded mandate on our states and landowners?

So, Mr. Chairman, that is the point of view that I hold and have expressed in other committees and thank you very much for the opportunity of sharing those views here with you.

The CHAIRMAN. Well, we thank you for coming to the Committee to make that presentation.

I will call upon Senator Harkin, first of all if he has questions of Senator Thomas and, if not, we will excuse Senator Thomas and Senator Harkin then will proceed with his opening statement.

Senator THOMAS. Thank you, Sir. I appreciate it.

Senator HARKIN. Thank you. I have no questions. I just want to thank my colleague for coming and testifying and for his long-time interest in water quality. I appreciate it very much, Craig.

The CHAIRMAN. Thank you.

Senator Harkin?

STATEMENT OF THE HON. TOM HARKIN, A U.S. SENATOR FROM IOWA, RANKING MEMBER, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

Senator HARKIN. Thank you very much, Mr. Chairman. I apologize for being slightly late. I again ask that my full statement be made a part of the record.

The CHAIRMAN. It will be published in full.

Senator HARKIN. I just want to thank you for holding these hearings. It is a very critical issue. We are facing some very critical problems in water quality in Iowa. It has been estimated that about 20,000 or about 40-percent of our waters are impaired. I am sorry; about 150-waters in Iowa are listed as impaired; about 20,000 nationwide or about 40-percent of the total.

We established the Clean Water Act 25-years ago. Great strides have been made but it is obvious from even the most casual observer that we have a long way to go.

I am again pleased to see that our director of EPA, Carol Browner, is here, our distinguished Secretary of Agriculture, and I also want to point out that I think one of the foremost experts in this whole area is with us today, Mr. Paul Johnson, who is director of the Iowa Department of Natural Resources. He is former chief of the USDA's Natural Resource Conservation Service. He is a former state representative and a long-time, well-known conservationist throughout the Nation, again also a long-time personal friend.

I just wanted to make those opening statements, Mr. Chairman. This is an issue that again I think a lot of people thought we just passed the Clean Water Act and we could move on. But there are all new sources of pollutants and nutrients entering our water that we had not anticipated 25-years ago.

I believe we have to come up with comprehensive new approaches to some of these point source and nonpoint source pollutions. I believe we have to put more incentives in for farmers to practice better conservation practices. That is why I have introduced the Conservation Security Program that would provide direct payments to farmers on a voluntary basis to encourage them to practice better conservation methodologies.

I think the voluntary approach is one that has worked in the past with the Water Quality Improvement EQIP program. Both of them have shown their worth. And, I think this is going to be one very major element.

The second is to provide, I think, some national standards for run-off from some of our large feedlots. We still have a patchwork quilt from state to state and area to area as to what we are allowing in terms of run-off from these large confinement operations.

I have been watching the growth of these large animal feeding operations and they use the word "confinement." I think that is a pretty loose term. They do not really confine the run-off that much and we are seeing a lot of it polluting our waterways, our underground water, some of our underground wells, and I think we are going to need some national standards on that, which we still do not have.

So those are just my thoughts on that. Again, Mr. Chairman, I appreciate your having the hearing and again ask that my statement be made a part of the record.

The CHAIRMAN. Thank you very much, Senator Harkin.

Senator Lincoln, do you have an opening comment?

STATEMENT OF THE HON. BLANCHE LINCOLN, A U.S. SENATOR FROM ARKANSAS

Senator LINCOLN. I do, Mr. Chairman. Thank you so much and thank you for allowing us to have this hearing today.

I will really cut right to the point. In this issue, as it has evolved in my state, it just does not seem to make a whole lot of common sense to add an unnecessary regulation on our nation's private landowners, who are already conducting responsible harvesting of their own private timber. And this is in regard obviously to the timber industry. I know you have been talking about some of the agricultural aspects of it, as well. It is not economically sound and it is not good for the environment we are seeking to protect.

There are already many, many state and Federal regulations, as well as best management practice guidelines in place, to limit and control nonpoint sources of pollution. I fully support the Best management practice(s) [BMP] guidelines already instituted in many industries across the Nation and especially in our private forestry industry and think we should be promoting them as much as possible.

In fact, I believe I am correct in saying that the Environmental Protection Agency supports these programs, as well. They have approved forestry BMP programs in Arkansas and in many other states as an acceptable solution to the problems of nonpoint source pollution. They have been working effectively in our state and in many other states.

In Arkansas over 85-percent of our private forest landowners voluntarily follow these BMPs to strictly limit and in many instances eliminate the discharge of pollutants from forestry activities. I just would like to reiterate that point. Eighty-five percent of Arkansas's private landowners are voluntarily spending time and money to ensure that when they harvest their timber, they do not unnecessarily disturb or harm the environment. That is a pretty good track record—85-percent participation on a voluntary basis.

It simply makes sense to do so. I mean after all, they have to live on that land and drink the water, too. So they are interested in making sure that they are preserving and operating under good conservation measures.

I have introduced a bill that takes these facts into account. My bill, S. 2041, promotes the continued voluntary implementation of BMPs by eliminating any potential new Federal regulatory burden from being placed on private forest landowners.

Many silviculture activities that benefit the environment, such as conducting responsible harvesting and thinning, voluntarily following best management practices, and promoting reforestation, will actually be discouraged by the proposed regulations.

I wish we did not have to resort to legislation to statutorily enforce what the Congress originally intended in the Clean Water Act, that the EPA has jurisdiction over point sources of pollutants but not nonpoint sources. But, Mr. Chairman, it seems that we have no other choice or that this is one action we have to take in order to find a resolution elsewhere. Simply put, my bill statutorily exempts forestry nonpoint sources of pollutants from the EPA's point source regulations.

Having said all that, I want to reiterate that I want to find a sensible solution to the problems of maintaining clean water. I have introduced my bill to statutorily ensure that forestry sources of nonpoint pollution remain so and there should be an easier way to go about this.

Certainly we can come up with a better solution than to have to step in and statutorily limit the EPA's authority. I think it has been shown through the good work of the forestry industry what they have done with the BMPs, that we can reach the goal of maintaining clean water through education and implementation of voluntary programs for nonpoint sources and not through mandatory permitting for nonpoint sources of pollution. Why would we want

to implement what has been described at best as a confusing, unpredictable extension of the TMDL regulations?

The Arkansas Department of Environmental Quality, which I might add has full EPA delegation for all of its water permitting programs in Arkansas, has stated publicly that they do not have the capability or the manpower to implement these new TMDL regulations. Furthermore, they have also negotiated with the EPA and the forestry industry to create an agreement on implementing nonpoint source pollutant controls.

I would just like to restate that the state of Arkansas has an EPA-approved method of limiting nonpoint sources of water pollution. I would think that, that would be enough for us. I would hope that it could be. In trying to encourage, as oppose to mandating what we want to see happen in terms of conservation, it is certainly going to, in the long term, come up with better results.

To exacerbate things, there is a lawsuit currently pending in Arkansas by the Sierra Club that would expand Arkansas's 303(d) listed waters to around one-hundred-ninety waters. That would almost quadruple Arkansas's current fifty-one-stream segments on the 303(d) list covering eighteen different rivers and streams. So it would seem to me that this lawsuit, along with this regulation, would essentially require a point source water permit for normal timber operations over almost our entire state of Arkansas. This just seems to be a bit excessive. It does to me and I hope that others with EPA and the Department of Agriculture and the Chairman and my colleagues might see some of that excessiveness so that we could come about with a solution.

Mr. Chairman, I am sorry to have taken so much time and I will finish by saying that I agree that we need to do all that we can to ensure that our nation's waters remain clean and usable for many generations to come. I am a mother, as well, and I want to see that happen for my children, too. But I do not believe that attempting to regulate nonpoint sources of pollutants as a point source is the way to do that. Simply requiring point source permits for nonpoint sources of pollutants will do nothing but overburden the state and Federal regulatory agencies, as well as the farmers and foresters required to follow the new regulations.

In the end, Mr. Chairman, these new rules get us nowhere closer to a cleaner environment than we would get from a voluntary program. They become unnecessary and certainly unreasonable in the entire scheme of what we are trying to accomplish.

So thank you, Mr. Chairman, for holding the hearing and I appreciate and look forward to visiting with my colleagues who will be witnesses and testifying. Thank you.

The CHAIRMAN. Thank you very much, Senator Lincoln.

The chair would like to call now our distinguished witnesses from the administration, first of all, Ms. Carol Browner, Administrator of the Environmental Protection Agency. She will be accompanied by the EPA Assistant Administrator for Water Chuck Fox.

Let me ask Ms. Browner, I am not certain of the arrangements made with staff. Do you wish to testify by yourself or would it be permissible to have the Secretary of Agriculture—in that case I will call the Secretary of Agriculture simultaneously. Deputy Secretary Richard Rominger, as often is the case, is accompanying him, and

the Under Secretary for Natural Resources and Environment James Lyons.

Let me just take this moment to say that the last time we were all assembled, as I recall, was at the USDA. It was a summer program involving the President of the United States and on that occasion he was generous in commending an article which James Woolsey, former Director of the CIA and I had written for Foreign Affairs Magazine of a year ago January in which we, in essence, said that OPEC might strike again and that we really ought to try to take some thoughtfulness about biomass research. Our committee has taken favorable action on that bill. We are hopeful the Senate as a whole may do so soon because this does offer an avenue, not for a solution of the current problem or the future ones that may be before us, but a significant way in which the agricultural and environmental communities, both parties, the President and the Congress could participate in a constructive solution.

So I appreciated your asking me to be with you on that occasion and we are grateful that you are with us today.

At this point I would like for you both to testify. Because your testimony is very important, we will not put a limit on it. You have had this process before and know that it is helpful to some extent to summarize your comments because I know there will be questions and maybe even some dialogue between the two of you.

First of all, Administrator Browner.

STATEMENT OF CAROL BROWNER, ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC., ACCOMPANIED BY CHUCK FOX, ASSISTANT ADMINISTRATOR FOR WATER, ENVIRONMENTAL PROTECTION AGENCY

Ms. BROWNER. Thank you, Mr. Chairman and members of the Committee. We are very pleased to be here today. I am particularly pleased to be joined by Secretary Glickman and his colleagues, with whom we work very closely on any number of important issues, issues important to the agricultural community, the forestry community, and environmental and public health protections for the people of this country.

We appreciate the opportunity to talk to you about what we believe is one of the most important steps that we can take to ensure the goals of the Clean Water Act, actually goals that were anticipated by the Congress in a bipartisan manner almost 30-years ago now. Those goals, quite simply put, were to ensure that the people of this country would have clean water, they would have water that is drinkable, fishable and swimmable.

We have made a lot of progress and it is progress we should all be very, very pleased with. When the Clean Water Act was first passed in 1972 and working with this committee and other members of the Congress over the last 7-years, we have made tremendous progress. Behind us are the days of rivers catching on fire, of lakes dying slowly. Today, without a doubt, our waters are cleaner, thanks to a team effort—Federal, state, local governments working with industries, individual stewards of the land, farmers, ranchers and forest managers.

But it does not mean that all of our problems have been solved. An overwhelming majority of Americans—218-million—still live

within 10-miles of a polluted water body. Over 20,000 water bodies do not meet water quality standards, standards that have frequently been set by the state government. We certainly still have work to do and, Mr. Chairman, I appreciate your comments and other members of this committee recognizing that there is still work that remains to be done.

As we all know, the proposed revisions to the water pollution control program that EPA has put forward were designed to help us solve the remaining water quality challenges and problems that we face. The program is called the TMDL program and I think everyone knows but I think it is worth reminding all of us what TMDL stands for—total maximum daily load.

As a practical matter, what a TMDL is, is a pollutant budget for a specific river, lake or stream. It looks at the individual river. Not all rivers are treated the same but individual rivers, individual lakes, individual streams, and it determines how much more pollution needs to be removed from that river, lake or stream to ensure that water quality standards are met. It is a very, very sensible way to do the final work necessary to ensure clean water for all people in this country. A TMDL is essentially a quantitative measure of what it takes to achieve water quality goals.

The TMDL program is led by states and communities because they are in the best position to make the decisions as to how to reduce the remaining pollution, how best to achieve the water quality standards and the water quality goals.

The proposal which EPA put out was many, many years in development. While the public comment period has closed recently, we have not yet made any final decisions. And Mr. Chairman, again let me thank you for calling this hearing at this point. This is extremely valuable to us as we review all of the comments we have received, as we continue in the dialogue with USDA and others. And we do hope to finalize this proposal sometime this summer.

Let me give you my personal assurances that we are going to do everything we can to incorporate many of the ideas that we have heard from these hearings so that we can produce a program that will best serve the interests of all of the American people.

Now the concept of TMDLs or the concept of a quantitative approach is not untested. Recent history tells us that the quantitative approach will, in fact, achieve significant results. I just want to give you one example. I have others, but let me give you one example—the Great Lakes.

In the late 1970s our fresh water treasure known as the Great Lakes were in tremendous danger. That was widely accepted, both in the Great Lake states but across the country. And so our Nation, our friends in Canada, the Great Lake states, we all came together and we developed quantitative pollution targets. How much pollution did we need to get out of the Great Lakes to restore the Great Lakes?—very, very similar to what a state would do in a TMDL program.

What has happened? The Great Lakes are absolutely on the rebound. We have a plan. We are working in partnership with states, with communities, with industry, with farmers, and the Great Lakes are on the rebound. Similar efforts are reviewing the Chesapeake Bay, the Long Island Sound.

Successes like these led EPA to convene an advisory committee several years ago to take a hard look at the TMDL program and to develop recommendations for improving it, to look at what we had learned and to see if we could not incorporate those tools, that knowledge, into a program that other states could then take advantage of.

The advisory group was a diverse group and I will tell you something—they did not agree on everything. There was lots of discussion, lots of different points of view. But it is their recommendations that formed the basis for the program proposed by EPA last summer.

Mr. Chairman, I look forward to discussing with you and the members of the Committee these changes in more detail, but let me just say one thing in closing. This proposal was intended to honor and reflect what makes this program so effective to begin with. And, as Senator Lincoln pointed out, it is the work of the states that has made this program so successful thus far. Nothing in our proposal should be construed to change that and if it has created that impression, then we will fix it because we know that this work, at the end of the day, will best be done state by state.

When we finalize this program this summer, I think it will be very clear to make sure that everyone understands what the program will not include. Very quickly, our proposal, nor will the final program require a Clean Water Act permit for nonpoint sources of pollution. Let me say that again. No Clean Water Act permit for nonpoint sources of pollution. This means that there will not be a Clean Water Act permit for the vast majority of silviculture operations—not all, but the vast majority. It will not create a program run out of Washington. It will allow the states to set the goals, to write the plan, to implement the plan.

Finally, let me mention that the administration does have a budget pending before Congress that seeks additional funds for the states, as Senator Thomas spoke to the need for funding. We are specifically asking in the EPA budget for an increase of $45 million for TMDL development by the states. This would be a base of $110 million, so a significant increase in funding for the states.

In addition, we are seeking an increase in nonpoint source pollution grants of $50 million on a base of $200 million, again money for the states. Mr. Chairman, you have our commitment that we will work with all parties as we seek to finalize this program.

The 1972 Clean Water Act set an ambitious national goal of fishable and swimmable. We can achieve it by working together. Thank you.

[The prepared statement of Ms. Browner can be found in the appendix on page 56.]

The CHAIRMAN. Thank you very much, Administrator Browner.

Secretary GLICKMAN.

STATEMENT OF HON. DAN GLICKMAN, SECRETARY, UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, DC., ACCOMPANIED BY RICHARD ROMINGER, DEPUTY SECRETARY OF AGRICULTURE; AND JIM LYONS, UNDER SECRETARY OF AGRICULTURE FOR NATURAL RESOURCES AND ENVIRONMENT

Secretary GLICKMAN. Thank you, Mr. Chairman, Senator Harkin, Senator Lincoln. I want to thank you for inviting USDA to appear, along with my colleague Carol Browner. With me, today are, if Deputy Secretary Rominger and Under Secretary Jim Lyons.

We share EPA's commitment to cleaning the waters of the U.S. and building on successes reducing water pollution over the past several decades. But to some degree, those accomplishments were the easy part. The remaining pollution concerns, as highlighted in the President's Clean Water Action Plan which Administrator Browner and I helped to prepare, are so-called nonpoint sources of pollution such as soil erosion, urban run-off, pollutants from animal feeding operations and other sources that do not come from a single, simply-identified source. Addressing these nonpoint sources of pollution is the great challenge that remains to further improve our waters to make them fishable, swimmable, and potable.

To accomplish these next steps in cleaning our waters will take a concerted effort from farmers, ranchers, and forest landowners, as well as urban and suburban residents. Notwithstanding all the work that remains, farmers, ranchers, and foresters have been working for years to reduce the effects of their operations on water quality. Much has been done in this regard using many of the conservation tools that Congress and the department wrote into the previous three farm bills.

I do not have to restate them all but we have the Conservation Reserve Program, the Wetlands Reserve Program, and the Conservation Reserve Enhancement Program. They have helped improve the waters of Chesapeake Bay, salmon habitat in Oregon and Washington, and drinking water supplies for New York City. The President's budget has requested $1.3 billion above currently authorized levels to bolster our agriculture conservation programs.

I am proud of agriculture's and forestry's contributions to the Nation's efforts to clean our waters, while recognizing that we can and should do more. The question is how should we proceed with our efforts to reduce nonpoint source pollution and what additional tools are needed to realize further gains?

I believe we must proceed carefully and thoughtfully. As you know, American farmers and ranchers have for the last 3-years suffered from rock-bottom prices, shrinking global demand, record worldwide production, and a slew of natural disasters. Simply put, as you know, Mr. Chairman and so does Senator Harkin and Senator Lincoln, farmers are under extraordinary financial distress right now and more than ever, they need clear and understandable information about how any new proposed regulation might affect their operation.

The proposed rules are for some folks confusing, and in the agriculture community we have heard that—they are confusing. The language of the draft rule is complex and frankly, it would present a challenge to any expert on the issue. By its very nature, these

rules are complicated because they deal with technical aspects of pollution control.

But first and foremost, farmers need a clear statement of how the proposed rule would affect them. Farmers demand clarity and I think they can deal with a lot of things but what they do not need is more uncertainty out there. And I think this is something that Carol and I are working on very, very closely and she understands that better than almost anybody else that I know.

I do want to clarify the situation regarding the department's position on these proposed rules. On October 22, 1999, Under Secretary Lyons sent a letter to Administrator Browner commenting on EPA's proposed rules. Senator Thomas referred to that. The letter had not, however, gone through departmental clearance. And, more importantly, I never reviewed it.

Accordingly, it does not represent USDA's official position. Now I will be talking about the content of the letter, which I generally agree with, but the fact is that substantively, that letter did not go through our formal clearence process. And I would have sent a different tone if I had seen that letter.

The fact is that we are working together—USDA and EPA—on this issue very closely. Some are using the letter to drive a wedge between USDA and EPA on the issue and the letter unfairly questioned the EPA's interpretation of its own legal authorities. Let me make clear: I have enough problem with USDA's legal authorities, let alone to comment on EPA's legal authorities, particularly as they relate to that agency, which has been charged by Congress to implement the Clean Water Act. So that is something that in the letter I just thought was inappropriate and I thought I would mention it to you.

I do have concerns about the proposed rule but I believe adjustments can be made without undermining the intent or the letter of the law. We have formed an interagency group with EPA to work through our concerns. The group has been meeting regularly. It is making progress and I want to make it clear that EPA has been more than willing to work with USDA in dealing with the problems that we are raising and I will talk about today a little bit.

For example, number one, and Senator Lincoln talked about this, I believe the rules should recognize the best management practices of America's farmers and ranchers and give necessary credit to those best management practices in the rule. I think the rule should be more clearly constructed and minimize adverse effects, where possible, on agricultural and silvicultural operations. And third, it should allow for reasonable time frames for planning and implementation.

I want to take a moment to summarize our major concerns. First, the rules should recognize the voluntary conservation efforts farmers and ranchers and timber companies are practicing on the land. The rule should clarify that a farmer's best management practices, such as a streamside buffer on farm and forest land, will be taken into account when determining how to best meet clean water standards. The fact is over the years, the Natural Resources Conservation Service [NRCS], and other agencies within USDA have been spending millions of people-hours and hundreds of millions of dollars to help farmers and ranchers and foresters do the best job

they can to make sure that the soil and water is protected, and those efforts have produced profound positive effects on the country and the landscape. And these practices, which continue with the technical assistance of NRCS, must be continued.

I do not want to see farmers confused into believing that those practices would become subordinate to a regulatory approach, except maybe on the most dire circumstances where nothing is being done by anybody.

Second, the EPA should provide comprehensive cost projections of the impact of the proposed rule on agriculture and silviculture.

Third, the rule should clarify if and when the process would apply to discharges from silvicultural activities. USDA and NRCS knows what works well in implementing, especially the Forest Services does, what works well in implementing TMDLs in forested watersheds and the rules should reflect our field experience. USDA's partnerships have shown that an adaptive and collaborative TMDL process that relies on best management practices and monitoring often has the best chance of efficiently attaining water quality standards.

What we have found over the last 50- or 60-years is by actually working with people, giving them the technical assistance and the resources, they will actually do the best job of anybody in maintaining their land.

Finally, we are concerned about the science being used in assessing and attributing the effects of nonpoint source pollution. Theoretical models have a high level of uncertainty and there are gaps in the data regarding what is natural background pollution versus what is caused by human actions. So these are issues that we need to work very, very closely together on in order to create rules which are clear and science-based.

We believe education and partnerships are going to play decisive roles in efforts to improve water quality. The proposed rule should be fair, clear, and provide farmers particularly with great certainty. With this in mind, we are diligently working with the EPA to resolve our concerns and I am confident, in fact, that we can do this.

So Mr. Chairman, I thank you for this opportunity to appear before your committee and we look forward to your questions.

[The prepared statement of Secretary Glickman can be found in the appendix on page 74.]

The CHAIRMAN. Well, thank you very much, Secretary Glickman.

Ms. Browner, let me make a comment, to be followed by a question on the legal authority issue that I raised in my opening comments. This comes, and I always hate to reduce these arguments to anecdotal, almost parochial situations, but Senator Lincoln has raised this in her testimony, as have others.

During this winter season we have harvested on our farms some poplar trees that apparently were in the way of what we thought were higher value trees. Most people in Indiana know that, that we are interested in this, so when these activities come I have seen forestry people from all over our state who know that I am involved in the business and believe we ought to be concerned about this.

The thing that caught their concern especially was this issue that you raise, that most people in silviculture would not be affected by that. Yet in a hearing in the New England EPA Region

I at Concord, New Hampshire on December 17, Mr. Kraft said that "Ultimately, it will be left to the states, but we would have to approach each request for a permit to conduct a logging or logging-related activity to assure it wouldn't harm the water." That was very site-specific and rather inclusive.

As a followup, in a more general case, essentially some have cited the 1977 DC. Circuit Court opinion of National Rural Development Council [NRDC] versus Costle in which the ruling was that EPA has no authority to pick and choose which point sources to regulate based on whether they are significant contributors. That is a problem. In a way, Mr. Kraft, whether he was right or wrong, was consistent apparently with the 1977 case and, quite frankly, this is what drives much of this argument.

One of the reasons we are having the hearings is not only the problems that Senator Thomas raised, and he has some very large foresters. Western state problems are very, very substantial. But in Indiana, we do not have very many large foresters. Maybe Senator Lincoln has some of both, for all that I know. But in any event, this general discussion has struck some fear in the hearts of almost everybody if you have five acres or upward if you are talking about everyone and the inability of EPA to pick and choose, despite the assurances you have given.

So with all of that build-up, what do you have to say about the illegal authority? How can you pick and choose? What reassurances can you give to foresters all over the country of various sizes?

Ms. BROWNER. First of all, as Senator Lincoln pointed out, the vast majority of states today run the clean water program on a day to day basis in their state. We are not involved on a day to day basis. We are not involved in permitting decisions on a day to day basis. Nothing in this proposal changes that. States would continue to do the job that they have been doing.

The TMDL is an opportunity for a state to develop a plan that reduces the remaining pollution that needs to be reduced. It is up to the state to decide where those cost-effective reductions can be found. We have tried to be clear, and I am now completely convinced that we have failed to be clear, but we tried to be clear that when a state develops a plan, a TMDL plan, they could give credit for BMPs for voluntary—I will read you the language—"voluntary and incentive-based actions may also be acceptable measures of reasonable assurances," and it goes on and on. This is in the FEDERAL REGISTER. This is what we said when the proposal went out.

So in other words, as a state develops a plan and they know they have to get so many pounds of nitrogen out of the water, out of the stream to make it healthy, they go back and they look at the sources of nitrogen and they say we can get so many pounds from this industrial source, we can get so many pounds from another source, and our best management practices among the forestry efforts in our state will get us this many. No permit would be required in that instance. They have a plan. They have reasonable assurances for getting the pollution reductions. They move forward with implementing the plan.

The vast majority of forestry activities would not require permits and I want to be the first to say that we think forests are good for water quality and that we think there are tremendous things going

on across the country already in the forestry industry that are enhancing water quality.

Can I just give you one example of something that we think is a great success? The Simpson Northwest Timberlands. EPA and the State of Washington reached an agreement with the Simpson Timber Company, a large operation, as I understand it, to develop and approve a TMDL implementation plan for 250,000-acres of private forest land, which includes 1,400-miles of streams. We worked it out. It is doable.

Another example is in the Chesapeake Bay. There were some very serious problems in the Chesapeake Bay that were occurring because of some activities upstream. This was actually a program we did, I think, with the State of Maryland and the Forest Service to go back in and restore some riparian forest buffers. And because of this 60-acres of restoration, we are now getting 4,000-pounds of nitrogen reduction, 500-pounds of phosphorus and 100-tons of sediment reduction per year.

These are the kinds of best management practices that are already occurring in the country. You probably have them in each of your states. This is what we think should occur. We do not want to do anything that stands in the way of that. And if our proposal somehow or another has confused people, then we will fix it because we think that is one of the best tools we have for cleaner water at this point in time.

The CHAIRMAN. Well, it is a critical point and a very comprehensive and thoughtful answer. As you say, you are still formulating and you have commended the timeliness of the hearing to hear what you need to consider, and I think this is an area which you recognize as really very, very critical, given the legal precedents as well as the concerns that are persuasive.

Secretary Glickman, you have mentioned Secretary Lyons' letter on October 22, and the fact that although you did not sign off, you share many of the views. My understanding is that many professionals in USDA were deeply concerned about EPA's proposals, that Secretary Lyons was not acting simply in a fit of creativity, that he was sort of bringing those concerns to the fore.

Secretary GLICKMAN. It was certainly not in a fit, but I do not know about creativity or not.

The CHAIRMAN. Subsequently they have been more broadly shared. I do not want to berate the issue of why the consultation and coordination between the two agencies did not occur perhaps as much as it might have before then. Your assurance today is that whatever that might have been, it now is very intense and you both are here today, which we appreciate.

Secretary GLICKMAN. That is correct.

The CHAIRMAN. And that is important. At least in your full testimony you have stated that EPA should provide a comprehensive cost projection of the impact of the proposed TMDL rule on agriculture and silviculture. My concern is that probably you and the department ought to produce such a thing, to give at least from the standpoint of American farmers and ranchers, some idea of what you project the problem is. It could be a cooperative one but I just sense that those of us who are involved in the agricultural side of this would like the views of the professionals from the USDA as

to what is involved as all this hearing record is finally being put together and we begin to banter this about.

Now, it is not an academic problem. As we have collected testimony for this hearing, the cost estimates range so widely as to be almost an astronomical difference, and that is unsettling in terms of a public policy situation. So without going into histrionics about how far apart we are, I would just ask you to zero in on that project.

Likewise, with the Conservation Reserve Program, it would appear if USDA accepts more than 1.5-million acres through the recently concluded regular signup, it might encroach on the water quality acreage reserve. Now, this has been an important point with the Committee and with you with regard to the Conservation Reserve Program [CRP] program because the Clean Water Act Action Plan of 1998 was to hold back 4-million acres under the CRP enrollment cap for continuous signup.

Now, red flags may be down there at the department sort of understanding that we are getting close, I think, to the limits there but would you review that? Give us some assurance that the plans we already think were in operation that are certainly pertinent to what we are talking about today are not in the breach here.

Secretary GLICKMAN. We will. And again this is one of the concerns that has been expressed by our technical people, that here we are bidding in a lot of land in problem areas and taking it out of production for a long time and we do not want to see those efforts unnecessarily disturbed, and I do not think they need to be, but that is part of the review process.

The CHAIRMAN. One of the reasons that the CRP and the farm bill's aspect of that, that has been widely commended is that there were very important point totals given for these environmental assets that were to be preserved, so this is another one of those points. You have made proposals elsewhere, in other fora, about CRP and additional things we might do.

Secretary GLICKMAN. Right.

The CHAIRMAN. And I have commended many of those thoughts, but even at the same time, we do not want to undo that which seems to be very useful.

Let me, for the sake of the record and my enthusiasm over Mr. Kraft's testimony, which is about to occur, I gave him the title of the EPA Administrator Region I. He was not the person who testified in that region but he does mention that testimony in his testimony today, so just for the sake of the record I would like to clear up who said what.

Senator Harkin?

Senator HARKIN. Thank you very much, Mr. Chairman.

I will kind of cut to the quick on this perhaps a little bit in terms of silviculture. There is testimony I read that is going to be given later by Mr. Adler—I was reading his testimony and he said obviously the forest industry is fearful that these new proposed regulations, if implemented, would have some economic impact on them. He said clearly that is going to be the case in many instances.

Again it seems to me that when you are talking about forestry, just as you talk about agriculture, that there can be point and nonpoint sources of pollution coming from them. I am wondering if

you are thinking in terms of the proposed regulations as treating all forest operations as point sources of pollution. I do not know what you are thinking there. Or is this going to be maybe yes in some cases and no in other cases? Maybe you could explain that for me a little bit, Ms. Browner.

Ms. BROWNER. You are exactly right. There are some activities that generate a point source discharge and there are other activities which, quite frankly, do not.

The way the statute was set up, and I think the easiest way to think about it is that EPA, nor the states, can require a permit for nonpoint source runoff. A permit can be required for point source, and clearly we would all agree for industry, for large cities, for stormwater, and for those activities that significantly contribute to the detriment or the degradation of a water body.

So it is conceivable, and when we talk about the vast majority of silviculture activities would not require any kind of permit, I think we all know there are bad actors. We all know that, in every industry. It is unfortunate. There are the leaders, there are the people who are the visionaries, and then there are the bad actors.

I want to be clear. We are quite sure that there will be those out there, the bad actors, who are conducting their business in such a way that it is a point source that is contributing to the degradation of a stream and therefore the state can require them to get a permit. We believe that is a relatively small number of companies and that for the vast majority, the kind of best management practices that are in their own interests, that they are already engaged in, will be what they simply continue to do.

But for nonpoint sources, and we will provide, Mr. Chairman, with your permission, for the record a letter we sent to Senator Baucus yesterday in an effort to once again clarify this, we are very clear for nonpoint sources we cannot require a Federal permit, period. The Clean Water Act did not give us that authority. Nor would we be asking for that authority.

[The information referred to can be found in the appendix on page 245.]

Senator HARKIN. I think that outlines and cuts to the quick of what we are talking about. The only thing that is sort of left dangling there is definitions. How will you spell out in the new regulations how you are going to decide what is point and what is nonpoint? I mean obviously there are the clear instances we know of.

Ms. BROWNER. That is right.

Senator HARKIN. Then there are some that maybe get into gray areas. How are you going to provide some distinct lines so people know whether or not they are engaged in point source-type activities that could contribute to point source pollution?

Ms. BROWNER. I think that your comment is very on target. It is something we agree that we need to make clearer in the final program. I think that it is fair to say, and Secretary Glickman said this is not easy stuff. It will be easy, I think, out in the field, but what we have to write down to jump through all of the hoops that we are required to in creating a program and to try and reflect all of the debate that we heard makes for very difficult reading. I am the first to admit that.

I think there are several areas where we have heard repeatedly that we probably could have said it more clearly; we probably could offer more examples so that the states, when they develop their programs—I mean let me remind you, and this is the second point I would simply make—EPA does not write these. The states go out and write the TMDLs. They decide where the best place is to get the reductions from. They decide how much credit they can give to best management practices. That is done by the states, but clearly we need to give better guidance to the states on what they should be giving credit for, on what the definitions are, and I think your point is extremely well taken and it is something that we need to work with USDA and we would be happy to work with this committee and others to try and fix in the coming months.

I think we can fix it. I think we have learned a lot in these public hearings and it is something we need to fix.

Senator HARKIN. I wanted to focus on the forestry issue a little bit because I think that is really where you are going to get a lot of the rub on this.

Ms. BROWNER. Yes.

Senator HARKIN. Obviously row crop farmers now are fearing that wait a minute; if you can broaden this point source solution that broadly, then maybe they will be affected by it, too. So I think there is more than a little bit of legitimate fear from row crop farmers.

Now having said that, to the extent that we can continue down the road that Secretary Glickman has so courageously, I think, structured, and that is a combination of different approaches—the Conservation Reserve Program, extending it along the boundaries of waterways and making those longer-term-type permits—I think that is a great way to go. Extending the strips—I forget what they are called—the waterway strips and things that you have done in the past——

Secretary GLICKMAN. Buffer strips.

Senator HARKIN. Buffer strips—I could not remember the word—the buffer strips, I think has just done great stuff out there, and that has been very courageous, to take that step forward.

Second, implementing the voluntary-type programs. Now, I am not an expert on forestry. I do not know a lick about it. But it seems to me that what we have done in terms of the voluntary programs and what we are trying to do with the large animal feeding operations might have some applicability over there in terms of some standards, some national standards that we are doing in large animal feeding operations but more in terms of providing incentives for farmers to conduct their own conservation practices.

I do not know if that is applicable in forestry or not. I just do not know, but it is working in row crop agriculture.

I appreciate the department's support of the Conservation Security Program and the money that is in the budget this year for that. I think that is going to go a long way toward again helping our nonpoint sources of pollution in row crop.

I am just wondering if there is any such kind of thought in terms of forestry, the type of incentive-based program in forestry that would be voluntary and which again would be in their best interest. I just do not know if that is applicable to forestry or not.

Secretary GLICKMAN. Under Secretary Lyons may be able to comment quickly on that.

Mr. LYONS. Senator, we do have similar programs to help private forest landowners, private nonindustrial forest landowners in particular, and these are programs actually authorized, in part, by this committee in the 1990 farm bill. One is the stewardship program, the Stewardship Incentive Program, and those programs provide funding to private landowners to help them put in place conservation practices to address water quality concerns, wildlife habitat concerns, and the like.

Unfortunately, those programs have been woefully underfunded, worse so than the conservation programs. So we have had a difficult time getting traction, if you will, and getting those in place. But where they have been put in place, we have had some substantial success.

Senator HARKIN. One last thing, Mr. Chairman. I do not know if I can stay for the entire hearing but I just wanted to say that I am sending a letter to both of you today. "I just wanted to state that I have strongly supported your agencies' joint efforts on the unified national strategy on animal feeding operations."

"However unfortunately, with the release of the Draft Guidance Manual and the Draft Comprehensive Nutrient Management Plans, it appears that USDA and EPA are not fully working together as partners to develop an enforceable approach to address the serious issue of impaired waters from feedlots."

"So I am sending a letter to both of you today outlining my concern that your current approach would lead to confusing regulations for large, confined animal feeding operations."

Again I thought we got off on a great start here a year or so ago. I thought people were working together but I am wondering now if we are starting to diverge here on the regulations that are being developed. As I said, I do not need a comment. I will send the letter to you and I would appreciate your responding to it as soon as possible.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Harkin.

Mention has been made of Senator Baucus. He is unavoidably detained in Montana on pressing business today but he has given us a statement and his statement will be placed in the record along with the opening statements of the senators.

[The prepared statement of Senator Baucus can be found in the appendix on page 80.]

Senator Lincoln?

Senator LINCOLN. Thank you, Mr. Chairman, and thanks to the witnesses, Secretary Glickman and Administrator Browner, for being willing to come and visit with us, and I appreciate your offer to work with us on this because perhaps there has been a great deal of confusion, to the tune of at the first meeting we had in Arkansas we had 1,500-people show up and the second meeting we had 3,000-individuals show up.

Well, we are going to have another meeting in March and you very graciously had your Region-VI EPA folks at the first two meetings and I would encourage both you and the secretary, if you could not attend, that you would send someone from Washington

to be in attendance at that next meeting—I think it is March 7—which would be very appropriate to answer some questions, because there is a great deal of confusion. I agree with you that eliminating that confusion is absolutely essential.

Secretary Glickman mentioned one of the biggest problems for agricultural producers is uncertainty. The variables that they had to deal with. The fact is that I think that is the biggest problem that we have with your regulation, is the uncertainty and the unpredictability for both agriculture, as well as forestry.

I concentrate on forestry because the point, in fact, is forestry has gone certainly in our state a great deal to try and work with EPA and the PCNE, the other groups, to try and come up with some really, really far-reaching opportunities to do best management practices in conservation.

You make the comment repeatedly that these are things that the states do. I would just add to that, that the states do not do these, they do not set these regulations, nor do they put them into effect, unless they get your approval. This is not something they act on alone. The states do not go in one direction and EPA in another. When they go through most of setting these standards, they are things that they do in conjunction with EPA. It is not just something the states do, as I said, on their own. So I think it is important to recognize that.

As we look at what the regs have put forward, maybe if you could clarify some of the things here, a couple of questions that I have. One, where you have a situation where you have a best management practice in place, has there been any consideration that the regulations would only apply to states who do not have an EPA-approved best management practices? Obviously——

Ms. BROWNER. You are not the first person to raise this and it is certainly something we are willing to look at. In some ways it fits back a little bit to Senator Harkin's question in that what is a best management practice? I think that is something we would need to work out with the states.

Senator LINCOLN. You already you. You approve their plans.

Ms. BROWNER. We understand that; I understand that. And that might be one threshold, but you may also have other states coming forward with new types of best management practices; how could we incorporate those? So that is something we are willing to look at.

Senator LINCOLN. All I am saying is that in each state you either approve or disapprove their environmental programs. They are not acting on their own.

Ms. BROWNER. I am happy to spend some time explaining to you what approve or disapprove means. It is not quite as black and white, I think, as perhaps some may have suggested. It is a complicated process that we go through in making the decision to delegate and then in making sure that within a broad program like clean water or clean air, that all of the components are working. We would be happy to sit down and walk you through it.

But I think that the basic thrust of what I hear you asking is in those instances where best management programs have been approved by EPA, how would we incorporate that into the states? Or how would we allow the states to incorporate that into the TMDL

program? And I think we are very open to that. We think it is a good idea. We simply need to work with people to understand how best to do it.

Senator LINCOLN. Well, I just know that if I am trying to teach something to my children, it is much easier if I teach them the benefits that they are going to get out of it and help them work to do it themselves, as opposed to just applying more demands on them.

I think that in what you have done in the best management practices has produced an awful lot of goodwill and conservation and reaching the objectives that we all want to reach. I would hate to see an unnecessary, overburdensome-type regulation. And as you clarify it, maybe it will not be that way, and I hope that is the case, and we would like to work with you on that.

We would like to just kind of get a few clarifications on the TMDL regulations that you have put forward. Could the regulations that you have out there be extended to encompass all of the activities within the watershed of the listed water body, or will they be limited to the properties adjacent to the list water body?

Ms. BROWNER. I am going to ask Mr. Fox to answer.

Mr. FOX. Senator, the way we have proposed the rule, it would be limited only to those landowners and those properties that have a documented water quality problem. In fact, the Agency, the state or Federal agency, would have to make a specific finding that there is, in fact, a problem associated with this landowner. We did not envision at this time that it would be applied on a watershed basis.

Senator LINCOLN. So it is not your intent to apply it to the watershed basis; is that correct?

Mr. FOX. As we propose it, that is correct.

Senator LINCOLN. OK. The regulation as it deals with waters that are not listed but are considered impaired, will this only apply to the official 303(d) list of waters?

Ms. BROWNER. It only applies—maybe your state has some list that we are not immediately familiar with. This applies to the 303(d) listed waters.

Senator LINCOLN. Only.

Ms. BROWNER. Some states have their own state processes in addition to the 303(d) and we would be happy to talk to you about Arkansas. They may have something that we, off the top of our heads, do not know. Someone seems to be telling us that, that may be the case. But the intention is 303(d).

Senator LINCOLN. Your intent is to focus on a 303(d) list. OK. Well, I might want some more clarification on that if it is possible.

Just in talking about the point and the nonpoint sources and, as Senator Harkin mentioned, those definitions, in reading your proposed rule and noting that you specifically go back to or specify that certainly agriculture was not focussed in on in terms of definitions until 1977 and 1987, where the specifics on return flows from irrigated agriculture and agriculture stormwater were specified out statutorily, but you go on down and when asked which silviculture discharged would be designed under today's proposal as source subjects to the program, you state for the sources that were categorically excluded previously—nursery operations, site preparation, reforestation and subsequent culture treatment—thinning, prescribed burning, pest and fire control, harvesting operations, surface drain-

age or road construction and maintenance—that categorical exclusion from the definition of point source would be removed.

So in other words, you are leaving it up to a subjective decision by yourself as to whether or not that is going to be a point or a nonpoint source?

Ms. BROWNER. I am going to be very honest with you. We are having a hard time understanding your question. We are happy to try and answer it for you but I am happy—I was trying to make sure I understood which section you were even in and right now we are a little bit confused.

So Mr. Chairman and Senator Lincoln, if it would be appropriate, we would happy to answer all of these in writing or to meet with you individually. You just—I cannot understand what you are asking me at this particular moment.

Senator LINCOLN. Well, I just think it is important for us to know how you have defined and what you have put yourself in the position of being discretionary over in terms of point and nonpoint sources.

Ms. BROWNER. We do not disagree but I think we need to know which section you are in so we understand.

Senator LINCOLN. OK, I have the FEDERAL REGISTER right here and it is just your answers that you have submitted from your regulations in the FEDERAL REGISTER and I will be glad to offer that to you and have you answer them in writing.

I would just again encourage us all to work on something that can be predictable and certain to the individuals that are dealing with it. I would encourage you to come to some of the meetings that we are subjected to so that you can give some of those answers to the people who do feel an uncertainty in what has been prescribed in the rule and regulation.

So, I think that is very important as we go through this because there are a lot of people who are alarmed in the definitions that have been provided and what has been done and also, I think just in the past history of what EPA has done in many instances in their interpretations and the way that they go about interpreting the intent of what Congress is out there to do. So I would encourage you to work with us, please.

I will, Mr. Chairman, be glad to submit to the administrator my questions in writing so if she would choose to answer them in writing, that is fine.

The CHAIRMAN. If the senator will put the questions in writing we will ask the administrator to respond in writing on due reflection and have clarification.

Ms. BROWNER. Great. Thank you.

The CHAIRMAN. I know that you must leave in just a few minutes, Administrator Browner, so as a result, I am going to ask Senator Fitzgerald—he has a couple of questions that he wants to ask whole both you and Secretary Glickman are here. Then Mr. Fox, I understand, could continue onward if necessary.

STATEMENT OF HON. PETER G. FITZGERALD, A U.S. SENATOR FROM ILLINOIS

Senator FITZGERALD. Thank you, Mr. Chairman.

I appreciate both of you being here and I am wondering with the Chairman's dispensation, if I could not shift gears just a little bit. We are so fortunate to have our distinguished Agriculture Secretary and EPA Administrator on the same panel.

I wondered if I could talk a little bit about the ethanol program. Administrator Browner, I know you have been kind enough to meet with members of the Illinois delegation on this and we are hoping to have a large meeting with House and Senate members with both of you. I know we sent you a letter. We sent it actually to the President. Maybe he has not sent it down to you. But we would love to have that joint meeting. There are about 40-members from the House and Senate who have requested a meeting with both of you to discuss the reformulated fuel program.

But Administrator Browner, I was wondering; I am very concerned about the viability of ethanol in phase two of the RFG program. I was wondering whether the EPA is taking any steps toward providing ethanol with a carbon monoxide credit so that it could continue to remain the choice oxygenate, at least in Chicago where it is heavily used and very popular. I do not know if you would be able to comment on that.

Ms. BROWNER. Senator Fitzgerald, as I think I shared with you and the Illinois delegation in I think it was two meetings we actually had, the administration, EPA was looking at the issue and Senator Harkin, you are well versed on this issue of revapor pressure, and that we would be making a proposal in terms of the revapor pressure in light of a National Academy of Sciences report.

We had hoped to get that done a little bit sooner than we have but it is winding its way through the Office of Management and Budget [OMB] review process and will be shortly put out in the FEDERAL REGISTER. So, we have taken into account the Academy's review and all of the issues as we understood them and we will going out on a notice and comment in terms of the revapor pressure issue.

Senator FITZGERALD. What you sent to the OMB, I understood you sent something there regarding regulating MTBE as an oxygenate. Is that——

Ms. BROWNER. I am talking about Reid Vapor Pressure [RVP] right now. I am talking solely about the RVP, which is in the RFG round two program. That is all I am talking about.

Senator FITZGERALD. OK. Well, I appreciate that and we look forward to talking to you about that.

Secretary Glickman, I understand the USDA has recently been assessing the impacts of an MTBE phase-out and ethanol replacement in the California market and I do not know if you have any results of that assessment that you might be able to share with us. I noted in Illinois, ethanol is 16-percent of the market for our farmers' corn and it is probably not that high in other corn states—Illinois is the leading ethanol producer in the country.

But I wonder what effect might that have on farm income at a time, as you pointed out in your testimony, that prices have hit rock bottom and farmers have really been suffering across the country?

Secretary GLICKMAN. I do not have a specific answer. I will go back and ask our chief economist whether he has done any eco-

nomic impact studies. We are working with EPA on the MTBE issue. Obviously USDA has a great interest in the ethanol issue for a lot of different reasons, much of which are compatible with yours.

Senator FITZGERALD. So that study is not yet completed, the economic study?

Secretary GLICKMAN. Deputy Secretary Rominger will respond.

Mr. ROMINGER. I do not have the figure with me but I think our chief economist did complete that study and it did show that if ethanol did replace MTBE, it would have an effect on the price of corn.

Senator FITZGERALD. And the farmers' income. And that would probably, in turn, have effects on the farm programs by reducing the cost of the loan deficiency payments and the like.

Do you know if that analysis addressed ethanol's ability to replace—the ethanol industry's ability to replace MTBE in the California market in 3-years, over 3-years?

Mr. ROMINGER. I think, as I recall, that the production of ethanol would have to be increased but they felt that it was possible, would be possible to increase the production of ethanol to be able to fill that market.

Senator FITZGERALD. Well, I appreciate that opportunity to switch gears a little bit.

Administrator Browner, did you want to add something?

Ms. BROWNER. Yes. I just thought it might be helpful to the Committee—I know this will be an issue of great interest to many. Approximately 2-weeks ago, 3-weeks ago, California did complete a file, a submission to EPA seeking a waiver from the 2-percent oxygenate requirement in the Clean Air Act for the reformulated gasoline program.

Independently, California has passed a state law that effectively bans MTBE, which is one of the oxygenates currently available within California within—I might get the year wrong but I think it is two to 3-years.

The waiver petition to EPA, the argument that California is seeking to make, it is a very technical, highly modeled type analysis that will have to be done but essentially they are suggesting that the use of an oxygenate in their fuels—and remember, California fuels are somewhat different than fuels in the rest of the country; they have been in a different fuel program, given the nature of their air pollution challenges—that the use of an oxygenate could actually contribute to increases in some pollution parameters.

This is a technical question and they have provided to us all of the modeling that they believe demonstrates that, all of these things that are called inputs and outputs and I do not even understand it after a while, and our technical people are now reviewing it. It will take some period of time for that review. It is a highly complicated computer-type review that has to be done.

When we complete that review, which will take us some time—it could be months—we will then go through a notice and comment process—FEDERAL REGISTER notice as to how we read the models that California gave us, how they read them, if there is some disagreement, what we believe the law allows for, and what we would propose to do. Then we will take comment on it and then after the comment period, we would make a final decision on whether or not

California's request for a waiver from the 2 percent oxygenate would be granted based on legal and technical grounds.

Senator FITZGERALD. Will you be able to take into consideration other factors, like the impact on farm income of the loss of that kind of market, or do you have to do it—will you need some congressional help to think in broader public policy terms?

Ms. BROWNER. I should point out the provision in the Clean Air Act which California is relying on is a provision that has not, to my knowledge—I do not have any air people; these are all water people—to my knowledge is not a provision that has previously been used.

I know this for a fact. EPA has never received a request for a waiver from the 2-percent oxygenate. In terms of what factors we are allowed to review, that is obviously something that everyone, I am sure, will have a point of view on and we will be happy to share with us.

I should say that we do believe that the Clean Air Act does create that opportunity to seek a waiver, that there is no question in our minds about the right of a state to apply for a waiver, that Congress was clear in that respect. But in terms of what you have to demonstrate and what kind of modeling is sufficient and what kind of factors then get included in that analysis is something we are currently working on.

Senator FITZGERALD. Well, we will look forward to continuing our discussions with you. If you could keep in mind that meeting that we are hoping to get—in fact, we wanted to have the Energy Secretary there, as well, and maybe if the three of you could talk with the House and Senate members who requested that meeting, I will follow up on that. I think the letter was actually sent to the White House.

So we will follow up with that and we appreciate very much your hard work, both on behalf of the environment and on behalf of our farmers. Thank you.

The CHAIRMAN. Just to try to bring some simplicity to what just transpired, is it not the case that we had a debate on the Senate floor in which the senator from California, Senator Boxer, and others were talking about MTBE and the fact that this was unhealthy for her state?

So the thought immediately arose—Senator Fitzgerald, Senator Harkin and I all sort of shared this thought, that, in fact, if ethanol could replace MTBE, this might be a good thing for clean air in California, as well as farm income.

Now to that respect, Mr. Rominger has conducted a study, or his colleagues, and they found that, in fact, it does have a price effect. Predictably, if you send more ethanol to California, more corn goes into ethanol and all the rest. It could relieve LDPs at another level from which we are now talking, so there is another good effect there, too.

Now as I understand, however, in this highly modeling effect you are talking about, some people out in California have said hold on; before you send all the ethanol out there, are there some problems in the environment with the ethanol? In other words, as we are replacing MTBE, do we run into some other dilemmas? And we do not know, and this is being studied, among other things. And, of

course, those of us who are corn farmers find urgency in the study coming to conclusion as rapidly as possible if the verdict is to be a favorable one so we can move on.

Now it seems to me it would be helpful, and this is one value of the senator's question, of having this dual appearance today. This is an EPA question; it is an agricultural question, I think, for the common sense rules I just stated. Probably Secretary Rominger's study, which is there probably, not well known to any of us, we need to exhume and sort of circulate. Likewise, some state of play as to what is going on in California.

If it is this consideration by EPA and the modeling and the several months, all of us keep this—we get it in fragments from time to time. We have community meetings of environmentalists, corn farmers, other advocates of ethanol.

And I suppose while we are at it on the ethanol situation, and this comes just anecdotally likewise, given the price of corn, which is low, the price of petroleum, which is high, a good number of people have been wondering in a common sense way in America, has the spread between the cost basis of the two narrowed? And the answer is yes but the question is how much? And this is tremendously interesting. We are getting answers all over the place. There are sales in Nebraska that raise questions as to whether almost parity has been achieved.

Now, people rushed in to point out no, that has not occurred as yet; there is still a gap. But to the extent the Department of Agriculture can furnish this committee and therefore the rest of the American public some really economist-based facts on this, why, this is going to help the debate immeasurably, I believe, and take it at least a few steps further.

Secretary GLICKMAN. We will make sure you get whatever studies we have.

Ms. BROWNER. If I might, Mr. Chairman, just in closing on this particular issue, it is a difficult and a complicated issue. I want to be very clear.

For a long time now, EPA has been concerned about MTBE. We commissioned a blue ribbon panel. We have embraced the recommendations of that blue ribbon panel. We have called upon Congress to help us address the problem and we would be—I think everyone in the administration remains very hopeful that, that opportunity could present itself and that we could all work together to find an appropriate solution, given our concerns about MTBE.

I do not think there is any administration—President, Vice President, EPA, USDA, Department of Energy—that has done more for ethanol. We are big, big believers in renewal energy sources and in the role of ethanol. We also have a concern about MTBE. They happen to be caught up in the same statute. It would be very, very helpful, I think to all of us, if we could work together.

The CHAIRMAN. Excellent. Well, we thank the entire panel, especially the Administrator and the Secretary. It has been quite a devotion of your time today but you have been helpful to us and thank you for coming.

The chair would like to call now a panel of state and private witnesses, and this will include Mr. James A. Kraft representing for-

estry. He is vice president and general counsel and secretary of Plum Creek Timber Company, Incorporated.

Mr. Paul Johnson, representing state conservation agencies, is the former chief of the USDA Natural Resources Conservation Service, director of the Iowa Department of Natural Resources.

Third, Ms. Roberta Savage, representing water administrators, is executive director of the Association of State and Interstate Water Pollution Control Administrators.

Mr. Robert Adler, representing clean water network environmental organizations, is professor of law and interim director, Wallace Stegner Center for Land Resources and the Environment of the University of Utah College of Law.

And Mr. John Barrett, representing agriculture, is a cotton and grain producer from Edroy, Texas.

It is great to have all of you before us this morning. We will ask for the sake of full discussion by you and the Committee, that you try to limit your comments to 5 minutes. This will not be rigorous in the event that this is impossible, because, as you noted, the Committee has been liberal in terms of time to make sure we have a full discussion.

Let me start in the order I introduced you. Mr. Kraft has already been mentioned by me mistakenly in a role that he did not take, as EPA administrator in Region I, but he did mention that testimony, which was important, with our dialogue with the first witnesses. Mr. Kraft, would you give your testimony?

STATEMENT OF JAMES A. KRAFT, VICE PRESIDENT, GENERAL COUNSEL AND SECRETARY, PLUM CREEK TIMBER COMPANY, INC., SEATTLE, WA

Mr. KRAFT. Thank you, Mr. Chairman. I appreciate the opportunity to testify today on behalf of the American Forest and Paper Association on EPA's proposed Clean Water Act regulations. While AF&PA represents the manufacturers of wood and paper products, all of whom have serious concerns with a multitude of other program changes contained in this rulemaking, I will confine all of my remarks today on the forestry components of the National Pollution Discharge Elimination System [NPDES] rule.

I would like to cover four things today. First I would like to point out the effectiveness of the current programs under Section 319. Second, I would like to point out that this current proposal will impose substantial economic burdens and will be unwieldy and inefficient, as was described by Senators Baucus, Wyden and Murray in a recent letter to the EPA. Third, I would like to go into what I believe is EPA's lack of legal authority to pass this regulation. And lastly, I would like to propose some common sense alternatives.

First, I would like to focus on EPA's decision to abandon almost three decades of statutory interpretation of the Clean Water Act and case law by eliminating the designation of forestry as a nonpoint source activity. EPA has contended that because silvicultural activities can be a cause of water quality impairment, that this gives them the discretionary license to label such activities as point sources. However, EPA's citation of silviculture's impact on water quality is selective and runs counter to our own experience throughout our ownership. At Plum Creek we have 3.3-million

acres of timberland in the states of Washington, Idaho, Montana, Arkansas, Louisiana and Maine.

In every state with significant forest management, those states have forestry best management practices or rules. These programs have been submitted to and approved by EPA as part of the Section 319 nonpoint source program. More than 20-states conduct periodic BMP compliance surveys. Others have even gone further and are conducting statewide BMP effectiveness studies to measure water quality upstream and downstream of forestry activities.

The results of these studies demonstrate the general effectiveness of BMP programs and I think Administrator Browner rightly pointed out earlier in her testimony that there are a lot of success stories under the current program, and I think she is right.

I think the studies are also helping us to determine how to better improve the BMPs as we go forward. Take the state of Montana, for example, where our company has 1.5-million-acres of timberland. Over the past decade, Montana has developed a pretty rigorous BMP program and a compliance survey. We get audited on our performance. The most recent results found successful implementation statewide of BMPs averaged 94-percent and our company is well over or pretty close to 100-percent; it is in the 98–97 percent range. That is up from 78-percent in 1990.

This improvement was achieved not through heavy-handed, top-down regulations but was brought about by locally led efforts to educate loggers and landowners.

Even using EPA's most recently available public data, only 11 states listed silviculture as a cause of impairment on their Section 303(d) lists. Further, almost two-thirds of the stream segments listed due to silviculture were from one state—Montana.

However, this list has been found to be highly inaccurate. In 1997 Montana began requiring documentation of the scientific basis for the listing of water quality limited streams. Montana's Department of Environmental Quality has found that credible data was lacking to justify listing in over half the streams on the original list.

In my written testimony that I submitted there are a number of other specific statistics but in the interest of time I will not go into that, as to why silviculture and forestry is a relatively minor cause of water quality impairment across the country.

I would like now to shift to my second point, which is the economic burdens that would be created by the proposed rules and comment on the ineffectiveness and the unwieldy nature of the proposal.

The forestry community is struck by the heavy-handed command-and-control approach that this rule incorporates. It would be imposed upon the states and private landowners throughout the country. EPA's economic analysis that accompanies the proposed rules is inadequate. According to AF&PA assessments supported by the work of five independent economists, the incremental economic burden to landowners, operators, communities and government agencies could easily exceed $1 billion annually nationwide.

The administrative costs alone of an NPDES program for silviculture, even in the unlikely event, and I would like to get into that later because I think a very good question was asked earlier

that I would like to answer—even in the unlikely event that this rule would be invoked sparingly, only for bad actors, the cost would exceed EPA's estimates by severalfold. Because the economic impact will far exceed $100 million annually, we believe that EPA must conduct more detailed and comprehensive cost-benefit economic analysis of this proposed rule.

Not only would the economic burdens be greater than the proposal recognizes but it is hard to comprehend, sitting here, as someone who deals with forestry activities every day, how the EPA would develop and implement a workable NPDES permitting system for the thousands upon thousands of forestry activities that occur every year.

Another concern that we would like to share here about the burdens and the inefficiencies of this rule is the impact it would have on voluntary conservation efforts that are today working to protect and improve water quality. And one thing that our company has been very interested in and I think the Simpson HCP was mentioned earlier today, there are millions of acres of private land that are today covered by habitat conservation plans, which, as you know, are approved by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service under the Endangered Species Act to protect fish and wildlife habitat.

Many of these plans are designed to protect water quality and fish habitat. Our fear is that this proposed rule would have a great potential to undermine these efforts that are being so successful.

Just as an example for our company, we are very near completion of a massive habitat conservation plan in our Northwest ownership covering 17-species of fish, including salmon and trout, for 1.7-million acres of our timberland. If these rules were to go into effect as they are currently proposed, we could be faced with wholly new requirements from another Federal agency for the very same resources that are being protected by our plan. And this is a scary thought for us because we have invested more than $2 million and 2-years in working with the agencies to prepare this plan and I suspect that other landowners who would look at this proposed requirement and the threat that they might have to obtain NPDES permits and comply with a whole new set of TMDL rules would be reticent to expend that kind of resource.

As an aside, our company, as we have gone through this process, has kept EPA informed and we are very much interested in a voluntary way, working with EPA, to see how this plan can dovetail with the needs of the Clean Water Act.

It appears that EPA is trying to solve all of the perceived problems in the Clean Water Act through radical changes to the 303(d) program and through the designation of silviculture as a point source. However, the 303(d) program, as designed by the Congress, was never designed to take on such a massive role, which leads me to my third topic, that the radical changes called for in this proposal have such policy implications that it is improper for the EPA to act without specific direction from Congress. In fact, the legal analysis that we have done shows or would suggest that there is no legal authority under the current act for this proposed regulation.

I go on further to say that we concur with the concerns raised by Senators Baucus, Wyden and Murray, which questioned the legal underpinnings of the proposal and the need for congressional direction on this kind of policy change.

Under the current proposal, EPA would turn the Clean Water Act on its head and would redesignate most forestry activities as point sources. I think there was a question there: well, what is going to be a point source under this regulation and what is not going to be a point source? The answer was well, it depends upon whether you are a bad manager or a bad actor. And I guess looking at that, there is no way to determine whether in someone else's opinion you constitute that and there is going to be no way, I think, to figure out if you need a permit.

Despite I think the very well-intentioned limitations stated by Administrator Browner that they would use this authority only in limited situations and as a last resort, I am afraid the courts will not let them do that. Selective enforcement of a regulation, in some instances calling it a point source and in other cases for the same activity calling it a nonpoint source, will not be respected by the courts and inevitably I think there would be litigation here that would expand the NPDES portions of this rule to all water bodies where forest management is conducted.

The forestry community, many state agencies, governors and others oppose the designation of forestry activities as a point source. We do not believe there is any legal or statutory authority for EPA to revise the regs that would eliminate the long-standing recognition of forestry as a nonpoint source activity merely to address some unidentified, last-resort situations on a case-by-case basis.

Before I close, Mr. Chairman, I would like to discuss the reasonable assurances requirement found in the proposed TMDL rule. Setting aside the scientific difficulty of actually calculating a daily load from nonpoint sources, the proposed rule requires states to build in and have an implementation plan for every TMDL. We do not believe that Section 303(d) provides EPA with this authority; nor does it provide, as EPA contends, that the implementation plans can be approved, disapproved or taken over by EPA.

What it appears to be here is a case of a proposal extending Federal enforcement over what has traditionally been a state activity. And this is not a minor legal issue but one that has enormous consequences for private landowners throughout the country, large and small.

I would like now to turn to my last point, which is alternatives.

The CHAIRMAN. Would you summarize that?

Mr. KRAFT. Sure. This will be very quick.

I think we all share the goal of cleaner water, certainly at our company and throughout the AF&PA. I think that there are some common-sense things that can be done to achieve those goals.

In essence, I think Section 319 can be made to work. It is working. Examples are there that it is working. If we want to make it work better, I suggest rather than top-heavy regulations that we increase the funding, make the partnerships work better, improve the BMP program.

Mr. Chairman, over 30,000-comments have been submitted on these rules and the forestry community represents a sizable share

of those comments. We feel strongly that only Congress should determine how nonpoint source activities are addressed under the Clean Water Act. In the end, we believe the current proposed rules will discourage the practice of sustainable forest management. They will create disincentives to maintain timberland in the U.S. In fact, I could see a lot of people getting out of the business if these were passed.

They would stifle economic opportunity and prosperity in communities that are desperate to be part of the economic revival in this country and it would make it a lot more difficult for people—the guys who own 40 acres—to make a living off their land.

This concludes my remarks, Mr. Chairman, and I would welcome any questions you have.

[The prepared statement of Mr. Kraft can be found in the appendix on page 81.]

The CHAIRMAN. Thank you very much. Let me say at the outset your statement will be published in full in the record, Mr. Kraft, and that will be true of each of the witnesses.

Mr. Johnson?

STATEMENT OF PAUL JOHNSON, DIRECTOR, IOWA DEPARTMENT OF NATURAL RESOURCES, DES MOINES, IA

Mr. JOHNSON. Thank you, Mr. Chairman and Senator Harkin. It is good to be with you today.

In looking at my colleagues on either side, I see they have already scratched half of their testimony. I think we could all spend an hour with you and still have a lot to say. I will not go through my prepared remarks; those are for the record and I would urge you to take a look at them.

But I would start today by reminding you of where we have come from. Iowa is working land, probably more developed than any other state in the country. We have no national forests, no national parks, no wilderness areas. We work it all. Senator Harkin, maybe we need to work on that part of it, as well.

But nonetheless, it is working land and our subject that we have in front of us today certainly does impact Iowa. We live on this land; we work this land; we are proud of it.

I am going to skip the remarks that deal directly with the TMDL, although I do want to say that although my written testimony raises serious concerns about the present TMDL proposals, I want to make it very clear that inaction or business-as-usual should not be the option. We have made great progress in cleaning up our nation's waters but the public is asking for more and we believe there should be more and we need to accelerate our efforts.

I would like to take my remaining minutes and maybe offer a slightly different perspective on this. I believe there have actually been two national clean water acts. 1972 is the one that we are talking about now, the foundation on which we are presently trying to add additional programs. I do not want you to weaken where we are with the Clean Water Act, the 1972 act. It has served us well in dealing with point source and should provide the underlining coordination and regulatory framework, I believe, for dealing with nonpoint, as well.

But there was another one back in 1935, the Soil Conservation Act back then that established conservation on private lands in this country. I believe if we had called that a Clean Water Act back in 1935, we would probably have even more soil conservation than we have today. But I think we should recognize the importance of that in the work that has gone on over the past 65-years. It, too, has served our Nation well. We are a healthier Nation because of it, I believe.

Two acts, two cultures. Our challenge, I believe, is to facilitate convergence of those cultures. You cannot deal with the 1972 act without understanding 1935. And I do not believe we can take the next steps in our 1935 process without support of our 1972 act.

I would like to make some suggestions for our 1935. The delivery system is in place and it is a good one. Just four or 5-years ago people were wondering whether we should take it apart as we move toward a more market-driven farm program.

Do not take it apart. Strengthen it. We have land grants out there. We have ARS. We have good Forest Service research. Challenge them to produce the conservation commodities that we are talking about here. Think big. I believe you ought to put much more resources into research on how we can produce conservation commodities from private lands.

Strengthen the Extension Service. Do not let it fade away. As we talk about nonpoint and we talk about the other opportunities on private lands, the Extension Service should play an important role. So should the Natural Resources Conservation Service and the Farm Service's agency.

Strengthen conservation districts and watershed efforts. Locally led conservation can work and we are learning today how to do that better.

I would urge you to support additional technical assistance out there. I believe it is tragic that in our mad rush to cut government, we have slashed the heart and soul of private lands conservation. We should have twice as many people out there working with private landowners today, not the number that we now have.

We do not improve education by cutting teachers. We do not improve national defense by cutting our military. We do not improve medical services by cutting our doctors and nurses. All of these are what we are about in the technical assistance that we provide private landowners. In fact, it is the private landowners who do the conservation, not these people, but these people are really needed out there to do it.

In Iowa we have a huge backlog because of lack of technical assistance. In my home county we have a one-year backlog under the conservation buffer initiative. We have farmers wanting to sign up and enroll them, but we do not have the people out there to do it. The same is true on grazing lands; I believe same is true on urban stormwater issues. I think that if we had technical assistance there, we would start improving our water from nonpoint much more rapidly.

We have a good set of basic conservation rules. EQIP—Senator Lugar, thank you for that. It is an excellent program. RCRA Implementation Plan [RIP], Wetlands Reserve Program [WRP], Conservation Reserve Program [CRP], continuous CRP, but I would

argue that we need more resources in those programs and we need more flexibility.

CRP is probably the one program that is adequately funded at this point, although I think some would argue that we could always use more. We have almost $2 billion in that program, and what does that tell farmers? Do not farm, and you are a good conservationist. Yet when it comes to the working lands, the lands that we are talking about here today, we have just a fraction of that, perhaps one-tenth of it.

In Iowa we have $100 million backlog right now on WRP and floodplain easements, $100 million backlog. Ten years ago I do not think you could have gotten a farmer to sign up for that program and yet today, $100 million backlog, and that is after farmers are already told that there is not much money in the program.

We need more flexibility and we certainly need to start rewarding stewardship instead of rewarding people after they have made mistakes. We have farmers out there who have buffers along rivers and streams. They do not quality for the program. They are told to plow them out, farm them for 2-years, and come back; then you are eligible for a CRP contract. I think that has to change.

Senator Harkin, I think your proposal and the administration's proposal is a wonderful idea. Although it is $1.3 billion, I would view that as a pilot, given the opportunities that we have.

I think we need to build consensus for our National Private Lands Conservation Act. We have done public lands; we have a great start on regulatory. We will continue to argue about whether or not they are as good as they ought to be but I think it is time we looked at that 70-percent of the land out there and looked at ways in which we can really improve our conservation on private lands, and that is the heart of what we are talking about today.

Our Governor Vilsack recently called upon Secretary Glickman to work with him toward a National Governors Conference on Private Lands, similar to what Teddy Roosevelt did back at the turn of the century for public lands. I would urge you to take part in that, hopefully as our governor will continue on that.

In Iowa this year we are trying to converge the 1935 and the 1972 Clean Water Acts, improving our TMDL program, our monitoring, our standards, our assessment, and accessing more the USDA programs 319 and research. We can make these programs work and we can improve our national waters.

Thank you for the opportunity to be here today.

[The prepared statement of Mr. Johnson can be found in the appendix on page 95.]

The CHAIRMAN. Thank you very much, Mr. Johnson.

Ms. Savage?

STATEMENT OF ROBERTA SAVAGE, EXECUTIVE DIRECTOR, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS, WASHINGTON, DC.

Ms. SAVAGE. Thank you very much, Senator. And before I begin, I would like to say that normally our association invites, and I did invite, a number of state administrators to be here but each time I called them they said, "The state legislature is holding a hearing on TMDLs." So you have the executive director instead.

Your staff has been wonderful and accommodating. They would call me and say, "Who is going to testify?" and I would give them a name and then they would go into hearing. So your staff is wonderful and I appreciate their patience.

My name is Robbi Savage. I am the executive director of the Association of State and Interstate Water Pollution Control Administrators.

I started with the association in 1978 and prior to that I worked with the League of Women Voters on the 208-program, which was the precursor to our nonpoint source 319-program; and prior to that at the United States Environmental Protection Agency in the Office of Water, also in the nonpoint source and 319-program. So I have been involved in these issues for more years than I hope you will count up and I have very strong feelings about the way this program is being managed across the country.

The states feel very strongly as well and back in 1972 when the bill (the Clean Water Act) was passed, it was very clear—at least we thought it was—that the states would take the lead in the clean water program. And prior to the passage of the 1972 Act States viewed themselves as the professors. When EPA was created in 1971, things got all turned around and the States, in EPA'S mind became, in essence, the students. That relationship has changed somewhat, as you know, over the years, but through it all, the states have been at the forefront of the clean water program and Congress recognized that in the 1972 bill, as well as other environmental and natural resource statutes.

The states agree that the TMDL program is a useful tool in managing our overall clean water program. It is not the only tool; it is one tool. It is a management tool. It is not an enforcement tool, and this is an issue that nearly every state brought up in its comments. To USEPA on the TMDL Regulations.

The states believe that they are co-regulators with the Federal government and in this relationship with EPA that we often call a partnership or a marriage, I tend to think of it either as co-regulators or a continuing partnership but in this process, we have come forward time after time with EPA to work on not only these regulations but the guidance on the 319-program.

We cosponsored the Western Governors TMDL forums. We met with EPA for an intensive two-day event at the wye Institute to discuss the TMDL regulations. We have worked with EPA hand in hand on the 319-guidance for the enhancement of the nonpoint source 319-program.

I tell you this because we have tried in every way possible to enhance the program on nonpoint sources because we think it is an important, a very important issue for water quality improvement. On the other hand, we do not believe that the enforceability envisioned by EPA is authorized in Section 319 or in the Clean Water Act.

Also I would like to say that in working with EPA, we came to a number of conclusions and resolutions, but since they were still in the Federal Advisory Committee Act [FACA] process in the development of the rules, there were no commitments made at that point.

EPA is trying to move the program forward and we understand that but the comments that we provided to the EPA, in conjunction with the Environmental Council of the States, (which is the State secretaries and commissioners, like Paul Johnsons around the country), and the Coastal States Organization. Together we outlined a number of concerns and rather than try to go through those for you one by one as an association, I thought it might be more useful to just simply read to you some of the state comments that we received.

And I would like to say, having been at the Agency when the term nonpoint source was coined, I remember being in the room and sort of fighting over what is a point source and what is a nonpoint source, at that point we determined, at least in those old days, back in the very early 1970s, that a point source would be those things that came from a pipe or a specific point that you could look at and point to—hence the name point sources. A nonpoint source was just about everything else.

This clearly has changed over time. You look at the stormwater rules for example. Stormwater has now been determined to be a point source, versus nonpoint. You look at forestry. That is now being determined to be a point source. So the definitional issues have changed but the original point and nonpoint definitions we thought were very clear and very easy to deal with.

Let me share with you the views of the states. In Massachusetts, the role of Section 303(d) has been greatly expanded by the proposed regulations. The Department Mass of Environmental Protection believes that EPA's proposal is overinclusive and questions not only the need for the expansion but whether EPA has the statutory authority to propose nonpoint source requirements.

Another state, Delaware commented that the Clean Water Action Plan envisions a number collaborative effort to restore and sustain the health of our watersheds. The TMDL rule impedes the state's watershed approach rather than complements it.

In Kansas they point out that the degree and detail of the prescribed remedies suggested will negative effective TMDL establishment and its implementation. EPA has the right and duty to expect TMDLs to be developed. However, its right to describe the specific details with TMDLs must be limited. The effective implementation is a state and local role in directing resources on a priority basis in certain geographic areas. It is not EPA's role, right or responsibility.

The comments go on and on, Mr. Chairman. There is a significant workload associated with the proposed regulations. The magnitude of the task is formidable. Given the estimates of the total maximum daily load workload and assuming that the states and EPA will be able to take advantage of the lessons we have learned, economics of scale and delisting inappropriate waters would have proceeded, EPA would still have to approve one TMDL each day in the next 15-years to meet the 40,000 that is currently projected by EPA.

There is no way, Mr. Chairman, that the states can do this job, not as it is currently outlined. There is not the money the time or the current staff resources. We need at least a tripling, even with

the funding increases that were outlined by the Administrator, at least a tripling of the existing resources.

The states are being set up to fail in this context, Mr. Chairman, and that is very troubling to the majority of us.

[The prepared statement of Ms. Savage can be found in the appendix on page 100.]

The CHAIRMAN. Thank you very much, Ms. Savage.

Mr. Adler?

STATEMENT OF ROBERT ADLER, PROFESSOR, UNIVERSITY OF UTAH, COLLEGE OF LAW, SALT LAKE CITY, UT

Mr. ADLER. Thank you, Mr. Chairman, and I appreciate the opportunity to be here. I do want to clarify that while the Clean Water Network asked me to testify today, I do not represent the Clean Water Network, which is a very large and diverse coalition of organizations.

I am an individual who has been involved in and interested in the effective implementation of the Clean Water Act for a long time and I was a member of the FACA Committee on TMDLs. I am also a participant in the ongoing study being conducted by the National Academy of Public Administration for Congress of innovations in environmental programs designed to make them more effective and cost-effective, with a focus on watershed programs, among others.

I want to begin by saying that there is no doubt, as Senator Harkin mentioned earlier, that the proposed regulations will change the manner in which farmers and the forestry industry must address their environmental impacts. Where I disagree with most of the other witnesses is that I do not necessarily think that the net effect of the proposed regulations will be the detriment of those sectors of the economy. In fact, I believe that by increasing the efficiency with which both public and private resources are dedicated to agricultural and silvicultural pollution, the proposed changes have the potential to benefit both the environment and the affected industries.

I also believe that they have the potential to help this committee's programs by ensuring that the dollars that are spent under the auspices of the various agricultural assistance programs are again conducted in a smarter, more cost-effective way.

But I want to spend a few minutes talking about the impact of U.S. agriculture on water quality and aquatic ecosystem health, facts that have been known to this body for a long time.

The 1972 Senate committee report said that agricultural pollutants are major contributors to the Nation's water pollution problem and that the waters of the Nation cannot be restored until this very complex and difficult problem of nonpoint sources is addressed, findings that have been confirmed in study after study, data produced not by EPA but by the states themselves.

EPA's 1991 report on nonpoint source pollution, assessing the information provided by the states, found that agricultural run-off impaired or threatened more than 100,000 assessed river-miles and more than 2-million acres of lakes. Logging impaired more than 15,000 assessed miles of rivers nationally, this based on a database which only looks at approximately one-fifth of the Nation's waters.

Similar results have been produced year after year and as recently as the latest EPA national water quality assessment, which continued to identify agriculture as the number one cause of impairments of the Nation's lakes and rivers and the fifth leading cause of pollution of estuaries.

Now, the response from the agricultural community, from the states, from the agricultural agencies is that significant efforts have been spent over the past 30-years, as Mr. Johnson notes, over the past 75-years or so, to address these impacts. Millions of dollars have been spent. Thousands of BMPs have been implemented around the country. Serious efforts at education, serious voluntary programs, and I agree: all those programs have been operating and in many cases to good effect.

Yet despite those programs and despite those laudable efforts, the data remain clear: agriculture remains the leading source of water pollution in the United States. So the question is why this paradox? Why have we spent so much money and still find that so many rivers and lakes are impaired by agricultural pollution?

My view is that it is because those dollars and those programs have not been targeted as wisely and effectively as they could be, and that is precisely where TMDLs can be a tool to help and precisely why I believe that this committee and the agricultural community should, in fact, welcome the TMDL process as a way to use those resources more effectively.

For example, cost-sharing dollars spent through the various farm bill programs can be targeted at watersheds identified through TMDLs as needing reductions in particular types of pollutants. Within those watersheds, TMDLs can be used to target the pollution sources most likely to contribute to the problem and most likely to be a part of the solution.

One of the programs that I studied as part of the NAPA review program was the Colorado River Basin Salinity Control Program and I want to use that as an example. It was not required to use a TMDL because they are not technically in violation of water quality standards, but for more than 25-years they have used the equivalent of a TMDL through a modeling process to calculate the total salinity load reductions necessary to attain and maintain water quality standards and to identify the particular sources of salinity that can be attacked most cost-effectively. Most recently, they have used it for a market-type competitive bidding process, which has approximately doubled the cost-effectiveness of salinity control in the basin.

So I draw two basic two basic conclusions from my study of the salinity program. One is that a TMDL-type process can be used to target and select the most cost-effective control projects but does not mandate particular solutions. Second is that it has produced significant reductions in salinity, water quality standards have been met in the basin as a result and because of that TMDL-type process, it is one of the most effective nonpoint source pollution control programs in the country in terms of the real goal not of how many BMPs we put on the ground but how many waters and how many miles of water, in fact, attain water quality standards.

And the same is true of the TMDL regulations, which very explicitly say that TMDLs in implementation plans can include regu-

lations, ordinances, performance bonds, contracts, cost-sharing agreements, MOUs, site-specific or watershed-specific voluntary actions or compliance audits of best management practices. The regulations are clear that they do not mandate particular results within the program.

I would like to say a little bit about three issues that I understand to be of particular interest to the Committee. One is whether or not waters impaired by nonpoint source pollution should be included in the program. The bulk of remaining waters polluted around the country, as I said earlier, are impaired by nonpoint sources. Excluding nonpoint sources from the program—not from the NPDES permitting program but from the TMDL program—would render that program of extremely limited value and, in fact, would make virtually no sense. The entire point of TMDLs is to look at the aggregate pollution from all sources within a watershed.

It is like the SIP program in the Clean Air Act, which does the same thing. If you try to measure the whole but to ignore some of the component parts, you do not get good results. In fact, you get nonsensical results. It would be like trying to assess a corporate balance sheet by looking only at the cash assets of the corporation while ignoring the capital assets or the inventory simply because they are a bit harder to measure. They are harder to measure but if you do not measure them, you do not get the full balance sheet from the corporation.

The second issue is implementation plans. One of the most clear unanimous recommendations of the FACA committee and I believe the most important and effective recommendation was that TMDLs without implementation plans are nothing more than a bureaucratic paper exercise. The implementation plan is what is going to take that load calculation and translate it to real water quality goals, and I think EPA would be making a very bad mistake to delete the implementation planning provision from the regulations.

Finally, the issue of EPA's authority to designate certain selected silvicultural activities as point sources, which has received a lot of attention today. The statute defines point sources not in terms of the nature of the economic activity but the nature of the discharge, with the exception only of agricultural stormwater and irrigation return flows, which are subject to particular statutory exemptions.

A point source quite simply is any discernible, confined and discrete conveyance. Federal courts have interpreted the term broadly. So based on the language of the statute alone, any silvicultural discharges through a discrete conveyance is a point source. Any silvicultural discharge that reaches waters through other means—run-off—is a nonpoint source.

EPA, by regulation, has defined certain activities, silvicultural activities, as being exempt from the program. What EPA proposes to do now is to modify those regulatory exemptions under very limited circumstances where water quality violations occur, as identified through the TMDL process. It is not, as has been alleged, converting statutory nonpoint sources to point sources.

So with that, I again thank the Committee for holding the hearing. I think the TMDL program is the best available tool to look at watersheds on a watershed-specific basis and in a comprehen-

sive rather than a fragmented way, and I would be happy to answer any questions the Chairman might have.

[The prepared statement of Mr. Adler can be found in the apendix on page 116.]

The CHAIRMAN. Thank you very much, Mr. Adler.

Mr. Barrett?

STATEMENT OF JOHN BARRETT, COTTON AND GRAIN PRODUCER, EDROY, TX

Mr. BARRETT. Thank you for inviting me, Mr. Chairman. My name is John Barrett and I am a cotton farmer from San Patricio County, Texas.

Even though I am a farmer, I am not confused, as was alluded to by Secretary Glickman. I would not blame you for being confused, Mr. Chairman. We have heard from the Government witnesses that TMDLs are not really going to do anything to nonpoint sources. Then we hear from Mr. Adler that they are the best hope to control nonpoint sources.

We in agriculture strongly believe that EPA's interpretation of the TMDL statute, Section 303, does not conform to the legislative intent expressed by Congress when the Federal Water Pollution Control Act was passed in 1972. We believe that Congress enacted Section 303(d) as a back-up mechanism to deal with point source discharges when technology-based controls proved to be inadequate to maintain water quality standards.

The real statute that Congress enacted to deal with nonpoint sources was Section 319. When 319 was passed in 1987, the debate in the Senate is very informative when juxtaposed with this current notion EPA has that Congress really somehow passed nonpoint controls when 303 was passed 14-years earlier in 1972.

Senator STAFFORD. "A new Section 319 establishes a program to begin the process of addressing this hitherto unregulated source of water degradation."

Senator SIMPSON. "For the first time, we have included a provision in the Clean Water Act related to nonpoint source pollution that comes from farmlands, timber operations, and other sources of run-off which are not considered point sources."

Clearly, the senators in 1987 did not think that they had established a regulatory program for nonpoint sources in 1972.

But beyond the very issues relating to statutory history and legislative intent, the very term "total maximum daily load" is counterintuitive to nonpoint source management. Total maximum daily load implies a constant and regular engineered and controllable environment like you can do with a valve on a pipe at a point source.

Nonpoint source professionals are well aware that nonpoint source run-off is distinctly unpredictable and unamenable to control. Farmers cannot control the rain. If we could, I would not have had a crop drought disaster in 1996 and 1998 and then two floods from Hurricane Bret and Hurricane Floyd in 1999. Mr. Chairman, when the EPA figures out how to control the weather, those of us out in the real world of run-off will be able to comply with a total maximum daily load.

In its zeal to redefine nonpoint source run-off as a discharge subject to the TMDL statute, EPA is attempting to drive a square peg into a round hole. The Federal Section 319 program that Congress passed grants states the flexibility to develop practicable, economically feasible and incentive-driven approaches which are implemented as a suite of best management practices, or BMPs. 319 approaches are considered to be implemented when they are put in place. In other words, implementation of the BMPs is equivalent to compliance.

The TMDL statute has a different bar. Its requirement is that compliance is not achieved until water quality standards are met. For nonpoint source run-off, this requirement raises the real possibility that a source will have to be eliminated from a watershed in the event that BMPs and modified BMPs ultimately prove ineffective in attaining water quality standards. Let me be very clear. This is the Federal Government telling farmers whether they can farm or not.

Mr. Chairman, EPA has made a policy decision with which it cannot possibly comply. Under the approach EPA is proposing in the new TMDL regulations, if an EPA regional administrator disapproves a state-submitted TMDL and/or implementation plan, then EPA must impose a Federal TMDL and implementation plan on the state and stakeholders in the watershed within 30-days.

Mr. Chairman, this must be a joke. EPA cannot even answer their mail in 30-days, let alone develop a TMDL and implementation plan. Even worse, the Federal implementation plan equals Federal zoning and Federal land use planning. Cities can zone, some counties can zone, states can do it within limits, but the last thing most of us heard is that the Federal Government needs unambiguous statutory authority to do so. By this I mean Congress passing a law and not the Administrator of the EPA passing a regulation.

Finally, I recently heard a senior EPA official tell a group that this program will have a multi-billion dollar impact, and I agree. However, EPA is officially claiming only $25 million a year on states and no costs on the private sector. I have even heard the Assistant Administrator for Water, Mr. Fox, tell a subcommittee of the House that EPA would never regulate nonpoint sources through a TMDL. However, EPA developed a single TMDL in California which imposed $12 million in costs on just three farmers.

Mr. Chairman, I want to let Senator Chafee's comments when the 319 program was enacted close for me. "The primary role of the Federal Government in the nonpoint program is to provide financial assistance to the states, which are given the lead in developing their own programs. It is not Big Brother from Washington telling them how to do this. The states do this. We give them the money to help them. We do not mandate it. Farmers are not required to seek permission from the Federal Government to carry out their farming practices."

Thank you, Mr. Chairman.

[The prepared statement of Mr. Barrett can be found in the appendix on page 143.]

The CHAIRMAN. Thank you very much, Mr. Barrett.

I will mention that a statement has been submitted by Senator Coverdell and we will put that in the record with the statements from other senators.

Let me begin the questioning because I believe my question really has been formulated by all you have said and sort of an understanding of where this may go. There is clearly a difference of opinion with the administration panel and this one on whether Congress really ought to enact something that is more comprehensive or hits the problem of the TMDL, as opposed to this development coming through regulation. And maybe that is so and maybe that is not.

Well, one of the reasons for this hearing is that the recommendations by Administrator Browner have set off enormous controversies all over the country. As you mentioned, Ms. Savage, you are unable to produce a director because they are all testifying at state legislatures.

Now, maybe that sense has not reached Washington yet, although Senator Lincoln has been talking about the massive participation in her hearings, indicating quite a bit of grassroots interest. That does not define the issue simply because people are outraged or sad or concerned, but it does indicate that this is not a settled situation and the law of the land. We are continuing to work our way through it.

Now, as I listened to Ms. Browner this morning, she mentioned, for instance, the Great Lakes and the Chesapeake Bay as very large issues for our country and the thought that a total management of these situations is very complex. Her feeling was that the Great Lakes have been turned around, not that the problem has been solved, and maybe the same for the Chesapeake Bay. Most Americans probably recognize that, that perhaps we are one Nation and we take a look at major problems of this sort and this is very difficult.

Now, moving from these massive waterways then into thousands of streams and rivers and so forth, of course, is another problem, and here the rights of landowners, people who are doing business, the Federal system itself, the rights of states or however they fit into the Federal Government may make this a lot more difficult.

So I sort of understand where Ms. Browner is coming from, in a way. Obviously there must be some sense of frustration that the TMDL program does not quite work, as it stands. And I think Mr. Adler in his testimony was very helpful as a proponent of TMDL, without going into an endorsement of Ms. Browner's proposal or what Secretary Glickman had to say, but that it is a comprehensive reduction and to have comprehensive reduction, you take a look at where it is all coming from and how you might make something of it.

Now, we are dealing, however, with law in which it appears that there is dispute over the point source or the nonpoint source and really what is provided, how much of this you can do, how far you stretch it—I think at least this is in contention. And it could very well be that by the time we complete this issue, Senator Lincoln has offered a bill but other senators are poised to offer all sorts of legislation which, in fact, may finally clarify this. We may have a

different Clean Water Act by the time we are concluded with all legislation.

What I think I sense is in a common sense way, Ms. Browner hears this and has tried to work through, after the public hearings and with Secretary Glickman and with others, some reasonable rules of the road that will be least offensive to as many parties as possible, try to mitigate some of the anxiety. Certainly that was true in her comments about silviculture today, that not many people are going to be affected by this, but some, and it is not really clear altogether the criteria, I suppose, except that Mr. Kraft said there are some bad actors out there. And indeed there are and the common sense of the American people has seen some of this from time to time and is outraged and wants somebody to do something about it.

Now given all of this, are we on the right track? Mr. Adler believes that we are with regard to the TMDL comprehensive reduction idea to begin with and if we are, what sort of legislative changes are going to be required? Or can this occur through interpretation of the legislation, the major acts that we have here? What sort of responsibility should this committee, should the Senate undertake, given the whole lay-out of the dilemma we have heard this morning?

Mr. Johnson, do you have an idea about this?

Mr. JOHNSON. Yes. First of all, I think there are some—and I tried to articulate them in my written testimony—there are two or three issues that I think need to be dealt with before we go forward with whatever plan we have.

One is to get a better understanding of water monitoring. We do not have a national effort on water monitoring. From what I know, EPA does not have that, so each state is doing it differently. Some states are not doing it at all. I seriously question the whole issue of monitoring in interstate waters. As you know, when we settled this land we laid a grid across it and we are feeling sorry for doing that even today because it does not fit nature.

Well, this program, the way we are laying it out, is sort of a second grid. We are not escaping it; we are getting more into it.

So I think——

The CHAIRMAN. To back up on that for a minute, now you are saying, just for the sake of all of the audience, that water monitoring differs markedly from state to state. What do you mean by that? The measurements?

Mr. JOHNSON. The amount that we do, the mandates. In fact, our 303(d) list is, in most states, dependent on the amount of monitoring that we have done. Iowa has done very little until this last year when we really got into it. I believe Kansas has done a very good job, from my understanding of it. They have 1,500- or 1,600-waters on their list; we have 159. It is not because theirs is more polluted than ours, I do not believe, but we have very uneven monitoring across the country.

The CHAIRMAN. Well, how could you tell what the problem is without there being some monitoring?

Mr. JOHNSON. That is a very good point. So you have that; then you have an assessment of it. You have a different approach to setting the standards across the country. I think that these are basic,

good, basic science questions that we really need to get a better handle on.

I do not believe that—I am not here speaking against the idea of targeting, as Mr. Adler has said, and the idea of doing a budget of pollutants in impaired waters. I think that you have to do that if we are going to really use our resources wisely. But we are starting each state at such different levels and nobody has blown a whistle and called time out and said, "Let's get this right across the country and then let's go forward." There is a real need for that, I believe.

The U.S. Geological Survey is perhaps a lead agency in monitoring and I would urge you to take a look at perhaps giving them additional resources and more responsibilities in this role, particularly in monitoring.

The CHAIRMAN. Maybe this is not analogous but in the Clean Air Act there seems to be somewhat more uniformity in monitoring from the nonattainment cities to the attainment or what have you, essentially the same rules of the game for Chicago or Los Angeles or Indianapolis or what have you.

Mr. JOHNSON. Well, others could maybe comment more on this; they may know the issue better than I. But I would guess that if Iowa wanted to quit monitoring entirely—and we do not; we want to do more—we could just do that and there would be no impaired list except what would be imposed upon us, I suppose. We would lose some 106 money, perhaps.

We have got to get a better handle, I think, and some better standards nationwide on monitoring and a better understanding of the science of what it tells us, as well, especially with nonpoint.

The CHAIRMAN. Are you saying if Iowa stopped monitoring, which you are not going to do but if you just stopped it, then the TMDL does not work, or how does it work if you have no monitoring?

Mr. JOHNSON. I suppose a drive-by look. In fact, we are dealing with a list right now that is not based on real good science but at least it is a start.

I think a lot of the frustration we all have with TMDL right now is that suddenly we are really cranking it up and it is being driven by litigation and I do not fault that, by the way. I think sometimes to get us off of dead center, somebody has to force it, and that is what is happening.

But we are developing TMDLs now based on a list that we feel is very, very weak. It is not based on good monitoring. It is based on a fisheries person driving by a shallow water, for example, and saying, "Gee, there is too much algae there."

So there are certainly good programs in the country. I would have to admit that ours is not, because of our past history, but we are catching up.

The CHAIRMAN. Well, that is an important point because all of us say on the one hand, all this is a problem but, on the other hand, as you say, TMDLs are being driven by litigation. People say this is outrageous and what is going to be done about it? Now, the fact that there is no monitoring, no plan, no one doing anything does not really assuage the public grief.

For example, the White River running through Indianapolis, Indiana, source of enormous outrage presently because tens of thousands of fish have died and continue to be dying. The governor devotes much of the State of the State address trying to talk about the fish dying in White River.

Now the fact is that I am not certain the governor has any plan for this, although many people say they are still looking for the source of the problem, but people do get outraged in America. They are very concerned about the environment and clean air and clean water are uppermost.

So balanced against our thoughts today about the Federal Government overreaching, really the lack of monitoring or the whole matrix that might be required to get there, is a public demand for this and people who go after it have a lot of political support, in addition to those who are saying, "Hold on now a moment," what Ms. Browner was saying today, a lot of support, too, for holding on, walking around this.

Ms. Savage, you talk to these people every day in your capacity who are out there on the firing line. What is the balance between this? How do we meet the lawsuits, the public outrage, the demands for standards that may or may not have been established very well and may be extraordinarily different really, state by state? What advice do you have not only to Ms. Browner or Secretary Glickman but to the Congress, to this committee to begin working on this?

Ms. SAVAGE. Let me address your first point, Senator, that the public is outraged, and rightfully so, in many ways. When Mr. Ruckelshaus came to the Agency in 1971 he made some very clear—I remember seeing him now—very clear directions to the EPA and to the states, specifically we were to focus on what was called point sources in two areas.

One was the construction of wastewater treatment facilities, and $5 billion a year was going to build sewage treatment plants. And the other was the bad actors in the industrial sector. The intent was to move to a permitting system for all point sources of discharges.

The 208-program, which was the original precursor to the nonpoint 319-money, was a planning exercise and literally ignored by many in the Agency. Billions of dollars went into cleaning up point sources. It is taking us 30-years to do that and for the most part, we are fairly comfortable with the successes achieved in the point source arena.

On the other hand, it is like the onion. The more you clean up and the more layers of the onion that you discover, the more you understand how difficult this process is. Most of us thought when you clean up the raw sewage in the streams and you get those industries under control, voila, your water is cleaner. Well, that has not necessarily been the case.

On the other hand, as Ms. Browner said, there are all these standards that people are not meeting. That is assuming that the standards are the same as they were in 1972; they are not. It seems that every time we attain standards, then we raise the bar and, of course, we are not going to be in consistent compliance with

the standards because we are always learning more and changing them.

I would not give any advice to Ms. Browner or Mr. Glickman. I am just glad I am not in their shoes, to be perfectly honest. These are very, very tough issues and TMDLs are very, very important. I think that because of the suits, as Paul has said, there is a new energy. About 10-years ago we were all saying clean water is a boring program and it is not very sexy. Well, it is pretty sexy now, and TMDLs has been in the middle of that, but TMDL's aew not the whole program. It is a way to do the water budget, as Ms. Browner indicated. But the budgeteers do not enforce; they do not regulate; they develop the budget, and that is what we need to be doing here.

With regard to the implementation plan, it is not that we do not think nonpoint sources are important; they are; they are critical. Our association came up with the first national analysis of nonpoint sources back in 1985 and at that time we said it was 50-percent of the remaining problems. State administrators cannot say it is 50-percent of the problem and say, "No problem with nonpoint sources." That is inconsistent. But the way we go about implementation and the time frames that we go about cleaning the program or getting to that end point of clean water is what is under debate. Whether EPA has the statutory authority is under debate.

Implementation plans—we feel very strongly, as Bob does and as Chuck does and as Carol does, that implementation plans need to be part of this. The question is do they need to be submitted and approved by EPA? We do not think so. Perhaps an outline of what the implementation plan will include—we have discussed this with the agency specifically—an outline of what that implementation plan would hold and then, after the TMDL is approved, to go back with your public and develop the implementation plan using existing authorities. We are very comfortable with that approach and EPA seems to be at least willing to discuss it.

We want to delete the threatened waters category, because there is just no way to deal with this. Every water in the United States is threatened by something. But when we put threatened waters in this regulation, then you multiply 40,000 number—totally beyond our belief. EPA cannot expect that. So if you delete the threatened waters category, it might be doable in some regard.

The offset provisions are very troubling. Again philosophically, we agree with the concept. If you are going to pollute a waterway and there is a way to get 1.5 out, then you should do that, but how do you do it? You know, philosophically, it makes some sense but most folks in the field do not know how to make that happen.

We need a very clear delisting process. As Paul said, some of the states' lists were just developed by EPA, by drive-bys. That is inadequate. That is inappropriate, and a lot of the listings were done to get 319-money. They did not think much about implementation and enforcement associated with TMDL's. Those lists need to be cleaned up. And we need a very clear delisting process to do that. I could not agree more with Paul on the monitoring. The monitoring is not there for States to do what they need to do in 303(d).

We come before you year after year and argue for money for the monitoring program, try to tell you what we have done in 30-years

of clean water and what is the first thing that happens? Our monitoring money is cut. USGS is cut. That makes no sense. If Congress and the public want accurate data, we need to ask the appropriators to make sure there is money and appropriate strategies for monitoring.

And lastly, we need to integrate our 303(d), the TMDL program, with our 319 nonpoint source program and our 305(b), which is our reporting program. We need to report to you on a regular basis what is going on in these programs. They should not be separate. We should coordinate them into a comprehensive approach that, in fact, does what we are asking—a budget that is a plan and then report to Congress on how we are doing. Fifteen years is not going to do it.

The CHAIRMAN. Well, that is a good list of very sensible suggestions. Have these all been made to Ms. Browner and her associates at some point? I presume——

Ms. SAVAGE. Oh, yes, Sir.

The CHAIRMAN. So you are reciting really on the basis of having done this before.

Ms. SAVAGE. Well, as Mr. Kraft said, there were 32,000 comments to EPA, of which I understand 15,000 were from the forestry industry and the remaining were across the board, very substantive for the most part, and I think you will find that the comments that I have outlined here are reflected in a large majority of those comments.

The CHAIRMAN. Mr. Kraft, you commented in your testimony that the legal basis is not here or not quite here for much of what was being suggested, and you have heard the comments of others—Mr. Adler, who believes that the TMDL program, at least in general, may be a good way to proceed, that we are not able to monitor what we are doing now, but in part, that is because, as Ms. Savage so kindly mentions, money is not often appropriated and that, I suppose, does not happen totally by chance. A lot of people do not want to monitor these things in life. There is resistance to monitoring dirty air over cities from time to time but finally we do this and report it and it has ramifications that are difficult politically. When you begin to get all this data it is good for social scientists but sometimes not for the practitioners who are out there.

What comments do you have, Mr. Kraft, having listened to all this conversation at this point, that would clarify your position or where we ought to go?

Mr. KRAFT. There are a whole host of things, I think, in your question. I do not think, on your first point about the lack of authority, I think the legislative history and EPA's own interpretation of the statute consistently over a long period of time, I think, makes it pretty clear that there is not authority in the current statute for what is being proposed.

As to the second part of your question about TMDLs perhaps being a good thing and being in the statute, I think it is clear, and no one really disagrees with this, that there is a requirement to do a TMDL budget for impaired watershed and it is clear the states do not have the money to do it on the time line they are being ordered by the courts. And I think there probably is some benefit to having a budget.

The question really comes down to then what is the way that you take that budget and translate it into something that is workable for the vast array of nonpoint source activities?

I think for our company we are strong believers in adaptive management. We do that in our own plans, our habitat conservation plans, and I think that kind of approach to 319 is what is needed here.

I think rather than trying to regulate through permits things that really cannot be done, the way you do it is through more money for monitoring, and we definitely need that, and then take a look at your BMPs and are they doing what you think they are supposed to be doing? Get some scientific data that shows whether those BMPs are effective or not.

We need, rather than this regulation, I think what we need is a study to find out what is the problem out there with silviculture, if any? Is it really as big an issue as some would have you believe? I happen to think that that is not the case but perhaps we should put off a massive change in regulation until we can really understand what the problem is.

But I do think that even if there is a problem out there and we find out what it is with better data, the way you approach that is through best management practices because that will lead to better water quality. And the best example I can give is our own habitat conservation plan, which is, in essence, a collective set of best management practices. It includes putting buffers around streams, repairing roads that were not built up to modern standards. It means grazing best management practices, fencing off cattle from streams where that is needed.

It is a whole host of things that when you think about and work it, once you set some guidelines out there for resource managers, you will be impressed, I think, with the dedication that people who work the land, who know the land, they want to protect these resources and they will.

So I think rather than having to get into a permitting of every single thing, we can create, through an adaptive management process, better BMPs.

The CHAIRMAN. As you know, most of the protest of the EPA idea come from the silviculture area, from forestry. Trying to think through, and you are someone who knows about this, why is silviculture likely to come under fire at any point? If you think of lots of small plots with trees on them, it is hard to figure that, but I gather when Ms. Browner was talking about the bad actors, there are very large lumbering interests who impact upon streams and waterways in various ways, foul up the water in some fashion.

Now, what is to be done about this where there seem to be outrageous situations, and what does the industry do about it now?

Mr. KRAFT. I think there are a couple of answers to that. I would think you would find among the vast majority of our members in AP&PA that they are exactly the opposite. They are responsible stewards of the land.

One of the things that the industry has done is, I think, have a code of conduct that they have implemented through the Sustainable Forestry Initiative Program, a commitment to clean water. I

think you see many of the large timber companies around the country doing habitat conservation plans.

So I think there is a lot going on already under the voluntary programs that we have to protect clean water.

The CHAIRMAN. Well, what if somebody in the far west sees a stream or river and they believe that things are really being fouled up by somebody in the lumber or timber industry and they file suit and say somebody has to stop all this? Isn't this a part of the reason we are having the argument as Ms. Browner comes forward with this?

Mr. KRAFT. Mr. Chairman, I would say that the states are very active in enforcing those standards now. If we were to cause a problem on our land, if we violated the best management practices or the streamside management zone and caused pollution in a stream, we would be called into court immediately. I think there is ample enforcement authority under the current act and the states and EPA have that enforcement authority today.

The CHAIRMAN. Now Mr. Barrett, from the standpoint of the farmers, it does not matter whether we are talking about EPA today; whenever we talk about EPA, there are problems. In fact, I think some have said sometimes we have price problems and those are very severe. the Committee has been talking about that all the time. But problems with EPA supersede that almost every time in terms of getting a turn-out of people.

Now in this particular area, whether farmers are exercised or not, I am trying to gather your view as to how those views fit into a total management plan for a waterway or lakes and streams and what have you. In other words, really most of the protests on this, as I stated, I think, accurate, have come from people in forestry, although there have been long-running arguments with dirt farmers and other people who are involved in agriculture with regard to EPA. But on this specific argument today, could you restate what the objections are as you see it from farmers other than foresters?

Mr. BARRETT. Well, Mr. Chairman, with all the good work you do here on the Committee to try to keep us in business, you talked earlier about the crop insurance mark-up and for us to have the most important asset we own, which is our land, threatened by a Federal regulatory take-over is something that really has not sunk in on the greater agriculture community out there yet. I do not think the pendulum has swung to the degree it has with the silviculture folks, but that is going to change. And that is why we are trying to deal with it as proactively as possible down at the county level to try to get the real row crop farmers involved in the TMDL process.

The largest issue I think that we have to get across to policymakers is that when you deal with land management practices like BMPs, and that is what we have with the help of NRCS to manage our nonpoint source run-off, we can have an effective program that leads to water quality improvements over time.

But when you put BMPs into a water quality-based program, like the TMDL program, just the mere BMP by itself is not enough. You have to ratchet your BMPs without regard to whether or not

they are practicable or feasible or whether or not you are making any money.

The BMP might be you take the south 100-acres out of production and plant grass on it. That is not something that American agriculture is going to be able to comply with. That is why my testimony to you is that in order to, in a cooperative way for us to move forward with the states and improve water quality, we need to work with the BMP program that you in Congress passed for us, Section 319, along with all of our other partners—the NRCS and USDA—and actually get something done on the ground.

I think that is the real thing that needs to be changed. We in agriculture need to take back Section 319 from EPA and make it into an action-oriented program that improves rural nonpoint source water quality, rather than what it basically is now, which is just a process program where they go around counting septic tanks and such things as that. That is probably the number one thing that we could do to really make a difference out there.

And I agree with all the other statements about monitoring. The drive-by monitoring problem that we have in the TMDL business right now is horrendous. The state of Idaho ended up with 962 drive-by monitored waters on its list. The state of Oklahoma—I have a paper trail on that one. In 1992 the state of Oklahoma turned in a 303-list with about 20-waters on it. EPA made them put on 80-nonpoint source only waters that were just potentially threatened. They were on another list somewhere but nobody knew why they were on the list. Then, 8-years later, the state was asking EPA to take them off the list and they said, "Well, even if you had no data to put them on in the first place, you cannot take them off unless you have data."

So in a nutshell, Mr. Chairman, we need to have better science behind this process and we need to put BMPs into a process where they can be allowed to work.

The CHAIRMAN. I think you have emphasized correctly what is a fear, at least, of many farmers of the arbitrary aspects of this or that a good part of a farm might be sacrificed for the greater good. There is some possibility always hopefully in our courts of law for due process and working out before you are bankrupted arbitrarily but a good number of farmers feel they have been dealt with in this way. So it is timely that we hear that again because it is a part of the argument.

Mr. Adler, your testimony has been characterized by me so many times, it is only fair that you have a chance at least to make certain that it remains. But having heard what you have heard, do you have a first comment?

Mr. ADLER. I actually appreciate your characterization of my testimony, which I think was fairly accurate.

But I do want to respond to some of the things that have been said. First, your opening question, which is whether or not this committee or the Congress as a whole needs to take action on the statute, and I do not think you do. I think that EPA is well within its legal authority within the regulations.

There are some legal issues at the margins here that I am sure are going to be litigated, but that is true of every single regulation that EPA has ever promulgated and undoubtedly every regulation

that it will promulgate in the future, and that is the role of the courts to decide that.

I do agree that Congress should help, can help by increasing dollars for monitoring and implementation of the TMDL program. You are used to hearing that. "Don't do anything but send me more money" is, I think, the message, but I think it is true. And the FACA committee was also unanimous in its recommendation for more monitoring and better monitoring.

But in response to John Barrett's concerns, what we need is good science, not perfect science, and Congress acknowledged that in 1972 when it said that TMDLs ought to be set with a margin of safety, taking into account seasonal variations and the uncertainty inherent in the process. If we wait for perfect science, I would submit that the next generation of all of us will be in this room in 30-years talking about the very same issues. We need to act on good science but the best available science and to move forward.

I think it is important to take an historical perspective here because there is a bit of a misimpression that EPA all of a sudden launched this TMDL missile, and that is not what happened at all. Congress adopted the TMDL program in 1972 and the problem is that it was never implemented except in the breach. What catalyzed the activities over the past several years was a rash of citizen suits around the country in which groups complained that this legitimate and useful program had never been implemented and the courts, by and large, agreed. In fact, many of the courts expressed some shock at the slow pace or lack of pace with which this program had been implemented.

What EPA tried to do through the FACA committee and its rulemaking process was to try to make some sense of the program and to try to make it workable. As just one example, we had courts saying that states ought to write their TMDLs in 5-years and the FACA committee recommendation was to move that to 15-years and I would note that there were four state representatives on the Committee who agreed with that representation or that recommendation.

What EPA has done I think is the reasonable conservative middle ground. If Congress were to act, it would consider two other courses. One is to maintain the status quo but to get rid of the TMDL program, and I think we all agree that the status quo has not worked. Congress can throw more money at the nonpoint source and farm bill programs, but you legitimately do not like to simply throw money at a problem without knowing that the money is being spent wisely.

The other course on the other side is to regulate nonpoint sources and to treat them like we do point sources. There may be a day that comes where we will decide that we have to do that but in the meantime, the TMDL process is the reasonable middle ground and I think we ought to give it a shot.

The CHAIRMAN. Is there any further comment from the panelists?

Ms. SAVAGE. Mr. Chairman, I would like to add to that. Is there a role for Congress? I think there is. There is always a role for Congress in the statutes that they pass. And it may well be time for us to have a regulatory nonpoint source program, an enforceable program that might include acknowledgment of the BMPs and the

good actors that are out there doing it right and that are moving forward. We at ASIWPCA do not want to interfer with that or undermining their efforts. But, as Ms. Browner said, there are bad actors out there and maybe it is time that we say look, you have X amount of time to do it right and if you are a habitual wrong doer, then we ought to have something that is more enforceable and puts you on par with a point source that is not doing what it is supposed to be doing.

So I think in that, Bob and I agree. On the other hand, to say that there are only two options—status quo or go with these regulations—I do not think that that is accurate. We could modify these regulations based the comments and there have been, as we said, 32,000 comments. EPA has more than its hand full in going through all of these recommendations. There are many, many good comments. We can modify these regulations and get into the debate on nonpoint sources here in the Congress where it needs to be.

The CHAIRMAN. Well, I thank all of you for your testimony and likewise for being so forthcoming in your responses to the chair and to each other.

The hearing is adjourned.

[Whereupon, at 12:01 p.m., the Committee adjourned.]

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APPENDIX

FEBRUARY 23, 2000

OPENING STATEMENT OF HON. RICHARD G. LUGAR, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY

FEBRUARY 23, 2000

WATER QUALITY

The committee meets today to address the issue of water quality as it pertains to agriculture and forestry. Our particular focus this morning is the Environmental Protection Agency's (EPA) proposed changes with regard to the Total Maximum Daily Load program and the subsequent changes in the National Pollutant Discharge Elimination System Program.

Many in the agriculture and forestry community have concerns about how these proposed regulations will affect their businesses as well as their involvement in ongoing watershed restoration. Under the Clean Water Act, states have utilized voluntary programs and approaches to protect water quality. We want to hear today about the effectiveness of this approach. The States are concerned that the proposed regulations represent a major significant shift away from historic voluntary and collaborative efforts toward watershed-based approaches. These collaborative watershed strategies are the basis for voluntary, incentive-based solutions to control nonpoint source pollution. State water quality agencies, the Defense Department's Clean Water Act Services Steering Committee, the Department of Agriculture and the U.S. Chamber of Commerce (representing more than 3 million U.S. businesses), along with many forestry and agriculture groups question EPA's proposed revisions. They claim that the proposals would exceed EPA's authority, undermine states rights, impose exceptional costs and impede economic development.

We also want to address today EPA's legal authority to regulate nonpoint source pollution. The Congressional Research Service, in a legal memo prepared for the Agriculture Committee, has stated that it does not appear that EPA has legal authority to regulate nonpoint sources under the Clean Water Act. EPA appeared to concede this point at a House hearing last week.

Meanwhile, the water quality challenges remain, and agriculture and forestry's downstream neighbors will, with justification, expect progress. The question then, is, how can we best work together to improve our nation's water quality? Is it best done by command-and-control, or by further commitment to incentive-based watershed approaches, which may not have had either the time or the investment to work.

This committee has offered leadership on incentives for water quality efforts. The 1996 farm bill was one of the most environmentally responsive and responsible farm bills in our Nation's history. It included the Environmental Quality Incentives Program (EQIP) , that I authored along with Senator Leahy. This is a highly successful program that is targeted by states to environmentally sensitive areas. EQIP provides producers with the flexibility needed to address nonpoint source problems, which vary within a state, from state to state, and from watershed to watershed. These problems can also vary from season to season and from year to year. Nonpoint source pollution is very site specific, and EPA should incorporate maximum flexibility into any revision of the proposed regulations.

It is my hope that this hearing, in addition to being a forum for the airing of concerns about these particular proposed rules, will also be the start of a dialogue on how we can make progress in an incentive-based system to address water quality challenges associated with agriculture and forestry. This may involve more funding for our nonpoint source programs such as EQIP, the Wetland Reserve Program and the Conservation Reserve Program. We should also examine how to increase the use of other market-based approaches. It is through a combination of well-funded and innovative strategies that we will best address agriculture's water quality challenges.

TESTIMONY OF
CAROL BROWNER
ADMINISTRATOR
U. S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY
UNITED STATES SENATE

February 23, 2000

INTRODUCTION

Good morning, Mr. Chairman and Members of the Committee. I am Carol M. Browner, Administrator of the U.S. Environmental Protection Agency (EPA). I am accompanied today by Chuck Fox, Assistant Administrator for Water. I look forward to talking with you this morning about the Nation's clean water program and, more specifically, our efforts to identify polluted waters around the country and restore their health.

I am very pleased that Dan Glickman, Secretary of the U.S. Department of Agriculture (USDA) is also testifying here today. Over the past several years, EPA and USDA have worked together very closely to coordinate programs designed to protect natural resources and water quality. For example, EPA and USDA, along with several other federal agencies, worked together to develop the *Clean Water Action Plan* announced by President Clinton just over two years ago. We continue to work together to oversee implementation of the *Action Plan* and to coordinate key projects, such as our work to improve management of excess nutrients in waste from animal feeding operations.

The President's recent proposal to provide an increase of $1.3 billion in FY 2001 for diverse USDA conservation programs provides an opportunity to further strengthen coordination between USDA and EPA to protect natural resources and water quality.

I am pleased that the President has proposed to substantially expand FY 2001 funding for grants to States for water pollution control. The President's Budget proposes increased funding of $45 million for grants to States to identify and address the remaining polluted waters around the country. This funding, when matched by States will result in an increase of $75 million annually for development of "Total Maximum Daily Loads" or "TMDLs." As my testimony will explain, TMDLs are critical to attaining our water quality goals.

The FY 2001 budget also includes an additional $50 million in funding for grants to States to implement projects to reduce pollution from diffuse or "nonpoint sources," bringing the total value of these grants to $250 million, a 150% increase in 3 years.

Finally, the FY 2001 budget will include an additional $50 million for grants to support efforts to restore water quality in the existing "areas of concern" in the Great Lakes.

This new funding for USDA and EPA's clean water programs, when approved by the Congress, will provide States, agricultural producers, and others with significantly enhanced resources to clean-up water pollution problems around the country.

In my testimony today, I want to describe the work EPA is doing to carry the clear water program forward in this new century, giving special attention to our recent proposals to strengthen regulations guiding our efforts to identify and restore polluted waters under the Clean Water Act.

CLEAN WATER FOR THE FUTURE -- THE *CLEAN WATER ACTION PLAN*

Twenty-eight years ago, the Potomac River was too dirty to swim in, Lake Erie was dying, and the Cuyahoga River was so polluted it burst into flames. Many rivers and beaches were little more than open sewers.

Enactment of the Clean Water Act dramatically improved the health of rivers, lakes and coastal waters. It stopped billions of pounds of pollution from fouling the water and doubled the number of waterways safe for fishing and swimming. Today, many rivers, lakes, and coasts are thriving centers of healthy communities.

Despite this tremendous progress in reducing water pollution, almost 40 percent of the Nation's waters assessed by States still do not meet water quality goals. The States report that pollution from factories and sewage treatment plants has been reduced but remains a concern in many areas. Soil erosion and wetland losses impair or threaten the health of many aquatic systems. Pollution from a wide range of sources (e.g. storm water from city streets, agricultural lands, forestry operations, and others) degrade water resources. Fish in many waters contain unacceptable levels of mercury and other toxic contaminants. Beaches are too often closed due to poor water quality.

Several years ago, after taking a hard look at the serious water pollution problems around the country, the Administration concluded that current implementation of the existing programs was not fully addressing serious water pollution threats to public health, living resources, and the Nation's waters.

In response to this concern, President Clinton and Vice President Gore announced, in February of 1998, an interagency effort to enhance existing clean water programs and speed the restoration of the Nation's waterways. The *Clean Water Action Plan* was the product of a cooperative effort by USDA, EPA, the Department of the Interior, the National Oceanic and Atmospheric Administration, the Army Corps of Engineers and others. It describes over 100 actions -- based on existing statutory authority -- that these agencies and others will undertake to strengthen efforts to restore and protect water resources.

The *Action Plan* is built around four key tools to achieve clean water goals.

- **A Watershed Approach** -- The *Action Plan* envisions an improved collaborative effort by federal, State, Tribal, and local governments, the public, and the private sector to restore and sustain the health of the over 2,000 watersheds in the country. The watershed approach provides a framework for water quality management and is a key to setting priorities and taking action to clean up rivers, lakes, and coastal waters.

- **Strong Federal and State Standards** -- The *Action Plan* describes how federal, State, and Tribal agencies may revise standards where needed and make programs more effective. Strong standards are key to protecting public health, preventing polluted runoff, and ensuring accountability.

- **Natural Resource Stewardship** -- Much of the land in the Nation's watersheds is crop land, pasture, rangeland, or forests, and much of the water that ends up in rivers, lakes, and coastal waters falls on these lands first. Clean water depends on the conservation and stewardship of these natural resources. This *Action Plan* encourages federal natural resource agencies, including the Department of Agriculture, to support State and local watershed restoration and protection.

- **Informed Citizens and Officials** -- Clear, accurate, and timely information is the foundation of a sound water quality program. Informed citizens and officials make better decisions about their watersheds. The *Action Plan* encourages federal agencies to improve the information available to the public, governments, and others about the health of their watersheds and the safety of their beaches, drinking water, and fish.

USDA, EPA and others are making good progress in implementing the over 100 specific actions described in the *Clean Water Action Plan*. Congress has provided vital support to this work by appropriating critical funding, including doubling EPA's State grants for reducing nonpoint pollution to about $200 million.

A key accomplishment promoted by the *Action Plan* is completion of State assessments of watershed health and initiation of over 300 Watershed Restoration Action Strategies to restore polluted waters on a watershed basis. These Action Strategies are a tremendous tool for drawing together the diverse authorities and resources of local, State, and federal agencies to restore watershed health.

Other accomplishments include a new BEACH Action Plan, a response plan for pollution threats to coastal waters, new regulations to control discharges of stormwater, new efforts to support establishment of riparian buffers, and a contaminated sediment strategy. We are also supporting efforts to protect water quality and wetlands on a watershed basis through "watershed assistance grants" and the five State grant program.

The *Clean Water Action Plan* is a sound blueprint that brings the Nation's clean water programs into the new century. I ask, Mr. Chairman, that a copy of the first annual report of progress in implementing the *Clean Water Action Plan* be included as part of my testimony in the hearing record.

RESTORING AMERICA'S POLLUTED WATERS

The clean water programs that EPA and the States implement -- ranging from financing assistance for sewage treatment facilities, to permits for dischargers, to technical assistance to control pollution from nonpoint sources -- are all intended to reduce water pollution.

For many years after passage of the 1972 Clean Water Act, pollution problems were so common that any reduction in pollutants made a contribution to improving the health of waters. Today, however, some of the most obvious water pollution problems have been addressed. To restore the health of those waters that remain polluted, we need to complement existing programs with a more focused effort to identify *specific* polluted waters and define the *specific* measures needed to restore them to health.

The authors of the 1972 Clean Water Act envisioned a time when this more focused approach to restoring the remaining polluted waters would be needed and they created the TMDL program in section 303(d) of the Act.

In my testimony today, I want to discuss the existing TMDL program, the story that it tells about the health of our waters, and the regulatory revisions that EPA is proposing in order to strengthen the existing program.

The Total Maximum Daily Load (TMDL) Program Background

The TMDL program, as it exists today, has two key phases -- identification of polluted waters and restoration of the health of these waters.

In the *identification* phase of the program, the States, with EPA oversight and approval, usually develop lists of polluted waterbodies -- waters that do not attain the water quality standards adopted by that State -- every two years. States consult with the public in developing lists, rank waters on their lists based on the severity of the pollution, and set schedules for the development of TMDLs for each water body over an 8 -13 year period.

The second part of the program is the development of the actual "TMDL," which is, in effect, a State's plan to restore the uses of the water that the State has determined to be appropriate (e.g. swimming). It includes a quantitative assessment of water quality problems and the pollutant sources that contribute to these problems. A TMDL for an impaired water defines the amount of a pollutant that can be introduced into a waterbody so that the waterbody will achieve the water quality standards adopted by that State and allocates reductions in the pollutant or pollutants among the sources in a watershed. Therefore, a TMDL is in effect a "pollution budget" for an impaired waterbody. As such, it provides a guide to taking on-the-ground actions needed to restore a waterbody.

A TMDL can focus on a small segment of a waterbody or on a group of waters in a larger watershed. Where many polluted waters are clustered together, some States have chosen to develop a more comprehensive, watershed approach to the problem -- such as a Watershed Restoration Action Strategy as described in the *Clean Water Action Plan.*

States develop the lists of polluted waters and the specific TMDLs, both of which must be approved by EPA. If EPA disapproves a State list or TMDL, the Clean Water Act requires EPA to establish the list or TMDL for the State.

Program Status

The TMDL program was designed to provide a safety net, catching water bodies that were not protected or restored by the implementation of the range of general, broadly applicable, pollution control programs authorized in the Clean Water Act.

Until the early 1990's, however, EPA and States gave top priority to implementing these general clean water programs and gave lower priority to the more focused restoration authorities of the TMDL program. As a result, relatively few TMDLs were developed and many State lists were limited to a few waters and were not submitted in a timely manner.

Several years ago, citizen organizations began bringing legal actions against EPA seeking the listing of waters and development of TMDLs. To date, 17 of these cases have been resolved with agreement for State actions to identify impaired waters and

establish TMDLs. Where States fail to act, EPA will step in and identify the polluted waters or establish the TMDLs.

In 1996, EPA determined that there was a need for a comprehensive evaluation of the TMDL program. The Agency convened a committee under the Federal Advisory Committee Act (FACA) to make recommendations for improving program implementation, including needed changes to the TMDL regulations and guidance.

The TMDL FACA committee was composed of 20 individuals with diverse backgrounds, including agriculture, forestry, environmental advocacy, industry, and State, local, and Tribal governments. Two representatives of the USDA served as ex-officio members of the FACA.

In July of 1998, the committee submitted to EPA its final report containing more than 100 consensus recommendations, a subset of which would require regulatory changes. Although the TMDL FACA committee did not meet agreement on all issues, the recommendations guided EPA in the development of the revisions to the TMDL regulations proposed in August of last year.

EPA already has taken a number of other significant steps to improve State progress in listing polluted waters and developing TMDLs. For example, in August 1997, EPA issued two policy memoranda providing guidance for State lists and requesting that States work to improve the pace of establishing TMDLs. In particular, EPA asked that States develop 8-13 year schedules for developing TMDLs for all listed waterbodies, beginning with the lists due April 1, 1998.

States have made very good progress developing lists of polluted waters. All States submitted 1998 lists and EPA has approved all but one of these lists. In a few cases, EPA added waters to a State list. These lists, and maps of each State's polluted waters, are available over the Internet at www.owow/tmdls.epa.gov.

In addition, the number of TMDLs developed by States and approved by EPA has been steadily increasing over the past several years. Between 1972 (when Congress passed section 303(d) as part of the Clean Water Act) and 1999, States and EPA established approximately 1000 TMDLs.

Since October 1999, States have established, and EPA has approved, over 600 TMDLs for a variety of pollutants, including sediments and nutrients which are predominately caused by polluted runoff. Across the country, over 2000 TMDLs are now under development.

What Do the 1998 Polluted Waters Lists Tell Us?

The 1998 State lists of polluted waters tell us that the overwhelming majority of Americans -- 218 million -- live within 10 miles of a polluted waterbody. Over 20,000 waterbodies across the country are identified as not meeting water quality standards. These waterbodies include over 300,000 river and shore miles and 5 million lake acres. The size of these impaired waterbodies range from short sections of headwater streams to long sections of major rivers like the Mississippi and the Colorado.

Direct pollution discharges from sewage treatment plants and factories are the sole cause of pollution in about 10 percent of polluted waters. Another 47 percent are impaired by a combination of point source discharges and polluted runoff. The remainder are impaired by polluted runoff from diffuse or nonpoint sources. Some of the impairments are the result of ongoing discharges while others stem from historic or "legacy" problems resulting from past activities.

The pollutants most frequently identified as causing water quality impairment include sediments, excess nutrients, and harmful microorganisms. Metals, including toxics, also contribute to these impairments.

On average, there are about two pollutants identified for each of the impaired waters. This means that as many as 40,000 TMDLs may need to be done, although watershed approaches can be used to address many of these individual segments at the same time and in a coordinated manner for greater efficiency.

To better illustrate the story that the 1998 polluted waters lists tell, I have several maps and graphs -- including a national map depicting the percent of impaired waters by watershed, and a bar graph indicating the leading reasons that waters do not meet their clean water goals -- that I would like to enter into the record.

Proposed Regulatory Revisions

On August 23, 1999 President Clinton announced proposed revisions to the existing TMDL program regulations that will significantly strengthen the Nation's ability to achieve clean water goals and provide States, Territories, and authorized Tribes clearer

direction for identifying and restoring polluted waters. In addition, EPA proposed changes to the Clean Water Act discharge permit program and the water quality standards program that complement the proposed TMDL regulatory revisions.

These regulatory revisions are mid-course changes to the existing program based on current data and first-hand, on-the-ground knowledge regarding the status of the Nation's waters. Moreover, the insights we gained from the Advisory Committee process provided guidance on constructive changes to the program.

I want to briefly describe several of the key changes we have proposed to the TMDL program.

- **Schedules for TMDLs** -- The proposed rule calls for States to develop schedules for establishing TMDLs within a 15 year timeframe, two years beyond the current 13 year schedule. By proposing this 15 year period, EPA is recognizing that some States need to develop many TMDLs and that it takes time to develop a useful and effective TMDL. In addition, the regulation does not set a time period for implementing the TMDL and attaining water quality standards, thereby giving States discretion to develop appropriate schedules for implementation.

- **Priorities for TMDLS** -- The proposed regulations also give States considerable flexibility in setting priorities for the development of TMDLs over the 15 year period. While the proposed regulations would require States to prioritize their listed waters, the only specific priority setting requirements in the proposed rule are that States assign a high priority to polluted waters designated as a public drinking water supply where the pollutant of concern causes a violation of a drinking water standard, and to waters where pollutants threaten species listed as endangered or threatened under the Endangered Species Act.

- **Allocating Needed Pollution Reductions for Polluted Waters** -- The proposed regulations make clear that TMDLs include an allocation of the needed pollutant reductions among sources of pollution, but give States freedom to allocate needed pollution load reductions among sources in whatever manner they deem appropriate, provided that the sum of the allocations will result in the water attaining State water quality standards.

- **Defining "Reasonable Assurance"** -- EPA's current guidance asks that there be a "reasonable assurance" that a source actually will attain its pollution reduction allocation. Without such assurance, the TMDL may not result in attainment of the State-adopted water quality standard.

  The proposed regulations more explicitly define "reasonable assurance." In effect, "reasonable assurance" means a high degree of confidence that allocations in the TMDL will be implemented. For point sources, reasonable assurance would mean that Clean Water Act permits will be consistent with any applicable pollution reduction allocation contained in the TMDL.

  For diffuse or "nonpoint" sources, where no permit is required, "reasonable assurance" would mean that nonpoint source controls are specific to the pollutant causing the impairment, implemented according to an expeditious schedule, and supported by reliable delivery mechanisms and adequate funding. Some examples include regulations or local ordinances, performance bonds, memoranda of understanding, contracts or similar agreements. Voluntary and incentive-based actions may also be acceptable measures of reasonable assurance and are encouraged. It is important to note that a State decision to allocate load reductions to nonpoint sources does not bring that operator into a permit or regulatory program.

- **TMDL Implementation Plans** -- The proposed regulations call for organizing TMDL related information concerning needed pollution reductions, allocation of pollution reduction effort among sources, and "reasonable assurances" in a single document called an implementation plan.

  States will have the responsibility for developing the plans, but will work closely with a range of stakeholders at the local, waterbody level. States could develop implementation plans for clusters of listed waters on a watershed scale, as long as the scale of the implementation plan is consistent with the geographic scale at which the TMDL is established.

- **Permit Program Revisions** -- In cases where a State developed a TMDL that is disapproved by EPA, the Clean Water Act requires EPA to establish the TMDL. In such cases, the proposed regulations would allow EPA to use the authority that States now have to designate certain sources, such as large Animal Feeding Operations and large fish farms, as needing Clean Water Act permits. EPA would use this authority only where a permit is needed to assure implementation of measures called for in a TMDL established by EPA.

The new regulations also would provide EPA the authority to object to and, if necessary, reissue expired permits issued by States for discharges to polluted waterbodies where reissuance is necessary to move toward meeting water quality standards while a TMDL is being established or to ensure that a completed TMDL is adequately implemented.

- **Silviculture Activities --** The proposed regulation provides States with discretionary authority to require that discharges of stormwater from forest activities such as road building and harvesting have a Clean Water Act permit, but only where the discharge contributes to the nonattainment of a State-adopted water quality standard or is a "significant contributor" of pollutants to waters.

  Although silviculture activities are not the most significant source of water pollution nationwide, they can cause serious pollution problems in some areas. In the preliminary data for the forthcoming 1998 305(b) report, thirty-two States identified forestry as a source of water quality problems for 20,000 miles of rivers and streams and 220,000 acres of lakes. Other States identified serious problems from pollutants, such as sediment and nutrients, that can result from forestry and other activities, but did not identify source categories.

  This regulatory revision is narrowly tailored to allow the State permitting authority the option of requiring an individual silviculture discharger to address a significant water pollution problem through the use of a permit when other tools (e.g. financial assistance, voluntary measures) are unavailable, are not being implemented, or have proven ineffective.

  EPA recognizes that many States have strong and effective voluntary programs for reducing water pollution from silviculture operations, and expects that most States will continue to rely on these programs both to protect the quality of waters that are now clean and to restore the quality of waters identified as polluted.

  Where EPA uses its backstop authority and establishes a TMDL for a State, and allocates pollution reductions to forestry sources, the Agency will rely on voluntary, incentive and financing approaches for implementing these load allocations where they are proven effective. Only in cases where no other option offers a "reasonable assurance" of implementation would EPA consider using the proposed regulatory authority to require a discharge of stormwater from a forestry operation to have a Clean Water Act permit. EPA expects to use this authority as a last resort.

- **New Discharges to Polluted Waters** – The proposed regulations outline a new approach to achieving progress toward attainment of water quality standards in polluted waterbodies after listing and pending establishment of a TMDL. Because

the new regulation would allow up to 15 years for States to develop TMDLs, there is a significant risk that conditions will decline in many waters before the TMDL is developed.

Existing regulations allow new dischargers to polluted waters, as long as the discharge "does not cause or contribute to the violation of water quality standards." This means the dischargers either will not discharge pollutants causing the water to be impaired, or if they intend to discharge such pollutants, their permit must include effluent limitations that "derive from and comply with" water quality standards (e.g, the pollutant concentration level in the newly permitted effluent does not exceed the allowed concentration level of the pollutant in the receiving water).

EPA is proposing to strengthen this requirement by requiring that, where a State (or EPA where it issues the permits) allows large new or significantly expanded discharges to these waters, discharge permits must result in "reasonable further progress" toward water quality goals. Where possible, permits are to include an offset from another pollution source of one-and- a-half times the proposed new or expanded discharge. At a minimum, the permit is to do no further harm to the receiving water. This provision would help to assure that pollutants that bioaccumulate or are controlled based on mass loading, rather than concentration, do not make already polluted waters worse.

CONCLUSION

Most Americans are rightly proud of the tremendous progress the country has made over the past 25 years in improving the quality of our rivers, lakes, and coastal waters. The days of rivers bursting into flame and lakes dying are behind us.

This accomplishment resulted from a team effort -- Congress lead the way in passing the Clean Water Act and other federal laws, and federal agencies like EPA and the Department of Agriculture did their part. But much of the real, on-the-ground work has been done by the States, cities, small towns, and individual stewards of the land, like farmers, ranchers, and woodland managers.

The 1972 Clean Water Act set the ambitious -- some thought impossible -- national goal of "fishable and swimmable" waters for **all** Americans. At the turn of the new millennium, we are finally within striking distance of that goal. We need to maintain our traditional programs to protect clean waters. But today, we are able to list and put on a map each of the 20,000 polluted waters in the country. And, we have a process in place -- the TMDL program -- to define the specific steps needed to restore the health of these polluted waters and to meet our clean water goals within the foreseeable future.

It is critical that we, as a Nation, rededicate ourselves to attaining the Clean Water Act goals that have inspired us for the past 25 years. The TMDL regulations we have proposed draw on the core authorities of the Clean Water Act and refine and strengthen the existing program for identifying and restoring polluted waters. They provide a map that will support us in our effort to fulfill the original promise of the Clean Water Act.

Some who have commented on the proposed regulations have suggested that we are asking the country to take too great a step toward cleaner water and that we should set aside these proposals. I respectfully and strongly disagree.

We began this effort over three years ago by forming a Federal Advisory Committee including a wide range of interested parties. We used the report of this Advisory Committee, and input from States and others, to develop a proposed regulation. We extended the comment period on the proposed rules to January 20 of 2000 and actively sought public comments and input from all interested parties for 150

days. We held a series of public meetings around the country on this proposal to respond to questions and listen to alternatives.

A key theme of many of the comments we heard in developing the rule is the need to increase financial resources for States to manage this effort and to assist pollution sources in implementing needed controls. We recognize this need. We have increased funding for key State grant programs in recent years. Congress approved the Administration's requests to add $100 million to State grants for the nonpoint pollution control program in FYs 1999 and 2000. Most importantly, for FY 2001, the President has proposed a major increase to EPA grants to States targeted specifically for development of TMDLs. This funding, when matched by States, will provide $75 million for this important work. This is complemented by the proposed $1.3 billion increase in conservation programs at USDA. We heard the call for increased resources and we responded.

Mr. Chairman, some observers will tell you that these new regulations are more of the old, top-down, command-and-control, one-size-fits-all approach to environmental protection. In fact, the regulations are guided by a vision of a dramatically new approach to clean water programs.

This new approach focuses attention on pollution sources in proven problem areas, rather than all sources. It is managed by the States, rather than EPA. It is designed to attain the water quality goals that the States have set and to use measures that are tailored to fit each specific waterbody, rather than a nationally applicable requirement. And it identifies needed pollution reductions based on input from the

grassroots, waterbody level, rather than relying on a single, national, regulatory answer. In sum, we think we are on the right track to restoring the Nation's polluted waters.

Over the next several months, we will work with other federal agencies, States, and other interested parties to develop a final regulation to help the Nation better achieve the goal of restoring polluted waters.

Thank you, Mr. Chairman and members of the Committee for this opportunity to testify on EPA's efforts, in cooperation with States and other federal agencies such as the Department of Agriculture, to restore the Nation's polluted waters.

I will be happy to answer any questions.

* * *

U.S. Department of Agriculture Testimony
to the
Committee on Agriculture, Nutrition, and Forestry
by
Dan Glickman
Secretary

February 23, 2000

Mr. Chairman and members of the Committee, thank you for inviting me to appear before you today to join my colleague Carol Browner, Administrator of the Environmental Protection Agency (EPA), to discuss EPA's proposed rules on Total Maximum Daily Loads (TMDL). I am accompanied by Deputy Secretary Richard Rominger and Under Secretary for Natural Resources and Environment Jim Lyons.

USDA shares EPA's commitment to cleaning the waters of the United States and building on successes reducing water pollution over the past several decades. But, to some degree, those accomplishments were the easy part. The remaining pollution concerns, as highlighted in the President's Clean Water Action Plan which Administrator Browner and I helped prepare, are so-called "nonpoint sources" of pollution such as soil erosion, urban runoff, pollutants from animal feeding operations and other sources that do not come from a single, simply-identified source. Addressing these nonpoint sources of pollution is the great challenge that remains to further

improve our waters to make them fishable, swimmable, and potable for all Americans to enjoy.

To accomplish these next steps in cleaning our waters will take a concerted effort from farmers, ranchers, and forest landowners, as well as urban and suburban residents. Notwithstanding all the work that remains, farmers, ranchers, and foresters have been working for years to reduce the effects of their operations on water quality. Much has been achieved in this regard using many of the conservation tools that the Congress and Department wrote into the 1985, 1990, and 1996 Farm Bills.

For example, the Conservation Reserve Program (CRP) has been an extremely effective tool in reducing erosion on highly erodible lands. Continuous sign-up of buffer practices under CRP has become an important part of water quality protection. The Wetlands Reserve Program, the Environmental Quality Incentive Program (EQIP) and one of its predecessors the Water Quality Incentive Program have benefitted thousands of farmers and ranchers and helped them to improve the productivity of their operations through improved conservation. The Conservation Reserve Enhancement Program (CREP) is playing an important role in protecting the waters of the Chesapeake Bay, salmon habitat in Oregon and Washington, and drinking water supplies for New York City. The President's FY 2001 budget request includes $1.3 billion

above currently authorized levels to bolster our agriculture conservation programs.

I am proud of agriculture's and forestry's contributions to the nation's efforts to clean our waters, while recognizing that we can and should do more. The question is how should we proceed with our efforts to reduce nonpoint source pollution, and, what additional tools are needed to realize further gains?

I believe we must proceed carefully and thoughtfully. As you know, American farmers and ranchers have for the last three years suffered from rock-bottom prices, shrinking global demand, record worldwide production, and a slew of natural disasters. They are under extraordinary duress - and more than ever - they need clear and understandable information about how any new proposed regulation might affect their operations.

The proposed TMDL rules are understandably confusing to the agriculture community. The language of the draft rule is very complex and frankly would present a challenge to any expert on the issue. First and foremost, farmers need a clear statement of how the proposed rule would affect them.

Mr. Chairman, I want to clarify the confusion regarding the Department of Agriculture's position on the proposed TMDL rules. On October 22, 1999, Mr. Lyons' office sent a letter to Administrator Browner

commenting on EPA's proposed rule. However, the letter had not gone through Departmental clearance and more importantly, I never reviewed it. Accordingly, it does not represent USDA's official position.

It is unfortunate because if I had had an opportunity to review the October letter, I would have set a different tone. Some are using the letter to drive a wedge between USDA and EPA on this issue. The letter unfairly questioned the EPA's interpretations of its own authorities. Let me make clear, that we defer to EPA's interpretations of its legal authorities as it is the agency charged by this Congress to implement the Clean Water Act.

I have concerns about the proposed rule, but I believe adjustments can be made without undermining the intent or the letter of the law. USDA has formed an interagency group with EPA to work through our concerns. This group has been meeting regularly and I understand it is making progress.

I believe the TMDL rule should recognize the best management practices of America's farmers and ranchers; second, the rule should be more clearly constructed and should minimize adverse effects on agriculture and silviculture operations; and third, it should allow for reasonable time frames for planning and implementation.

I want to take this opportunity to summarize our main concerns:

First, the rule should clarify that a farmer's best management practices -- such as a stream side buffer on farm or forest land -- will be taken into account when determining how to best meet clean water standards.

Second, the EPA should provide comprehensive cost projections of the impact of the proposed TMDL rule on agriculture and silviculture.

Third, the rule should clarify if and when the TMDL process would apply to discharges from silvicultural activities. USDA knows what works well in implementing TMDLs in forested watersheds and the rules should reflect our field experience. USDA's partnerships have shown that an adaptive and collaborative TMDL process that relies on best management practices and monitoring often has the best chance of efficiently attaining water quality standards.

Finally, USDA is concerned about the science being used in assessing and attributing the effects of nonpoint source pollution. Theoretical models have high levels of uncertainty and there are gaps in the data regarding what is natural background pollution versus what is caused by human actions.

Mr. Chairman, USDA believes education and partnerships are going to play decisive roles in efforts to improve water quality. The proposed TMDL rules should be fair, clear, and provide farmers with greater

certainty. With this in mind, we are diligently working with the EPA to resolve our concerns.

Mr. Chairman, I thank you for this opportunity to appear before your Committee. We welcome the opportunity to discuss the issues and respond to your questions.

STATEMENT BY SENATOR MAX BAUCUS
SENATE AGRICULTURE COMMITTEE
February 23, 2000

Mr. Chairman, I regret that I am not able to be present at today's hearing, because of pressing business in Montana.

Nevertheless, I appreciate your convening the hearing. The Total Maximum Daily Load, or "TMDL" program, is critical to achieving our common goal, established in 1972, of making all of our nation's waters fishable and swimmable.

At the same time, EPA's proposed new TMDL rules would have an important affect on farms, ranches, and forestry.

In particular, like others, I am concerned about the proposal to revoke the regulation excluding most silvicultural activities from the definition of a point source, replacing it with a new standard that allows states or EPA to require Clean Water Act permits in certain circumstances. Among other things, I am concerned that this proposal may exceed the scope of EPA's authority under current law.

To address this question, Senators Murray, Wyden, and I recently wrote EPA Administrator Browner, questioning the application of the new rules to silviculture. Yesterday, we received an initial, partial, response, from Assistant Administrator Fox.

This response does not fully resolve all of the important legal and policy issues. But it does represent progress. For example, the response makes an important clarification, by confirming that, before the Clean Water Act permit program applies, a source must meet the current law definition of a "point source." In other words, permits may not be required of nonpoint sources, which, to my mind, comprise the vast majority of forestry activities.

I ask that a copy of the letter from Assistant Administrator Fox be included in the hearing record.

Thank you.

TESTIMONY OF

Mr. James Kraft
VICE PRESIDENT AND GENERAL COUNSEL
PLUM CREEK TIMBER COMPANY

On behalf of the

American Forest & Paper Association

On
EPA's August 23rd Proposed Water Quality Regulations

February 23, 2000

Before the
Senate Agriculture Committee

Introduction

Mr. Chairman and members of the committee, my name is James Kraft and I am the Vice President and General Counsel for Plum Creek Timber Company based in Seattle, Washington. I appreciate the opportunity to present my testimony today on behalf of the American Forest & Paper Association on the Environmental Protection Agency's (EPA) August 23rd proposed regulations to revise the Total Maximum Daily Load (TMDL) program under Section 303(d) and modifications to the National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the Clean Water Act. I'd also like to say at the outset that the forestry community and my company support the goals of the Clean Water Act but we do not believe this program takes us in the right direction. Mr. Chairman, as you will hear, these proposed rules are such a radical departure from the existing federal statute and case law and the economic and administrative burdens so enormous, that it has garnered serious concerns among the forestry, ranching and agriculture community nationwide.

American Forest & Paper Association (AF&PA)

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 over 9 million non-industrial private landowners who own 59 percent or approximately 290 million acres of the total productive timberland. The nation depends on industrial, nonindustrial and public forest lands to supply the raw material used to manufacture the wood and paper products we as citizens enjoy everyday. Plum Creek Timber Company owns land throughout the country including Washington state, Montana, Idaho, Arkansas, Louisiana and Maine.

While AF&PA represents the manufacturers of wood and paper products, all of whom have serious concerns with a multitude of other program changes contained in the rulemaking, I will confine almost all my remarks to the forestry components of the NPDES rule and will explain how this will also have a dramatic economic effect on the forestry community.

As we consider the proposed rules and attempt to decipher an extremely complex issue, the forestry community is struck by the heavy-handed command and control federal approach being imposed upon states and private industrial and non-industrial forest landowners throughout the country. Some important stakeholders in the issue including the National Association of State Foresters, the Society of American Foresters; and the agriculture and ranching community all have serious concerns with the proposed rulemaking. As the Committee is well aware, even the U.S. Department of Agriculture submitted extensive comments in opposition to the proposed rule based on legal, statutory, policy and regulatory interpretations.

The EPA National Pollutant Discharge Elimination System (NPDES) Proposed Rule

I want to first focus on EPA's decision to abandon almost three decades of statutory interpretation of the Clean Water Act and case law by eliminating the designation of forestry activities as a "nonpoint source" activity. Second, I will describe the forestry community's substantial progress in improving water quality. Finally, I will briefly address how we believe the federal EPA can assist states and communities in getting on-the-ground results to protect and maintain water quality nationwide rather than create enormous uncertainty and confusion in a federal regulatory process without commensurate improvements in water quality.

Let me first explain the background of the existing regulation defining these forestry activities as nonpoint sources. In the original Clean Water Act (CWA) 1973 regulations, EPA chose to exclude certain activities, including all silvicultural activities, from the NPDES program, without regard to whether they were point sources. When this was challenged by environmental groups, the federal courts ruled against EPA and ordered the agency to identify those activities that are point sources. EPA responded with silvicultural rules in 1976 that identified four discrete activities (i.e. rock crushing, gravel washing, log sorting and log concentration yards) associated with forestry operations as point sources. They concluded that everything else associated with forestry is a nonpoint source. By way of explanation, EPA stated in the proposed rulemaking that

"the [Clean Water Act] and its legislative history make clear that it was the intent of Congress that most water pollution from silvicultural activities be considered nonpoint in nature" and be addressed under section 208 of the statute. 41 Fed. Reg. 6233, 6234 (February 12, 1976).

EPA has proposed to eliminate the following activities from categorization as a nonpoint source: nursery operations; site preparation; reforestation; cultural treatment; thinning; prescribed burning; pest and fire control; harvesting operations; surface drainage and; road construction and maintenance. Instead, EPA proposes to redefine them as point sources. The proposed rule would give EPA or NPDES-authorized States the authority to designate silvicultural activities as point sources requiring NPDES permits. The designation would be triggered when the State or EPA determines that the silvicultural activity "contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States." EPA states that it will only exert this authority in impaired waterbodies on a case-by-case basis where a state fails to develop a reasonable assurances program that BMPs can achieve load reductions in an impaired waterbody and the activities are not enforceable. The additional Agency caveat discussed in the proposed rule is that it will be applied prudently, rarely and only as a "last resort."

For the first time in the history of the Federal Water Pollution Control Act and its subsequent Amendments, the U.S. EPA has now asserted its direct control of forest management activities on private lands. Let me give you the quote of what an EPA Region 1 official said at an EPA-sponsored public hearing conducted in Concord, New Hampshire on December 17th on how this rule would be implemented. "It ultimately will be left to the state... But we would have to approve each request for a permit to conduct a logging or logging-related activity to assure it won't harm the water." Given such statements, the forestry community has no confidence that the Agency or others opposed to forest management will enable any forest landowner to perform activities without federal oversight and the inevitable litigation that will result. Moreover, EPA's stated limitations on use of the point source designation authority will not be supported by the

courts and will inevitably be expanded to include all waterbodies where forest management is conducted.

Progress In Improving Water Quality

EPA contends that because silviculture activities can be a cause of water quality impairment this gives them discretionary license to label such activities as point sources. The EPA citation of silviculture's impact on water quality is selective and in some cases directly contradicts reports referred to in the proposed regulations. Every state with significant forest management activities has developed forestry best management practices or rules and submitted them to the Agency as part of the Section 319 nonpoint source program. More than 20 states have conducted periodic BMP compliance surveys. Other states including Florida and South Carolina have gone further by conducting state-wide BMP effectiveness studies to measure water quality upst eam and downstream of forestry operations and determine their ability to protect water quality. And the results are clear – they are effective in maintaining and protecting water quality.

Take the state of Montana, for example, where Plum Creek owns 1.5 million acres of timberland. EPA writes in the economic analysis accompanying the proposed regulations that Montana does not have a sufficient reasonable assurances program and therefore it will be subject to NPDES permit requirements. Over the past decade, Montana has developed a rigorous Best Management Practices (BMP) compliance survey program. The most recent results from 1998 found statewide compliance with BMPs averaged 94% - up from 78% compliance in 1990. This improvement was achieved not through heavy-handed regulation, but was brought about by locally-led efforts to educate loggers and landowners.

The most recent publicly available data from EPA's website, the 1996 national TMDL tracking database, indicates that only eleven states listed silviculture as a cause of impairment on their Section 303(d) list of impaired waterbodies where total maximum daily loads would actually

have to be performed. These are the only waterbodies where the Agency purports the rule will apply. Further, almost two-thirds of the stream segments listed due to silviculture were from one state - Montana. In 1997, Montana's legislature passed a bill that required the state to document the scientific basis for listing streams as water quality limited. After conducting this review, Montana DEQ has found that they in fact did not have credible data to justify the listing of over half the streams on the 1998 Montana 303(d) list.

Placing the national numbers into perspective and upon closer examination of the federal and state reports, the following information clearly reveals that forestry is a relatively minor cause of water quality impairment across the country:

- Silviculture accounts for approximately seven percent of the total impaired river miles nationwide;
- The relative amount of total river and stream impairment due to silviculture dropped from 9 percent in 1988 to 7 percent in 1996;
- The number of river and stream miles classed as "major impairment" due to silviculture dropped 83 percent between 1988 and 1996;
- The length of river and stream miles impaired from natural causes is about twice the length of impairment due to silviculture;
- Silviculture represents one-tenth of one percent of the impaired coastal waters;
- Silviculture represents less than one percent of lake impairment;
- EPA's 1996 National Water Quality Inventory report dropped silviculture from the chart as one of the seven leading sources of impairment to rivers and streams; and
- Compliance with state forestry best management practices is reaching 90 percent or more;

I would like to share with you some of our accomplishments as an industry. Through the *Sustainable Forestry Initiative (SFI)*^{SM} program, in which all members participate as a condition of membership, many members have committed to going above and full compliance with Best Management Practices (BMPs) to protect water resources during forestry operations. Through

their compliance with the SFI objectives, member companies are committed to fostering the practice of sustainable forestry through landowner education efforts on all forestlands.

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. 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.

Economic Implications of the Proposed Rules

EPA's economic analysis accompanying these proposed rules claims that between 600 and 1200 landowners per year will be affected and total administrative costs to sources and EPA/states would fall between $3.72 and $13.22 million. Mr. Chairman, there is no way that the economic burden on landowners, loggers, state agencies and the federal government would be so limited. If a permit is necessary according to EPA, they attempt to reassure the affected landowners by stating that it will only take 2 hours to prepare a notice of intent to file for a federal permit. If the national forest system timber sales program is used as a guide, actually obtaining the federal approval to conduct a harvesting operation is the real time question.

There are literally thousands of silvicultural "events" in each state every year. According to AF&PA's assessment, supported by the work of five independent forest economists at well-respected academic institutions around the country, the incremental economic burden to landowners, operators, communities and government agencies could easily exceed $1 billion annually, nationwide. The administrative costs alone of an NPDES program for silviculture, even

in the unlikely event that it would be invoked sparingly, would exceed EPA's estimates by several fold. Because the economic impact will far exceed $100 million annually, EPA must comply with the Unfunded Mandates Reform, Executive Order 12866, and the Regulatory Flexibility Act by conducting a more detailed and comprehensive benefit-cost economic analysis of the proposed rule.

EPA Rationale for Designation of Forestry as a Point Source

EPA provides two reasons for its change of interpretation. First, that the 1987 CWA amendments did not categorically exempt silvicultural activities from the stormwater program similar to the agricultural exclusion provision. Second, Congress never explicitly stated that silviculture was a nonpoint source.

To the first point, EPA relies on the Section 402(p) stormwater provisions as their authority to designate silviculture as a point source. They claim that because stormwater Section 402(p) of the CWA does not explicitly exempt stormwater discharges associated with silvicultural operations from NPDES permits (as opposed to agricultural stormwater runoff that is statutorily exempt), they have therefore interpreted the statute to allow the Agency to regulate silviculture under the stormwater program. Essentially, EPA claims that the absence of a specific exemption for silvicultural activities gives license to the agency to transform those activities from nonpoint sources to point sources. This interpretation constitutes an incredible usurpation of authority from Congress. In effect, EPA says that congressional failure to statutorily define every nonpoint source activity gives them license to designate as a point source, whenever it chooses, any and every nonpoint source activity except agricultural activities involving stormwater runoff. This interpretation strips from the Section 319 program everything except agricultural stormwater discharges and irrigation return flows. We suspect Congress would be astounded to learn that this is the consequence of its addition of the agricultural stormwater discharge exception to the CWA definition of point source.

With respect to the lack of a specific statutory exemption for silviculture, AF&PA believes that the 1972 Act and its 1977 and 1987 amendments clearly intended not to regulate water pollution from most silvicultural activities through the Section 402 or 404 permit programs. In fact, the 1987 Amendments enacted the Section 319 provisions to specifically address nonpoint source runoff, including silvicultural activities, through a state-based best management practices program. In the Section 208 provision, the forerunner of the 319 nonpoint source program, Congress directs states to put together a plan and process to "identify, if appropriate, agriculturally and silviculturally related nonpoint sources of pollution." Instead of relying on the statutory language and Congressional reports, EPA now claims the "discretionary" authority to require a federal NPDES permit for silvicultural activities based on whether its located in an impaired waterbody and whether a state has an adequate total maximum daily load (TMDL) reasonable assurances program. Mr. Chairman, the forestry communitv-at-large finds this to be an incredible expansion and interpretation of statutory authority.

EPA Stormwater Regulations

What is further astounding about these proposed rules is that it directly contradicts EPA's November 1990 stormwater regulations issued three years after the 1987 Amendments were enacted. At that time, EPA declared that silvicultural point sources do not include the very same activities they claim today are point sources. In fact, EPA modified the final rule to state that "stormwater discharge associated with industrial activity" does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122. Activities excluded under that regulation were precisely the same activities EPA now claims are point source discharges. Let me quote from the EPA rules: "EPA agreed with the commenters that logging is a transitory operation that may occur on a site for only a few weeks in a 20-30 year period, that delays in obtaining permits could create problems in the harvest schedule and mill demand, and that "runoff from such operations should be controlled by BMPs in effect for such industries and that such a permit would not be practical and would be cost prohibitive." 55 FR 48,011 (1990).

In fact, Section 402(p)(5) required EPA to submit a stormwater report to Congress to identify those stormwater discharges or classes not subject to industrial or municipal permits. There is nothing contained in that March 1995 report to indicate that silviculture should be permitted. To the contrary, the report does not include silviculture among the five "leading sources of water quality impairment" and does not identify forestry operations among the 90 categories of facilities and activities appropriate for consideration as potential "Phase II" sources subject to permitting.

Forestry and the Clean Water Act

Where Congress spoke to imposing federal permits for forestry activities they did so directly and unequivocally. Here's an example: In 1977, Congress enacted the Section 404 discharge of dredged and fill provisions which provided a conditional permit exemption for the identical silviculture activities EPA now claims "discretionary" authority to regulate. While some might argue that these are separate and distinct provisions, there is no distinction in terms of the potential runoff event. Somehow disturbed soil that is exempt from permitting (as dredged material) under Section 404 becomes eligible for permitting (as sediment) under Section 402. We do not believe that Congress intended for EPA to interpret a 1987 stormwater provision that contains no reference to silvicultural activities as regulatory license to override the Section 404(f) "normal silviculture activities" exemptions.

Further evidence of Congress' view that silvicultural activities in general, and forest road construction and maintenance in particular, are satisfactorily regulated through means other than a permit system comes from the Clean Water Act of 1977, Pub. L. 95-217, 91 Stat. 1566 (1977). The Senate Committee report accompanying the 1977 statute stated: "The construction of farm and forest roads is exempted from section 404 permits. The committee feels that permit issuance for such activities would delay and interfere with timely construction of access for cultivation and harvesting of crops and trees with no countervailing environmental benefit." In another passage

of the same report, the committee states "no permits are required" for activities listed in Section 208(b)(2)(F) through (I) "for which there are approved best management practice programs."

The forestry community, many state agencies, governors and others oppose the designation of forestry activities as a point source. We do not believe there is any legal or statutory authority for EPA to revise the regulations that would eliminate the nationwide recognition of forestry as a nonpoint source activity merely to address some unidentified last resort situations on an individual basis

The Total Maximum Daily Load (TMDL) Proposed Rule

There is an equally important reasonable assurances requirement that flows from the proposed TMDL rule that should be briefly mentioned. The Section 303(d) provision requires states to identify impaired waters (those waters not meeting water quality standards) and establish priority rankings and develop total maximum daily loads (TMDLs) under Section 303(d) of the Clean Water Act. Heretofore, under EPA's existing regulations, a TMDL has been a **numeric calculation** of the amount of pollutants a waterbody can receive from point source discharges, nonpoint source runoff, natural background; with a margin of safety. Setting aside the scientific difficulty of actually calculating a "daily" load from nonpoint source activities, the proposed rule requires states to submit an "implementation plan" under Section 303(d). The plan would contain not only the numeric calculation but also eight required elements including control actions and measures that must be implemented before EPA would approve the TMDL. The big issue, and one that was unresolved in the Federal Advisory Committee Act (FACA) group report, is whether the implementation plan should be submitted for approval by EPA under Section 303(d) or submitted under 303(e), the continuous planning process provision of the Act. We do not believe that Section 303(d) provides EPA with the authority to require implementation plans, nor does it provide, as EPA contends in the proposal, that implementation plans can be approved, disapproved, or taken over by EPA. This is not a minor legal issue but one that has enormous consequence for private landowners.

For example, lets examine the situation where EPA rejects an implementation plan because the Agency does not believe the forest stream side zone (SMZ) management width requirement established by a multi-stakeholder state best management practices group is sufficient to protect water quality. The Agency, having given themselves the authority to take over the state program, is now free to re-write the implementation plan, change the state's SMZ requirement and then impose an NPDES permit requirement because the state allegedly does not have sufficient enforcement authority. This is not theoretical, but exactly the type of authority the Agency is proposing to grant to itself. Moreover, the Agency is exposing itself to countless citizen suits if it does not exercise this authority to the satisfaction of environmental activists.

According to EPA's August 1997 Memorandum published in the Federal Register, "implementation of a TMDL depends on other programs and activities; a TMDL alone does not create any new or additional implementation authorities." The numeric TMDL itself must be approved by the EPA but no reading of the statute or its legislative history calls for the preparation and submission of an implementation plan under 303(d). We believe the continuing planning process described in the Clean Water Act's Section 303(e) provision is the implementation phase for the 303(d) listed stream segments.

Other Alternatives

It is plainly evident from the reaction by the majority of state agencies, state water quality agencies, governors and others that the proposed rules were formulated without the advice and input from those stakeholder groups who will be ultimately responsible for implementing the regulations. Mr. Chairman and members of the Committee, there is a better way. It requires additional funding of the Section 319 program, greater cooperation among multiple state agencies engaged in nonpoint activities, more partnerships with private landowners and stakeholders and better dialogue between EPA Regional Offices and the states to make improvements to water quality happen. However, the federalization of nonpoint source activities as proposed under

these circumstances will create dissention and not accomplish the mutual goals shared by everyone.

Conclusions

Mr. Chairman and members of the Committee, over 30,000 comments have been submitted on these rules and the forestry community represents a sizeable share of those comments. We feel strongly that only Congress should determine how nonpoint source activities are addressed under the Clean Water Act. As a January 20, 2000 Congressional Research Service report states: "It is difficult to argue that a Congress that took such care to minimize the federal role in the CWA sections that explicitly address nonpoint source pollution could have intended the possibility of direct federal regulation of such sources through a provision such as section 303(d) that makes no mention of nonpoint sources." As Congress has recognized several times, nonpoint source pollution is not amenable to point source discharge permits. Any call for more narrowly crafting or tailoring the designation of forestry as a point source discharge is not consistent with the statute and is clearly against USDA's original comments that were submitted into the EPA comment docket. We do not believe there is any legal or statutory authority for EPA to revise the regulations that would eliminate forestry as a nonpoint source activity merely to address some unidentified last resort situation on an individual basis.

The TMDL program will require states to develop 40,000 TMDLs on the estimated 20,000 impaired waterbodies nationwide. As was the case in Montana, and supported in a General Accounting Office (GAO) study, there are significant resource constraints at the state level including the lack of monitoring and sampling to do an effective job in implementing these proposed regulations for both nonpoint and point sources. The imposition of additional requirements on states to list impaired waterbodies, develop TMDLs and to "allocate loads" through this proposed rulemaking will overload the system. As we have learned from other federal environmental statutes, it is absolutely necessary to first undertake the necessary studies

to assure that major program changes such as these are scientifically defensible, technically feasible and cost effective.

In the end, we believe that these rules will discourage the practice of sustainable forest management. They will create disincentives to expand forest cover in the U.S., stifle economic opportunity and prosperity in communities desperate to be part of the economic revival in this country and make it more difficult for people to make a living off their land.

This concludes my remarks, Mr. Chairman, and I would welcome any questions you or members of the committee may have.

TESTIMONY OF PAUL JOHNSON
DIRECTOR OF THE IOWA DEPARTMENT OF NATURAL RESOURCES

Mr. Chairman and members of the Committee, my name is Paul Johnson. I am currently the Director of the Iowa Department of Natural Resources. I am also a farmer and a former state legislator and I also served as Chief of the Natural Resources Conservation Service for four years.

Iowa is a state blessed with a diverse and productive landscape and normally abundant rainfall. Our land forms include the rugged, picturesque hills and valleys of the Northeast, the flat plains of the North Central region, the loess hills of the West, and the rolling hills of the South. Our streams and rivers are also varied and include the cold-water trout streams of the Northeast and the mighty Mississippi and Missouri Rivers on the East and West. Our lakes are both natural and constructed, shallow and deep.

Although of varied terrain and waters, the resource that unites Iowa is its rich, productive working lands. These lands provide abundant food supplies for much of the nation and world. Statewide, over 60 percent of the land is in intensive row crop production with another 30 percent in grassland. Only about 1 percent of the land is urbanized and less than two percent is in public ownership. In some basins in the north central region, intensive row crop production can exceed 95 percent. But, the rich productive lands that are used to the benefit of so many also present water quality challenges. Soil erosion and nutrient enrichment are two of the most pressing problems in such a highly utilized landscape.

Like many other states, Iowa has had success curbing its most visible pollution problems – those caused by point source discharges. Currently we have over 1900 NPDES discharge permits with over 800 water quality-based effluent limits included in those permits. The remaining water quality problems are predominately nonpoint source related and, therefore, the TMDL process as applied to nonpoint source pollution is of great interest to Iowa.

Iowa is committed to protecting our streams, lakes, and wetlands while at the same time continuing to be known as a breadbasket of the world. We believe these two goals are compatible and we believe Iowans are ready to seize the opportunity to achieve both. But the path to these goals may not lie within the TMDL roadway.

The TMDL approach is appropriate for some water quality problems. But TMDLs as the "universal solution" approach currently being promoted by the EPA and supported by various other groups is flawed and will not succeed unless the Congress and the EPA recognize fundamental shortcomings in this approach and take steps to address them.

Some of the issues that Congress, the EPA, and states must address before proceeding down the nonpoint source TMDL path are briefly addressed below.

- **Congress must revisit and redefine Section 303(d) of the Clean Water Act.**

  Section 303(d) is rife with ambiguities that must be addressed. For instance, only the words "total maximum daily load" are used in 303(d). A total maximum daily load is appropriate for point source discharges but not nonpoint sources. Surely Congress knew this in 1972. Yet, the EPA has redefined TMDL to be something other than the literal meaning and is now proposing to stretch the meaning even further. Section 303(d) is also ambiguous about the significant water quality impairments caused by non-pollutant stressors such as habitat and flow alteration and exotic species. The EPA is simply trying to force a square peg into a round hole. Unless Congress rewrites Section

303(d), the courts and the EPA will continue to set policy in an arena that should be more clearly defined by Congress and the states. If Congress does not act, the unfortunate result will be the continued proliferation of lawsuits challenging every aspect of Section 303(d) and the EPA's implementing regulations. The challenge to Congress is significant, but the alternative is simply not acceptable.

- **States' water quality standards, monitoring programs, and assessment techniques must be improved.**

In the final article of a series of four articles on TMDLs in the *Environmental Law Review*, Oliver Houck, Professor of Law at Tulane Law School, likened the EPA's TMDL program to an elegant new structure constructed on a shaky foundation, that foundation being state water quality standards. The TMDL approach relies exclusively on state water quality standards, as these standards are the yardstick used to measure success or failure. States' water quality standards may be adequate for dealing with point source pollution and establishing water quality-based effluent limits, but we question whether they are adequate to effectively deal with nonpoint source pollution. Many states simply do not have adequate resources to improve their water quality standards nor does it appear the EPA has the resources or expertise to assist them in developing defensible standards.

The EPA is now asking states to develop and adopt numeric standards for nutrients by 2003 and has given every indication they are willing to promulgate if states fail to adopt standards. We question whether the sound science is there to develop responsible nutrient standards. For states like Iowa with rich, productive soils and intensive agriculture, adoption of nutrient standards is going to be a significant issue. Farm groups are more than ready and willing to challenge every aspect of nutrient standards.

The problem with inadequate monitoring programs and widely varying assessment techniques is well known among states' water quality staffs and should be recognized by Congress and the EPA. Iowa recently took steps to improve its monitoring program and is committed to further improvement. However, it should be recognized that states with comprehensive monitoring programs are effectively penalized under the TMDL approach, as states with little or no monitoring typically will have small 303(d) lists. Potentially, a state could discontinue monitoring and have no waterbodies on its 303(d) list and the only obvious penalty would be loss of Section 106 funds. The EPA, has not, to our knowledge defined what constitutes a minimally acceptable monitoring program nor has it indicated it would conduct monitoring in states with inadequate programs.

- **Future approaches to water quality improvement must recognize the complex nature of the remaining water quality problems and avoid the current "good versus bad" characterization of water quality.**

The TMDL approach, by its very nature, oversimplifies a complex situation. Under the TMDL approach, all waters not meeting state water quality standards are considered impaired. In the words of some officials, all impaired waters categorically are too polluted for fishing and swimming. This is nonsense, as many impaired waters are still relatively healthy waters. We must recognize the complex nature of water quality problems and design programs that recognize this complexity. The existing TMDL program portrays water quality as a black and white issue, whereas the real world is many shades of gray where the degree of impairment (as well as improvement or decline) may be very difficult to determine.

An unfortunate consequence of targeting 303(d) waters is that funds may not be available for water quality improvements in waters that do meet state water quality standards, but that could be improved with relatively modest expenditures. During the 1998 303(d) listing cycle, Department personnel were apparently informed that funds for lake improvement projects might not be available if a lake were not on the 303(d) list. This, of course, created pressure to list waterbodies for which there was no conclusive evidence the waterbody was impaired.

- **Congress needs to clarify responsibility for interstate waters.**

  Many states share rivers and their watersheds with neighboring states, either as a common boundary, or as upstream-downstream neighbors. State-to-state differences in water quality standards create obvious problems but another problem is the lack of a clear framework for addressing interstate waters. Iowa shares the Mississippi with Illinois and Wisconsin on the east and the Missouri and Big Sioux with Nebraska and South Dakota on the west. Segments of these rivers are on Iowa's Section 303(d) list, but the listed segments and the pollutants identified are not necessarily consistent with neighboring states. Responsibility for the development and implementation of TMDLs on these interstate waters is unclear. For instance, would a TMDL for nutrients on the lower Mississippi or the Gulf of Mexico override a nutrient TMDL for the Raccoon River that drains to the Mississippi? Questions like these need to be answered.

- **The complexity of nonpoint source pollution must be recognized.**

  The existing TMDL program provides unrealistic expectations and time frames for development of accurate and realistic nonpoint source TMDLs. Although water quality models for nonpoint source have improved and linking those models to a Geological Information System shows additional promise, it must be recognized these models typically require a significant amount of monitoring data to properly calibrate the model. Given the episodic nature of nonpoint source pollution, it may be many years before adequate calibration data can be gathered. The accuracy of many of these models is also questionable and it is our perception that many of the nonpoint source TMDLs being developed are of questionable accuracy. TMDL consent decrees typically establish rigid schedules for TMDLs, practically insuring that many TMDLs are or will be of questionable technical accuracy.

  Currently, Region VII EPA is initiating work on TMDLs for nitrates and fecal coliform bacteria for the Cedar River at Cedar Rapids. Both pollutants appear to be primarily of nonpoint source origin. Given the short time frame for developing the Cedar River TMDLs (months as opposed to years) and the lack of data for model calibration, we question whether accurate TMDLs can be developed. As a state where nearly all the waters on the Section 303(d) list are impacted by nonpoint sources, the ability to accurately develop TMDLs for nonpoint sources is a significant concern for Iowa.

  Also of concern is the efficacy of traditional agricultural best management practices as they relate to the implementation of nonpoint source TMDLs. Even if installed best management practices are effective, it may be a decade or more before the success can be documented.

- **The level of funding provided to states must be increased.**

  Developing accurate TMDLs is expensive, especially for nonpoint source pollutants. States like Iowa find themselves in the position of having to commit significant state funds to a questionable process to address problems that may be better addressed through other programs such as the Section 319 and USDA programs. If EPA has the expectation that states will continue to be a full partner in the TMDLs process, additional resources must be provided to states to develop accurate TMDLs and implement them. Failure to do so may result in an increasing number of states abdicating their responsibilities under Section 303(d), letting the EPA prepare the 303(d) list and develop TMDLs. This is disturbing as the EPA has neither adequate resources nor the expertise to develop accurate TMDLs for states.

The above issues are not easy ones but it is essential Congress address them before states are asked to commit more and more resources to a TMDL process that has questionable application to nonpoint source pollution and may at any time be overturned or redirected by the courts.

Concurrently with addressing the TMDL issues, Congress should begin to implement a aggressive, technology-based nonpoint source program rather than the water quality based approach inherent in Section 303(d).

We know that certain agricultural best management practices, such as buffer strips and constructed wetlands can be highly effective in removing pollutants before they enter waters. For instance, researchers at Iowa State University have found that watershed loadings of some nonpoint source pollutants can be reduced by as much as 30% by applying buffers in only 7% of the watershed. Other researchers have found that a wetland of just one acre can be highly effective in removing pollutants from as much as 100 acres of cropland. The keys to implementing practices that will work involve both adequate funding levels as well as a program framework to strategically locate these practices where they will do the most good.

This year, we are asking the Iowa General Assembly to provide funding for an Iowa Clean Water Initiative. That initiative includes the following components:

7. An enhanced water quality monitoring program, which will be used to establish baseline water quality data which can be used to measure the success of future water quality efforts, including TMDLs.

8. Staff resources to update and improve the state's water quality standards and planning program.

9. Funding to assist farmers in establishing conservation buffers along waterways.

10. Funding to establish wetlands in the Prairie Pothole region (the North Central portion of the state) to intercept tile lines and remove nutrients such as nitrates before the drainage water reaches rivers and streams.

A more detailed account of Iowa's Clean Water Initiative is attached.

We believe an aggressive technology-based approach to nonpoint source pollution holds more promise of addressing the nation's remaining water quality problems than the expensive, technically questionable, and litigation riddled TMDL approach as it is currently envisioned. Whether or not such a technology-based approach should be implemented through strictly voluntary measures or some type of regulatory scheme is open to debate. Initially, an aggressive voluntary approach should be initiated, with the message being that if reasonable water quality improvements are not achieved within a reasonable time, a regulatory approach will be imminent. Coupled with this is, of course, the crucial need to develop better water quality monitoring and assessment programs that can accurately document nonpoint source impacts and trends.

To summarize:

- Congress needs to revisit and redefine the intent of Section 303(d);
- significant improvements in water quality standards, monitoring and assessment need to be achieved;
- Congress needs to provide adequate funding to states; and
- an aggressive, technology-based approach to nonpoint source pollution needs to be implemented.

Mr. Chairman and Committee members, this concludes my testimony. I thank you for the opportunity to appear before you, and I would be happy to answer any questions you may have.

A S I W P C A

Association of State and Interstate Water Pollution Control Administrators

Testimony on

TOTAL MAXIMUM DAILY LOADS:

Proposed Changes in USEPA Regulations

Before the

Senate Agricultural Committee

February 23, 2000

Mr. Chairman, Members of the Committee and Subcommittee. My name is Roberta H. Savage and I am the Executive Director and Secretary of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA). ASIWPCA is the national, professional organization of State officials who are responsible for implementation of the Clean Water Act. As those on the front line, the Association's membership has a unique perspective on the issues before this Committee.

In the 1972 Clean Water Act, Congress gave the States the lead role to develop and implement the water quality program. States support the Act's goal to restore and maintain the nation's water quality and we believe the establishment of total maximum daily loads (TMDLs) is one of many important mechanisms to be used to achieve cleaner water.

The States have been in a continuing dialogue with USEPA concerning the proposed regulation. As co-regulators, we met to address State issues and consider options for addressing those concerns. In addition, ASIWPCA has sponsored a series of State/EPA conference calls on the regulations and has been a co-sponsor with the Western Governors Association of a series of workshops. These forums have allowed significant discussion that, we are hopeful, will ultimately bear fruit. USEPA appears to be receptive to a number of State recommendations to modify and streamline the current proposal and build upon existing program authorities.

Because of constraints placed on USEPA in the rulemaking process, the Agency has not been able to make any commitments to the States. For this reason, Mr. Chairman, my comments will address the regulation as proposed.

States have invested significant staff resources in analyzing the proposed rule and have spent many hours in joint consideration of the anticipated impacts on our existing programs. What we see here is an effort by USEPA to move the water quality programs forward, which is of course laudable. We are concerned however, that the rule, as proposed, will have serious, if perhaps unintended, consequences on State programs. For details, we refer you to the attached written comments developed jointly by ASIWPCA, the Environmental Council of the States (ECOS) and the Coastal States Organization (CSO) which were shared with USEPA in the spirit of partnership as co-regulators.

States are mindful that the proposed wholesale modification to the TMDL regulation is being put forth *in the context of existing statutory authorities and current funding levels*. We caution that State program budgets and staffing levels are not sufficient to implement the current regulation. Those levels will not likely to grow to meet an ambitious waterbody restoration agenda merely because an arcane Federal regulation is changed.

Section 303(d)

The provisions of Section 303 (d)(1)(A) are fairly limited. States must:

1) identify waters that do not meet State water quality standards (WQS) after application of basic point source control requirements,
2) prioritize those waters and
3) determine the total waste load the water body is able to receive and still meet WQS (with a margin of safety).

USEPA has 30 days to take approval action on a State submittal. If USEPA disapproves a State list or TMDL, they have 30 days to finalize one.

Historical Perspective

The Clean Water Program is complex and, as the attached diagram illustrates, TMDLs were envisioned as *one component* of a broad Clean Water Act program.

Since 1972, States have allocated the limited funds available to address the ambitious Clean Water Act agenda. They established water quality standards, built and managed permitting and enforcement programs, financed municipal wastewater treatment facilities and developed nonpoint source (NPS) and watershed management programs. Since TMDLs were expensive and time consuming and the data and state-of the-art was limited -- other Clean Water Act and State authorities were generally more useful.

USEPA's priorities varied and did not, until recently, include TMDLs. Due to the failure of States and USEPA to achieve Section 303(d) there have been numerous court cases. States agree that TMDLs should be a meaningful and fundamental component of State water quality management programs. To bring this about, the Association believes that three fundamental challenges must be addressed:

1. The significant lack of funding and adequate initiatives to address nonpoint source and other water quality problems in the current program,
2. Major gaps in available data, research and monitoring, and
3. Insufficient attention to multi-media and multi-jurisdictional water problems.

Guiding Principles

In moving forward to improve the TMDL program, State water quality and environmental program managers emphasize:

1. **The States' lead role in the nation's clean water program must be maintained.**
2. **TMDL requirements need be flexible and consistent with a) existing statutory authority, b) available resources and c) State water quality agency jurisdiction.**
3. **Existing initiatives should be used, wherever possible, to achieve objectives.**
4. **Expectations need to be clearly focused on desired environmental outcomes.**
5. **The iterative approach is crucial to success, particularly for nonpoint sources.**

THE MAGNITUDE OF THE TASK IS FORMIDABLE.

Assuming an even distribution and no additional TMDLs, one TMDL would need to be approved *each workday for the next 15 years by each of the 10 USEPA Regional Offices* to complete all of them. Assuming (optimistically) that an "80% savings" could be achieved (taking advantage of lessons learned, economies of scale, and delisting inappropriate waters), States would have to produce (and USEPA approve) one TMDL per week per USEPA region for the next 15 years. This does not consider the need to plan for implementation, conduct additional monitoring, or actually implement the TMDL. Unless additional funds are provided, State would have to divert resources from other worthwhile water quality activities to keep on schedule.

State experience demonstrates that cost estimates developed by USEPA are inadequate and incomplete (see attachments). USEPA states that TMDLs will cost $25,000 each. But, a mid-range is more likely to be $300,000 - $1,000,000, depending on complexity (in Long Island Sound, $20,000,000 has been spent thus far on a nutrient TMDL). Annual costs for a decent effort at the State level could be in the range of $670 Million - $1.2 Billion.

Concerns Regarding USEPA's Proposed Regulation

The Association has read a significant number of the comments submitted to USEPA on their proposal. Commenters share a common interest in the overall goal to improve water quality and further develop and implement TMDLs. But, they differ greatly regarding:

1) How much of a burden can legally and realistically be placed on Section 303(d) to carry out the Clean Water Act and

2) The appropriate role of Federal, State, and Local governments.

The primary State concerns are that:

- **The proposal broadly expands the Federal role in water quality management and permitting, which would seriously undermine USEPA's relationship with State government.**

- **The role of Section 303(d) is greatly enlarged, beyond what the Act envisioned.** It is not clear to the States, for example, that USEPA has statutory authority to:

  1. Cover waters that are: a) impaired solely by nonpoint sources, b) are not violating WQS or c) have solutions underway using other authorities;
  2. Require that implementation plans: a) be part of TMDLs and b) include explicit assurances that the plan will be fully implemented, fully funded, adequately monitored, and fully compliant with the WQS; and
  3. Intervene in a State's TMDL development or administration of the delegated point source permit program (to permit NPS or issue expired permits).

- **The proposal is too prescriptive.** States should be able to take alternative approaches that achieve the intended environmental outcome (functionally equivalency) particularly with regard to nonpoint and wet weather sources.

- **The proposal adds burdensome new layers to the existing program.** The additional lists, implementation plans, reporting, etc., confuse an already complex situation and waste scarce resources.

- **The proposed regulations would significantly restrict State ability to take "adaptive management approaches" to TMDL development and implementation.**

- **State water quality program officials cannot unilaterally develop TMDLs and implementation plans for problems that are beyond their jurisdiction.** Impairments to interstate and international waters also present unique challenges.

- **USEPA does not acknowledge the significant funding increases needed.**

Bottom Line

The likely outcome of USEPA's proposal (unless refinements are made) would be less environmental progress and more litigation and delay. While the proposal is premised on the need for a major significant shift away from the historic point source focus toward watershed-based restoration, they reflect a pervasive top-down approach. This is unworkable where NPS management is the primary challenge and locally led initiatives are essential.

NPSs need to be treated differently and with less analytical rigor than point sources. USEPA's proposal does not go far enough in recognizing that it is often impossible, given the data and resources available and the timeframes envisioned, to precisely quantify pollutant loadings from NPS runoff or to predict with certainty specific load reductions that will result from a given management practice. Achieving WQS requires an iterative process in which management practices are applied in watersheds, progress is made and evaluated, programs are adjusted and necessary additional funding is secured.

It is not fair or realistic to expect that States could successfully implement a program that is beyond the plain reading of the Clean Water Act. States should not be used as surrogates to impose requirements that USEPA would have no authority to apply. Unless the broad array of stakeholders are willing to support the approach, partnerships States have worked very hard to achieve in the NPS arena will start to unravel and momentum will be lost.

Unintended consequences are also a concern. USEPA's proposal imposes significant barriers to environmentally beneficial projects and community revitalization as well as encourages urban sprawl -- since new or significantly expanding sources could not locate in impaired watersheds. States would be required to make decisions based on information that they cannot scientifically or legally defend. RCRA and Superfund program experience indicates that once a water body is on a 303(d) list, a stigma attaches that makes it difficult to cooperatively solve problems. There are too many unanswered questions:

- *What is USEPA prepared to do to assure they have the resources to administer the approach proposed?*

- *What sort of TMDL is approvable: will an approved 319, estuary or coastal zone management, habitat conservation or species recovery plan be acceptable?*
- *How can States control transboundary air deposition: what is USEPA willing to do under the Clean Air Act? Can a TMDL be approvable for abandoned mine drainage, when there is inadequate and unpredictable funding? What are Federal agencies willing to do for re-mining of abandoned mine lands?*
- *How will USEPA streamline its process to meet the deadlines? How will the 135 day Section 7 consultation under the Endangered Species Act be reconciled with a USEPA 30 day deadline to act on lists and TMDLs? What happens if USEPA does not act within their deadline?*
- *Will USEPA decisions be held to the same high standards as States? What will USEPA do if a State cannot provide reasonable assurance re: funding?*
- *Will affected Federal Agencies commit to complete their implementation plan responsibilities by the scheduled deadlines? What if they do not?*
- *How will TMDLs on interstate and regional waters be addressed? What happens when TMDL development cannot be synchronized with related activities (revision/consistency of WQS, USEPA nutrient criteria development, etc.)?*
- *What happens if a State's best efforts cannot bring a stream into compliance?*

State Recommendations to Improve USEPA's Proposed TMDL Regulations:

The plain reading of the statute leads the Association to conclude that:

> **TMDLs should be limited to a credible technical analysis which identifies the maximum allowable pollutant load (or other conditions) necessary to attain WQS for the pollutant(s) of concern.**
>
> **Section 303(d) should apply only to impaired waters where TMDLs can make a meaningful contribution to solving the problem.**

Resources: Funding for Section 106 (State water quality management) and Section 319 (nonpoint source control) must triple -- with increases targeted to impaired waters. Major increases are also needed in the U.S. Department of Agriculture programs to provide needed technical assistance and support conservation practices in impaired watersheds.

Monitoring, Listing and Delisting:

- List Cycle: USEPA should establish a five-year listing cycle and provide at least 2 years lead time after promulgation before the next list must meet new requirements.

- Methodology and Use of Data: States (not USEPA) should to determine what data are credible and appropriate for use in the listing process. Decisions must be based on credible and appropriate data (not anecdotal evidence or evaluated data) that indicate exceedance of State WQS. The mere presence of a listed species under the Endangered Species Act or exceedance of a maximum contaminant level (MCL) threshold under the Safe Drinking Water Act is inadequate.

- Delisting: States should be able to delist waterbodies using the same procedures and methodologies that apply to listings at any time when sufficient new data is available that indicates WQS are attained or a TMDL is approved by USEPA.

Scheduling and Priorities: USEPA should not mandate priorities or schedules. States should have discretion to set them, in consultation with the public, based on all relevant considerations. They should be able to adjust schedules beyond the 15-year deadline for good cause.

Implementation/Reasonable Assurance: States should be able to reference and if necessary update water quality management plans at the same time or following submission of a TMDL -- implementation plans should not be a required TMDL element. For NPS, States should be able to implement a variety of controls as expeditiously as possible, as described in their upgraded NPS management programs or other recognized mechanisms (existing water resource management programs such as, estuary plans, 6217 programs, forest management plans, Federal land management plans and other effective programs in the States).

Public Involvement: The proposal needs to recognize the enormous effort, time and resources required throughout the process to achieve meaningful consultation and involvement. The public petition process proposed undermines that effort. Petitioners should be required to demonstrate to USEPA that they have exhausted their administrative remedies at the State level.

USEPA Action: It is the States' responsibility, in the first instance according to the Clean Water Act, to develop and propose TMDLs. USEPA has no authority to do so (absent their disapproval of a State's TMDL). USEPA should describe its methodology and approval process and use the State listing methodology when taking action. If USEPA does not act in 30 days, a State submittal should be deemed approved.

Changes to the NPDES Permit and Water Quality Standards Programs:

- USEPA Actions in Delegated States: Problems with State permit programs should be addressed under NPDES delegation agreements and current regulations. USEPA has no authority under the Act to issue an expired permit or to permit NPSs. Based on USEPA's track record, it does not seem realistic to assume that their proposal would ever work.

- Interim Period Before TMDL Development and Approval/Offsets: States should develop site-specific and/or watershed approaches that are consistent with current anti-degradation regulations and continued progress toward water quality goals. USEPA should delete the proposed offset provision.

- General Permits: Alternative sets of requirements should be allowable, depending on whether the discharge would be to a waterbody that is meeting WQS or impaired, with the goal of no-net increase in impaired waters. The TMDL program should not make the general permit process as resource intensive as issuing individual permits.

Summary: The Association, in conjunction with the Environmental Council of the States and the Coastal States Organization, has commented to USEPA that existing statutory authorities do not provide for the level and kind of requirements outlined in the proposed regulation. This is

particularly true for the nonpoint sources of pollution. We have serious concerns that the proposed regulation inherently limits the policymaking discretion of the States.

We are convinced that this proposal is a significant rulemaking under Unfunded Mandates Reform Act which requires USEPA to hold the cost to States of new mandates as low as possible and to seek funds from Congress in the next fiscal year to offset those costs. It is also subject to the President's Executive Order 13132, issued in August 1999 which states: "Where there are significant uncertainties as to whether national action is authorized or appropriate, agencies shall consult with appropriate State and local officials to determine whether Federal objectives can be attained by other means."

Congress has a critically important role in clarifying its intent and in contributing to the creation of an appropriate framework under which we all may proceed. We asked that the Committee support State efforts to identify and further explore with the USEPA, other means to attain our collective water quality objectives, as envisioned in the above referenced authorities.

Congress will also have a significant role in determining the amount and kind of funding resources to be made available to the States, to local governments and to the USEPA and USDA for implementation of the overall TMDL program. We would like to enter into discussions with you and with the appropriating committees to secure the funds necessary to create, develop and implement a successful TMDL program.

The States would also like to enter into discussions with the Congress and the USEPA relative to the reauthorization of the Clean Water Act. Because several of the issues addressed in the proposed rule can be considered as statutory in nature, we ask that the Congress be a leader in future dialogues relating to Clean Water Act authorities and any necessary amendments to achieve our overall water quality goals.

Mr. Chairman, we thank you for the opportunity to present the perspectives and recommendations of the State Environmental, Water Quality and Coastal program officials. We appreciate the leadership role the Committee is demonstrating on TMDLS and the work of your staffs to assure that Congressional intent and interests are being incorporated into USEPA's rulemaking. We look forward to having the opportunity to continue to work together toward the achievement of cleaner water for all Americans.

Attachments: State comments on the USEPA proposed regulations (Joint letter by the ASIWPCA/ECOS/CSO)

Fact Sheets on TMDL Resource Needs

Summary Table of USEPA Cost Estimates

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January 19, 2000

The Honorable Carol M. Browner
Administrator, U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Dear Ms. Browner,

We write on behalf of the undersigned organizations concerning USEPA's proposed revisions to the agency's water quality regulations, 40 CFR parts 122, 123, 124, 130, and 131, published in the Federal Register on August 23, 1999.

These State organizations have worked together to develop the attached comments and may also submit individual comments reflecting media specific perspectives. We appreciate the opportunity to comment on the proposal, which represents one of the most important and sweeping initiatives in the nation's effort to protect its waters.

There are several points of overarching importance that we wish USEPA to keep in mind as it evaluates the detailed comments that follow.

1) Congress provided in the Clean Water Act that the States should have "the primary responsibility and rights...to prevent, eliminate and reduce pollution, (Section 101(b)).

2) States, having this authority, should be full partners with USEPA in the management, protection and restoration of water resources.

3) States support the goal of the Clean Water Act and are empathetic as to the position in which the USEPA has been placed by the series of TMDL court cases.

4) The Federal Executive Branch, through the President's Budget Request and its negotiations with the Congress, needs to secure significant additional federal funding for the Clean Water Programs.

The Federal Water Pollution Control Act clearly identifies the States' lead role in developing and implementing water quality management programs. The States accept the responsibility to address important water quality problems and to be accountable for progress.

States should be considered by USEPA as full partners in the management, protection and restoration of water resources. USEPA may not as a matter of law or policy

consider that States are merely an interest group or stakeholder in the implementation of the Clean Water Act.

The undersigned organizations represent those public servants on the front line in the efforts to protect our nation's water quality. It is the State and local governments that will be called upon to implement, substantially pay for, and defend the USEPA's final regulations in court. As USEPA has stated publicly...for USEPA to be successful its mission, the States must be successful in attaining their environmental goals.

States have from the outset, supported and worked toward the accomplishment of the goals of the Clean Water Act to restore and maintain water quality. The States understand the implications of the numerous court cases on this subject. Translating and transforming those court actions and different opinions into an operating program and regulations applicable throughout the country is a formidable task.

The proposed regulations are premised on a major and significant shift away from the historic point source focus toward a watershed based restoration approach. Yet, the proposed regulations reflect a pervasive top-down, command-and-control approach to water quality protection, which is unworkable where nonpoint source management is the primary challenge. While States support this shift to the watershed approach, the available scientific, financial and management tools are inadequate to assure successful implementation.

It is critical that the federal executive branch commits to and works aggressively for significant federal funding increases to address water quality problems and support State environmental agencies. In our judgment, the infusion of sufficient funding to existing programs and supporting mechanisms could greatly enhance State efforts to accomplish the majority of the federal objectives underlying the proposed revisions. Moreover, the imposition of unfunded mandates on States, or mandates that are paid for at the expense of other State programs, is unacceptable.

In 1995 the Congress recognized this principle in the adoption of the Unfunded Mandates Reform Act. We believe this principle requires the USEPA to hold the cost to States of new mandates under the proposed regulations as low as possible, and also firmly commit to seek funds from Congress in the next fiscal year to offset these costs. We can document through the implementation of established TMDL's that the costs associated with the proposed regulations will far exceed the expenditures anticipated by USEPA.

Finally, there are significant uncertainties as to congressional intent in the Federal Water Pollution Control Act and the legal basis for several of the proposed new requirements. For example, the State organizations are not convinced that there is a statutory basis for 1) requiring the inclusion in 303(d) lists and TMDL development for waters impaired solely by nonpoint sources; 2) requiring that implementation plans be submitted as part of TMDL's; or 3) providing the USEPA with the authority to intervene in a State's development of a TMDL.

These concerns are raised in light of the President's Executive Order on Federalism (August 1999).

> National action limiting the policymaking discretion of the States shall be taken only where there is constitutional and statutory authority for the action and the national activity is appropriate in light of the presence of a problem of national significance. Where there are significant uncertainties as to whether national action is authorized or appropriate, agencies shall consult with appropriate State and local officials to determine whether Federal objectives can be attained by other means. (Executive Order 13132; Section 3(b)).

The Executive Order contemplates exactly the kinds of uncertain authority presented in the proposed regulations, inasmuch as the proposed regulation clearly limits the policymaking discretion of the States. The Executive Order thus requires the USEPA to explore with States whether there are other means to attain the federal objectives - clean water for all Americans, which we share.

These "other means" would, at a minimum, require that USEPA incorporate the maximum degree of flexibility into the revised regulations. Water quality problems generally, and nonpoint source problems in particular, vary greatly from State to State, within a State (or States), and from watershed to watershed. Such problems can also vary significantly within the same watershed from season to season and from year to year.

Simply put, 1) States must have the authority, commensurate with their responsibility, to develop and establish water quality programs and remedies to solve site specific pollution problems, 2) a prescriptive, top down, command and control, national approach, is inappropriate and counter productive and, 3) significant funding increases will be necessary to implement the existing TMDL requirements, let alone any additional responsibilities.

The regulations must be crafted to accommodate a myriad of approaches and iterative management in moving towards attainment of water quality standards. States need the flexibility to set priorities, establish realistic schedules, use functionally equivalent State programs in lieu of USEPA's permit-based approach for some sources, adopt innovative programs, and rely on incentive-based and voluntary efforts.

> *These facts make it imperative that the USEPA and the States work cooperatively to ensure that any revisions to the TMDL and related programs are workable. We stand ready to assist the Agency in achieving a successful outcome.*

Attached is a compendium of specific comments addressing specific concerns with the proposed regulatory revisions. We look forward to working with the USEPA to ensure that America honors its commitment to clean water in the most reasonable and effective way possible.

Sincerely,

R. Lewis Shaw

Lewis Shaw
ECOS President
Secretary of the South Carolina
Department of Health and the Environment

J. David Holm

J. David Holm,
ASIWPCA President
Director, Colorado Division of
Water Quality

J. Dale Givens

J. Dale Givens
ECOS Water Committee Co-Chair
Secretary. Louisiana Department
Of Environmental Quality

Jon L. Craig

Jon. L. Craig
ASIWPCA Vice President
Director, Oklahoma Division of
Water Quality

Sarah W. Cooksey

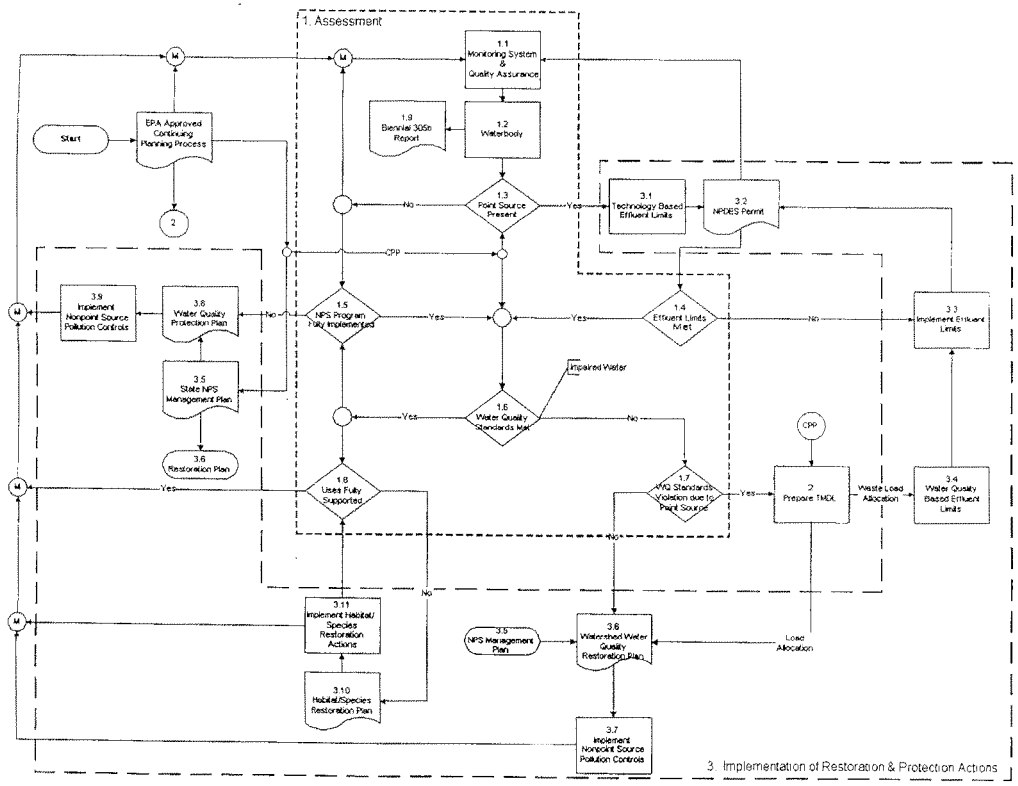
Sarah Cooksey, Chair
Coastal States Organization
State of Delaware

Cc: ECOS & ASIWPCA & CSO Memberships
ECOS & ASIWPCA & CSO Executive Directors
Chuck Fox, USEPA
Bob Wayland, USEPA
Mike Cook, USEPA
Jim Lyon, USDA
Glenda Humiston, USDA

Attachments:

1) States' Recommended Water Quality Assessments, Protection and Restoration Process Chart, and
2) State Conference Call Summaries/Comments and Recommendations as prepared by ECOS.

Attachment 1: States' Recommended Water Quality Assessment, Protection and Restoration Process



TMDLs and Resources Needs

There are currently 21,000 listed waters which, according to USEPA, will require 40,000 TMDLs. A waterbody can require several TMDLs (one for each pollutant of concern).

Assuming an even distribution and no additional TMDLs, one TMDL would need to be approved *each* workday by *each* of the 10 USEPA Regional offices in order to complete all of them *within 15 years*, as envisioned in the proposed USEPA regulation.

Assuming optimistically that "80% savings" could be achieved (by taking advantage of lessons learned, economics of scale, and delisting inappropriate waters), States would have to produce (and USEPA would have to approve) one TMDL per week in each of the 10 USEPA regional offices for the next 15 years. This does not consider the need to plan for implementation or conduct additional monitoring.

Funding for water quality programs overall, and in this instance for total maximum daily loads (TMDLs), has been consistently inadequate. To develop good defensible TMDLs, the costs for water quality monitoring, assessment, TMDL development and implementation will experience a tremendous increase at every stage of the process. The USEPA's propose regulations would greatly exacerbate the funding difficulties already being experienced by the States.

Because of the complexity of the TMDL process, the sheer number of TMDLs required and the intense public interest -- to solve the nation's water quality problems States need:

- more and better monitoring information,
- increases in personnel,
- more technical capacity and
- significant stakeholder support for implementation.

State experience is illustrative:

- For Long Island Sound, over $20 Million was expended between 1986-2000 for nitrogen based TMDLs.

- For one creek in Mississippi, the TMDL for dissolved oxygen required approximately 5 FTEs over 2 years at a cost of $450,000.

- It has taken Texas 5 years, 8 FTEs and $2.2 Million to develop one phosphorous TMDL for one waterbody -- and the TMDL is not finished yet.

- In California, TMDLs of medium complexity require $350,000 each and complex TMDLs, $1.1 Million. In FY2000, the State estimates the total TMDL work to be $9.1 Million.

- Florida will allocate $1.2 Million and 23.5 FTEs to TMDL development and annually needs 12 more FTEs (approximately $1 Million) and an additional $700,000.

- Washington needs about 84 FTEs annually to meet current requirements, but is able to provide less than 42.

MID-RANGE ESTIMATE OF COSTS TO DEVELOP 40,000 TMDLS OVER 15 YEARS				
	SIMPLER	**MODERATE DIFFICULTY**	**COMPLEX**	**TOTAL**
Percent of TMDLs (Number)	20 – 30% (8,000 – 12,000)	60 – 70% (24,000 – 28,000)	10% (4,000)	100% (40,000)
Cost Per TMDL	$50,000 – $200,000	$300,000 - $400,000	$600,000 – $1,000,000	
Total	$400,000,000 – $2,400,000,000	$7,200,000,000 – $11,200,000,000	$2,400,000,000 – $4,000,000,000	$10,000,000,000 – $17,600,000,000
Annual Average (over 15 years)				$670,000,000 – $1,170,000,000
Average per State Annually				$13,400,000 – $23,400,000

These estimates **do not** take into consideration the costs associated with:

1) any new Federal TMDL requirements,
2) additional data collection or monitoring to identify impairments and evaluate progress,
3) full implementation of TMDLs at the State level,
4) other stakeholders who will need to be involved or
5) likely event that more than 40,000 TMDLs will be required

Recommendation:

To make a meaningful contribution to TMDL development: A) Federal funding under the Clean Water Act needs to at least triple, B) funding for USDA programs would need to increase significantly and C) a higher level of commitment would be needed at the State and Local level. For example:

	Current Federal Funding For All State Water Quality Management	**Minimum Amount Need Annually Considering TMDL Needs**
Section 106	$115 Million	$345 Million
Section 319	$200 Million	$600 Million

SUMMARY OF USEPA COSTING ESTIMATES FOR PROPOSED TMDL RULES

According to USEPA documents assessing the incremental cost of the proposed revisions to the water quality management, NPDES Permit and Water Quality Standards programs regarding TMDLs, the following costs would be incurred to meet requirements. The funding gap in the States' ability to carry out the existing TMDL program at a basic level of service is not addressed.

	Total Annualized Incremental Costs	**Allocation Per State**
Listing: State costs*	$230,000.00	$4,600.00
TMDL Development and Content: State costs**	$10.1 – 23.8 Million	$202,000 – 476,000
USEPA burden for the above***	$18,000 (450 hours)	$360.00 (9 hours)
Offset Requirements	$11.54 – 42.28 Million	$230,800 – 845,600
Designation of NPS as Point Sources in NPDES Delegated States****	$5.67 – 22.96 Million	$138,300 – 560,000
TOTAL:	**$27.56 – 89.28 Million**	**$576,060 – 1,886,560**

* USEPA assumes these requirements have no incremental cost:

- identifying threatened waters (determining any adverse water quality trend),
- listing impaired/threatened waters,
- listing for air deposition,
- listing until standards are attained,
- developing the listing methodology,
- carrying out the administrative and rulemaking process and
- undertaking the monitoring and analysis to make and defend these determinations.

** Of the 9 elements USEPA defines as the TMDL, they think that only the implementation plan will have an incremental cost.

*** Excluding USEPA development of implementation plan, which USEPA states is covered below

**** For the 41 States delegated at the time of the analysis

Testimony of Robert W. Adler

Professor of Law
Interim Director
Wallace Stegner Center for Land, Resources and the Environment
University of Utah College of Law

On Proposed Revisions to EPA Water Quality Regulations

(TMDLs and Silvicultural Exemptions)

Before the U.S. Senate Committee on Agriculture, Nutrition and Forestry

February 23, 2000

Mr. Chairman and Members of the Committee:

My name is Robert W. Adler. I am a Professor of Law and Interim Director of the Wallace Stegner Center for Land, Resources and the Environment at the University of Utah College of Law. I submit this testimony an individual[1] who has had a longstanding interest and involvement in the proper implementation of the Clean Water Act. Over the past twenty years I have represented a state government, environmental organizations and private individuals and businesses in matters involving implementation of the NPDES and water quality standards programs, as well as other aspects of the CWA. I have written extensively about Clean Water Act (CWA) law and policy, including a book on the history and effectiveness of the Act,[2] a recent law review article comparing the TMDL program with the similar State Implementation Plan (SIP) program under the Clean Air Act,[3] and a large number of other articles and book chapters regarding water quality and watershed protection issues. I was a member of EPA's Federal Advisory Committee Act (FACA) Committee on TMDLs. Finally, over the past year I have also participated as one of the principle researchers in a study of innovations in environmental programs being conducted for Congress by the National Academy of Public Administration (NAPA), some of the preliminary results[4] of which are relevant to the issue being studied by this Committee. A copy of my full resume is attached.

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[1] These comments do not reflect the views of my current employer, the University of Utah College of Law. My affiliation is included above for identification purposes only.

[2] Robert W. Adler, Jessica C. Landman and Diane M. Cameron, The Clean Water Act 20 Years Later (Island Press 1993).

[3] Robert W. Adler, "Integrated Approaches to the Water Quality Problem: Lessons from the Clean Air Act," 23 Harvard Environmental Law Review 203-95 (1999).

[4] NAPA is in the process of reviewing the research conducted to support this study. The final report is still in process.

General Comments

The Committee requested testimony on the impact *on* agriculture and forestry of the Administration's proposed regulations. An equally important and integrally related question, however, is the impact *of* U.S. agriculture and forestry on human health and on the health of our aquatic ecosystems, and the long history of prior efforts to address those impacts. I intend to provide some perspective on that issue as well, and to explain why the answer to the second question is critical to a proper analysis of the first.

Representatives of the agriculture and forestry industries fear that EPA's proposed regulations, if adopted, will result in economic impacts to their members. I have absolutely no doubt they are correct. The proposed regulations will clearly *change* the manner in which the industry must address the environmental impacts of their operations. In some cases, operators will face increased costs of doing business, just as all other major U.S. industries have been asked to incur reasonable increased costs in order to do their fair share to protect the waterways we all rely on for drinking water, recreation, fish and wildlife and other environmental resources. It does not necessarily follow, however, that the net result of the regulations ultimately be to the detriment of those critically important sectors of our economy. First, in some cases the types of operational changes necessary to reduce or eliminate the environmental impacts of agriculture can benefit operators economically by decreasing annual input costs and increasing annual yields.[5] Second, and more importantly for the issue before this Committee, by increasing the efficiency with which both public and private resources are dedicated to agricultural and

[5] *See generally*, National Research Council, Alternative Agriculture (National Academy Press 1989).

silvicultural pollution, EPA's proposed regulatory changes have strong potential to benefit both the environment and our agriculture and forestry industries. They also could help to ensure that the agricultural pollution control assistance programs conducted under the auspices of this Committee are conducted in a smarter, more cost-effective way.

To explain that position, however, I want to begin by answering my second question, the impact of U.S. agriculture on water quality and aquatic ecosystem health, from both an historical and a current perspective. Of course, this legislative body has been well aware of the extensive environmental impacts caused by agricultural runoff and other forms of nonpoint source pollution for at least three decades. The Senate Committee Report accompanying the 1972 amendments to the Clean Water Act said:

> One of the most significant aspects of this year's hearings on the pending legislation was the information presented on the degree to which nonpoint sources contribute to water pollution. Agricultural runoff, animal wastes, soil erosion, fertilizers, pesticides and other farm chemicals that are part of runoff ... are major contributors to the Nation's water pollution problem. Little has been done to control this major source of pollution. It has been clearly established that the waters of the Nation cannot be restored and their quality maintained until this very complex and difficult problem of nonpoint sources is addressed .... However, there are many programs that can be applied to each of the categories of nonpoint sources, and the Committee expects that these controls will be applied as soon as possible.[6]

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[6] Sen. Rept. 414, 92d Cong. 2d Sess., reprinted in 1972 U.S. Code Cong. & Ad. News 3668, 3705-06.

Subsequent research confirmed the findings of the 1972 Senate Report, even many years after the Act was passed. In 1991, EPA released a report entitled *Managing Nonpoint Source Pollution*, based on individual reports submitted by the states, summarizing ongoing environmental threats caused by runoff pollution. EPA's findings included the following:

- Agricultural runoff impaired or threatened more than 100,000 assessed river miles nationwide.
- Logging impaired more than 15,000 assessed river miles nationally.
- Agricultural runoff impaired almost 2 million acres of U.S. lakes.
- About 52,000 acres of wetlands in three states alone (California, Iowa and Delaware) were impaired or threatened due to all sources of runoff pollution. (No other states reported data on runoff threats to wetlands.)
- Runoff threatened designated uses in 1.2 million acres of coastal waters and about 5,000 square miles of estuaries.

Similar results were reported by the states in their lists of impaired waters submitted under section 304(l) of the Act, added in 1987. Of the more than 17,000 water bodies identified as seriously degraded, only about 600 were identified as polluted "wholly or substantially" by point sources alone. Runoff pollution contributed to the impairment of the remaining waters, over 16,000 altogether. Major causes included soil erosion from row crops, logging and grazing; pesticide pollution; eutrophication due to runoff of excess phosphorus and nitrogen fertilizers; pathogens from confined livestock facilities; discharges of salts and metals from irrigation return flows; and degradation of riparian habitat from a range of farming and logging operations.

Even more disturbing, however, is how little the data have changed in yet another decade. Despite efforts to control agricultural and silvicultural water pollution under sections 208 and 319 of the CWA, as well as numerous programs undertaken under various Farm Bill and other agricultural assistance programs, agriculture remains the leading single source of water pollution in the country. In its most recent national assessment, EPA identified agriculture as the number one cause of impairment of rivers and lakes, and the fifth leading source of estuarine pollution.[7] For those waters adequately surveyed by the states, agriculture was identified as a leading source of impairment of 25 percent of assessed river miles, nearly 20 percent of assessed lake acres, and over 10 percent of assessed square miles of estuaries. In some cases, agricultural pollution continues to cause serious threats to human health, as well as environmental quality. In my home state of Utah, for example, the state Health Department conducted a study which indicated that communities adjacent to a large agricultural feeding operation faced higher risks of certain types of illness than people in other communities.

Members of the agricultural community, along with federal and state agriculture agencies, counter that significant efforts have been taken over the past thirty years to reduce the impacts of agricultural water pollution. Millions of public and private sector dollars have been spent to implement various best management practices on farms, ranches and logging operations around the country. Serious efforts have been taken to educate farmers about the environmental impacts of their activities, and to identify and disseminate information about more environmentally-friendly practices. As show in a recent survey conducted by the Environmental

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[7] EPA. The Quality of Our Nation's Waters: 1996, at 13.

Law Institute, in some states the traditional voluntary approach to agricultural pollution control has even given way to regulatory approaches.[8]

Absent adequate data on the efficacy of agricultural BMPs and the degree to which such practices are maintained over time after their initial implementation, however, it is difficult to assess the degree to which discrete control efforts or programs have succeeded in addressing the problem of agricultural pollution. For example, one study in Utah found that some farmers had failed to properly maintain irrigation system improvements installed under cost-sharing programs designed to reduce salinity inputs into the Colorado River system.[9] Unfortunately, similar follow-up studies have not even been conducted for many cost-sharing and education-based programs. Therefore, for many programs it is impossible to know the degree to which BMPs are properly installed and maintained over time, much less to assess their actual effectiveness in solving runoff pollution problems.

Even assuming that most BMPs are properly installed and maintained, however, the facts continually produced by state water quality monitoring and assessment programs remain undeniable. Despite all of these laudable efforts, agriculture remains the leading cause of water pollution in the United States. The question is, why? How can it be true that severe agricultural pollution remains despite over thirty years of dedicated control efforts under the CWA as well as the large range of USDA assistance programs?

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[8] Environmental Law Institute, Enforceable State Mechanisms for the Control of Nonpoint Source Water Pollution (1997).

[9] Hill, Robert W. and Terry A. Messmer, et al., Colorado River Salinity Control Program Uintah Basin Monitoring and Evaluation Final Report (Utah State University, April 1999).

I believe that one explanation for this paradox is that the dollars spent and the efforts made under past and ongoing agricultural pollution programs have not been targeted properly and used as effectively as possible. Dollars have been spent in ways and in places that are not calculated to produce the maximum improvements in water quality. Absent a reasonable method to correlate pollution control efforts with real-world environmental conditions, those efforts are not likely to produce the best possible results. And that is precisely why the TMDL process can be used to help improve the efficiency and the effectiveness of existing as well as proposed future programs to address agricultural water pollution. It is why this Committee and the agricultural community should welcome TMDLs as ways to properly target pollution controls, to gauge their effectiveness over time, and to revise control efforts over time until actual water quality improvements can be documented.

The TMDL Process Will Help, Not Hurt, Existing Agricultural Pollution Control Programs

While the TMDL process can be complex in some respects, its basic premise is simple and eminently logical. It is designed first to identify those water bodies that remain impaired despite the implementation of the initial round of the CWA's technology-based controls on point sources. As discussed in more detail below, these include waters impaired by nonpoint as well as point sources.

The TMDL process next requires states to identify the pollutants causing the impairment for each specific water body, and the major sources of pollution in the watershed. By allocating needed pollution reductions fairly among the responsible sources, pollution control efforts can then be *targeted* in ways that are far more likely to produce real water quality gains than are programs conducted without this basic information. This targeting process is improved further if

it is iterative, that is, if water quality trends are monitored over time, and if programs are modified as appropriate to ensure continuing environmental improvements. The net result is that whatever dollars are spent on pollution control, by governmental or private sources, are spent in ways that are more likely to improve the health of the water bodies we all share for drinking water, fish and wildlife and other uses. For example, through the proper use of TMDLs, cost-sharing dollars available for use within a particular region can be targeted at those watersheds identified as needing reductions in particular types of pollutants. Within those watersheds, programs can properly be targeted at those sources of pollution that most likely contribute to the actual problem to be addressed.

The Colorado River Basin Salinity Control Program, one of the major large watershed programs that a colleague and I studied as part of the NAPA study, uses the equivalent of a basinwide TMDL to accomplish this type of targeting. Using an available model developed by the Tennessee Valley Authority (TVA) and modified to apply to the Colorado River system, the basin states (with assistance from USGS, the Bureau of Reclamation and other agencies), calculated total salt reductions necessary to meet interstate water quality standards for the river, as well as international treaty requirements regarding the quality of water delivered to Mexico. Next, the program has continuously identified particular sources of salinity throughout the basin, and used the modeling process to identify the most cost-effective targets for salinity control. More recently, the program has instituted a competitive bidding process by which anyone within the basin can propose salinity control projects, with the most cost-effective solutions chosen during each bidding cycle. Thus, the TMDL-type process is used to target and select the best possible control projects, but does not inherently mandate particular solutions for particular

sources. Available data shows that this program has succeeded in producing significant reductions in salinity inputs into the river system, and that water quality standards have been maintained in the basin as a result. Thus, because it has been properly targeted using a TMDL-type process, the salinity program stands as one of our most successful nonpoint source pollution programs in the country in terms of meeting actual water quality goals. Moreover, because the targeting approach facilitates rather than forecloses innovations such as the new competitive bidding process, the cost-effectiveness of salinity controls has improved dramatically.

It is important to understand in this regard that like the Colorado River Basin Salinity Control Program, the TMDL process will not, if implemented properly, result in rigid federal intrusion into either state or agricultural agency water quality programs. Rather, it is designed to provide the necessary information to ensure that state and other programs operate effectively. In particular, the proposed rules do not dictate particular regulatory or other pollution control strategies. Instead, they merely impose reasonable accountability to the goal of improving water quality by requiring a TMDL implementation plan to include "reasonable assurances" that the load allocations assigned to nonpoint sources will be met.[10] For nonpoint sources, "reasonable assurances" are defined as "specific procedures and mechanisms that ensure load allocations will be implemented for that waterbody;" and examples explicitly identified in the regulation include, at the option of the state water quality agency, "regulations, local ordinances, performance bonds, contracts, cost-share agreements, memorandums of understanding, site-specific or watershed-

[10] Proposed 40 C.F.R. 130.33(b)(10(3).

specific voluntary actions, and compliance audits of best management practices."[11]

For these reasons, I believe that agricultural agencies and the agriculture community at large should *welcome* rather than oppose EPA's proposed new TMDL program. They are designed to help guide, rather than to replace or to dictate the content of, the agricultural pollution control programs chosen by other responsible agencies. If implemented successfully, they will not transfer authority to EPA to decide what nonpoint source controls must be adopted and by what sources. Rather, they will help to ensure that the choices made by the other responsible agencies are wise, cost-effective, and guided by sound science. This Committee will benefit if the cost-sharing and other assistance programs conducted under its auspices are more effective, and if the limited available federal dollars are spent in ways that produce better water quality improvements. The agriculture and forestry industries will benefit when pollution control programs are conducted in locations and in ways that are more likely to improve water quality in their communities. And the public at large will benefit when the thousands of water bodies around the country that continue to be impaired due to agricultural and silvicultural pollution despite three decades of concerted control efforts are restored to healthy conditions.

Waters Impaired by Nonpoint Source Pollution Should Be Included in the TMDL process

As shown above, after almost thirty years of progress in reducing impacts from sewage treatment plants, industries and other point sources, the bulk of the remaining impairment of the nation's waters comes from nonpoint sources. Excluding those sources from the TMDL program would render the program of extremely limited value in solving the most prevalent and

[11] Proposed 40 C.F.R. 130.2(p).

intractable problems facing America's waterways. Moreover, excluding nonpoint sources from a program designed to address aggregate pollution rather than discrete sources would make virtually no sense. Indeed, such a focus would unfairly continue to force point sources to bear the lion's share of the water pollution control price tag despite clear evidence that unregulated nonpoint sources contribute substantially, and in many watersheds exclusively, to water body impairment. Finally, the protracted schedule for listing and completion of TMDLs in the proposed regulations would be entirely unnecessary, and in fact would constitute unreasonable and unlawful delay of an already-overdue program, if it were limited to the comparatively easy task of identifying and quantifying point source wasteload allocations.

From a legal perspective, EPA is well within its authority, if not subject to a legal duty, to include nonpoint sources in this program. Section 303(d)(1)(A) requires states to identify all waters for which the first round of technology-based pollution controls are not sufficient to implement any applicable water quality standard. Section 303(d)(1)(C), in turn, requires the development of TMDLs for *all* of the waters identified under (d)(1)(A). It is entirely illogical to contend that the fact that Congress excluded from the listing process those waters that could attain water quality standards based on the earliest round of *point source controls* means that Congress similarly intended to exclude, by implication rather than expressed intent, waters that could only be cleaned up through the control of *nonpoint sources* or more complex combinations of point and nonpoint sources. Indeed, the opposite interpretation, that Congress intended to exclude only that limited category of waters identified expressly in the opening sentence of section 303(d)(1)(A), is a far more logical and straightforward way to read the statutory language. Given this realization, Congress could have indicated an intent to exclude nonpoint

source waters with far more precision than it is alleged to have done here. While the legislative history of this provision is sparse and far from a model of clarity, it clearly reflects that Congress understood that nonpoint sources contribute substantially to the pollution of many watersheds and should be taken into account in the TMDL process.[12] As my colleague Oliver Houck, a Professor of Law at Tulane Law School, wrote:

> ... the only logical interpretation of [the] legislative history behind section 303(d) is that nonpoint sources were a big fact of life in achieving water quality standards, and they would have to be included in the assessments of polluted waters and their TMDL allocations. Were they not included, a process to ensure that municipal and industrial limits were "consistent with water quality standards would make no sense; it, literally, could not be done.[13]

TMDLs Should Include Implementation Plans

The new regulations would depart from existing practice by requiring states to include implementation plans as part of their TMDLs, rather than leaving implementation to other, disparate parts of the Act. Ironically, at appears that *some* representatives of both the regulated community and the environmental community object to the inclusion of implementation plans as a mandatory component of TMDLs, although for different reasons. Regulated groups object because implementation plans, as defined in the proposed rules, will at long last require the identification of more precise and firm obligations to address the many sources of pollution that

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[12] H.R. Rep. No. 92-911, at 105 (1972).

[13] Oliver A. Houck, The Clean Water Act TMDL Program: Law, Policy and Implementation, at 41 n.93 (Environmental Law Institute 1999).

have escaped control obligations in the past. Representatives of some environmental groups will object because the inclusion of implementation plans will further delay the TMDL program relative to TMDLs that seek to produce numeric allocations alone and leave implementation to other provisions of the law.

Equally ironic, however, is the fact that the desirability of implementation plans in the TMDL program was one of the recommendations of the FACA Committee that came with *unanimous* support, despite the diverse representation on the Committee.[14] In my view, especially with respect to nonpoint sources, the inclusion of implementation plans represents one of the most significant recommendations that the Committee had to offer, and one that will result in the most important contributions to long-term water pollution control. Without implementation plans and the more precise identification of on-the-ground controls that will be included in such plans, many pollution sources will remain uncontrolled, as has occurred under countless past "planning" efforts under this provision, section 208, section 319, and section 303(e) of the Act. As a matter of fairness, it is also essential to note that the agreement to allow up to 15 years for states to complete their TMDLs was linked expressly in the FACA deliberations to the fact that the TMDLs would include implementation plans, which will be more difficult and time-consuming to develop. If EPA deleted the implementation plan component from the regulations, there would be no plausible justification for the extended schedule allowed by other aspects of the proposed rules.

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[14] Committee members disagreed, of course, about whether the inclusion of implementation plans was appropriate under section 303(d) or 303(e) of the CWA.

The only real legal dispute about EPA's authority to require implementation plans as part of TMDLs is whether such authority resides in section 303(d) or section 303(e) of the Act. The implications of this distinction will be purely theoretical if the states implement the TMDL program properly. In that case, all state TMDLs will be approved by EPA and there will be no need for EPA to step in and prepare TMDLs and their accompanying implementation plans instead. It is reasonable to expect that most or all states will meet their TMDL obligations once clarified in the final regulation. If some states fail to do so, however, there are important reasons why EPA should step in and implement the program fully in their stead. First, from the perspective of interstate fairness, one of the major values Congress sought to protect in passing the law in the first place, it will be unfair if most states and their citizens fulfill their TMDL obligations properly, but some do not. In essence, equally-situated farmers (and other operations) in a few states will be given an unfair competitive advantage with respect to those in other states. Equally important, the citizens of most states will be protected from the adverse effects of agricultural pollution, while the unfortunate citizens of other states will not. Moreover, for these reasons Congress clearly provided in section 303(d) of the Act that EPA must step in and implement the TMDL program if a state fails to do so. This authority will be rendered meaningless if EPA is allowed only to produce raw, numeric TMDL calculations, but not to develop the implementing steps necessary to ensure that the TMDL wasteload and load allocations are actually achieved. The purpose of the CWA is to restore and maintain the integrity of the nation's waters, not simply to produce meaningless calculations.

EPA Has Ample Authority to Require NPDES Permits for Silvicultural Point Sources

Finally, the proposed EPA regulations seek to facilitate better implementation of the TMDL program by amending its existing regulatory exemptions for certain silvicultural point sources to require, on a case-by-case basis, the issuance of NPDES permits by EPA or delegated states where necessary to implement wasteload allocations identified in the TMDL process. This authority can only be applied where EPA has written a TMDL, presumably due a state failure to do so, and only based on a specific finding that the source contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. Where such conditions exist, it is entirely logical and appropriate to use the NPDES system as the mechanism to ensure that appropriate pollution controls are adopted by those sources.

Some representatives of the forestry industry unfortunately have mischaracterized this proposed regulation. In particular, they allege that EPA is attempting, by regulation, to convert to point sources activities that are designated as nonpoint sources in the CWA. This is not correct as a matter of law. With only limited exceptions that apply to agricultural stormwater and irrigation return flows, but *not* to silvicultural activities, point sources are defined in the statute by reference to the nature of the discharge, and not by category of economic activity. In particular, the statute defines "point source" to mean:

> ... any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater

discharges and return flows from irrigated agriculture.[15]

Federal courts have indicated repeatedly that, in order to fulfill the remedial purposes of the statute, this definition should be interpreted broadly.[16] Thus, based on the plain language of the statute alone, discharges of pollutants to waters of the United States from *any* silvicultural operations through the types of discrete conveyance listed in the statutory definition should require NPDES permits. By contrast, silvicultural pollution that reaches waters of the United States through means other than point sources, that is, through runoff rather than discharges through discrete conveyances, constitutes nonpoint source pollution and is statutorily exempt from the NPDES program. Again, except for the express agricultural stormwater and irrigation return flow exemption, it is the manner in which pollution reaches water bodies and not the type of economic activity in question that dictates whether a point source exists. When Congress includes such express exemptions in a statute, it is presumed that other, similar exemptions were not intended.

In the past, however, EPA has *by regulation* decided to exempt certain silvicultural point sources from NPDES permitting requirements. In reality, it is these regulatory exemptions rather than the current proposal to remove some of those exemptions, that are arguably illegal under the CWA. When EPA originally attempted to exclude entire categories of point sources from the NPDES program, environmental groups successfully challenged that practice.[17] The D.C. Circuit

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[15] CWA §502(14), 33 U.S.C. §1362(14).

[16] *E.g.*, U.S. v. Earth Sciences, 599 F.2d 368, 373 (10th Cir. 1979); Quivira Mining Co. v. EPA, 765 F.2d 126, 129-30 (10th Cir 1985); Community Ass'n. For Restoration of the Environment v. Sid Koopman Dairy, 54 F.Supp.2d 976, 981 (E.D. Wash. 1999).

[17] NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

Court of Appeals did indicate that EPA had limited authority to determine the proper scope of the NPDES program through its regulatory interpretation of the terms "point source" and "nonpoint source." And EPA has used that technique to exempt, among other sources, a large number of silvicultural activities that otherwise would constitute point sources under the plain language of the CWA. Thus, what EPA proposes to do now is simply to modify those regulatory exemptions under the limited circumstance of silvicultural point sources that contribute to water quality violations, as identified through the TMDL process. It is not converting statutory nonpoint sources into point sources.

This does not mean, as industry representatives suggest, that all silvicultural activities will now be treated as point sources. First, nothing in the proposed regulation purports to define as a point source any silvicultural pollution other than discharges through confined and discrete conveyances. Unconfined silvicultural runoff will continue to be treated, as the statute currently requires, as a nonpoint source. Second, as explained above, EPA will only treat discharges through such discrete conveyances as point sources based on specific findings of water quality impairment through the TMDL process.

Neither section 208 nor section 404 of the CWA exempt silvicultural activities categorically from the definition of point source. First, if Congress intended this result, it could have done so much more clearly by simply adding "silvicultural stormwater" to the exemptions expressly included in the definition of "point source," quoted above. Second, the alleged exemption is simply not supported by the language of either section 208 or section 404 of the Act. Section 208, the provision of law originally designed as one of the primary means of planning for nonpoint source pollution control, required states to identify and to design best

management practices to address "silviculturally related nonpoint source pollution," along with other forms of nonpoint source pollution[18] This does not, on its face, in any way indicate that *all* silvicultural pollution is nonpoint source pollution. Rather, it simply instructs that some types of silvicultural pollution, to be identified by the states, was in the form of nonpoint source runoff and should be addressed in the 208 process.

Section 404(f) of the CWA,[19] by contrast, does expressly exempt "normal" silvicultural operations and the construction and maintenance of forest roads from permitting requirements under both section 402 and section 404 of the Act, *but only for limited purposes*. In particular, the provision indicates that "the discharge of dredged or fill material" from such activities requires a permit under either section 402 or section 404. Again, however, where Congress includes an express exemption for certain limited purposes, it is presumed that other, broader exemptions were not intended. Here, the exemption applies only to discharges of dredged or fill material, and not to other types of pollution normally addressed in the NPDES program.

Conclusion

I do not agree with all aspects of the proposed regulations, and given the difficult competing issues the agency faces, it is not likely that anyone does. In general, however, EPA has done an excellent job of integrating the recommendations of the FACA Committee and other relevant considerations into a coherent regulatory package that has the potential to make significant progress in implementing an important aspect the CWA that has remained largely

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[18] CWA §208(b)(2)(F), 33 U.S.C. §1288(b)(2)(F).

[19] 33 U.S.C. §1344(f).

unfulfilled for almost three decades. In light of these long delays, and given the need to strike a reasonable balance between the competing interests who have objected to these proposed changes, I hope that EPA proceeds expeditiously with the promulgation and full implementation of final regulations. While far from perfect, the TMDL program is the best tool available under the CWA as currently written to redress the wide range of impairments that affect watersheds across the country in a comprehensive rather than a fragmented way. Moreover, the TMDL process provides an excellent structure within which to implement EPA and state watershed-based policies and programs.

I appreciate the opportunity to testify today on these important regulatory changes. I would be happy to answer any questions the Committee might have.

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EDUCATION

Georgetown University Law Center - J.D. 1980, cum laude

Law Review - Editor-in-Chief, Law & Policy in International Business

Honors- Invitations to all four Georgetown Law Journals (based on top 7% of class)

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Johns Hopkins University - B.A. 1977

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EMPLOYMENT

July 1999 to present	University of Utah College of Law C Professor of Law; Interim Director, Wallace Stegner Center for Land, Resources and the Environment
July, 1994 to July 1999	University of Utah College of Law - Associate Professor
1993 to 1994	University of Virginia School of Law - Adjunct Professor (Environmental Practice)
December, 1987 to July, 1994	Natural Resources Defense Council - Senior Attorney; Director, Clean Water Project - litigation, lobbying, education and public advocacy on water quality, oil development, Alaska lands issues
October, 1984 to October 1987	Trustees for Alaska - Executive Director; Staff Attorney - litigation and advocacy on energy, Alaska Lands Act, Arctic National Wildlife Refuge, state land use, wetlands issues

June, 1980 to October, 1984	Pennsylvania Department of Environmental Resources - Assistant Counsel - Three Mile Island litigation, enforcement litigation, counsel to water quality and radiation protection programs.
May to August 1979	Environmental Defense Fund - Legal Intern
August, 1978 to April, 1979	Environmental Law Institute - Research Associate
January to June 1977	Environmental Protection Agency -Assistant Program Analyst

PROFESSIONAL STATUS

Admitted to practice in Alaska, District of Columbia, Pennsylvania, and multiple federal District Courts and Courts of Appeals.

PUBLICATIONS

Books and Book Chapters

Keiter and Adler, NEPA and Ecological Management: An Analysis with Reference to Military Base Lands, in Porter & Fittipaldi, eds., Environmental Methods Review: Retooling Impact Assessment for the New Century (AEPI 1998)

Adler, Filling the Gaps in Water Quality Standards: Legal Perspectives on Biocriteria, in Davis & Simon, eds., Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making (Lewis Publishers 1995)

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Ebb Tide for Pollution (43 pp., Natural Resources Defense Council, 1989) (Contributing Author, Project Co-director)

Pennsylvania Water Pollution Control Law (Pennsylvania Bar Institute, 1983) (Co-author)

Air and Water Pollution Control: Progress and Problems (Environmental Law Institute 1978) (Assistant Editor; author of "Mobile Source Regulation" and "Publicly Owned Treatment Works" chapters)

SELECTED CONFERENCES AND INVITED PRESENTATIONS (1994 - present)

"The Changing Law of Western Rivers: Impacts on Dams in the West," Presented at "Rivers, Dams and the Future of the West" University of Utah, Utah Wetlands and Riparian Center, Salt Lake City, Utah, November 18, 1999.

"Watersheds and the Integration of Water Policy: National and Local Perspectives," Utah State University, Natural Resource and Environmental Policy Program, Logan, Utah, November 4, 1999.

"New Directions in Water Law and Policy," Fourth Annual Symposium, Wallace Stegner Center for Land, Resources and the Environment, "Where the Rivers Flow," Salt Lake City, Utah, April 17, 1999.

"Wetlands and the Law," Presented at "From Swamps to Wetlands, The Wetlands Conference," University of Utah, Utah Engineering Experiment Station, Salt Lake City, Utah, November 18, 1998.

"Sewer Infrastructure Investments for the 21st Century, Creating Strategic Solutions for Southwestern Pennsylvania, A National Overview and Perspective," Presentation to Seminar Cosponsored by the Institute of Politics, University of Pittsburgh and the Heinz Endowments, Pittsburgh, Pennsylvania, November 6, 1998.

Panelist, National Public Radio, Science Friday Special on Great Salt Lake, May 1998.

"Towards Comprehensive Watershed Restoration and Protection for Great Salt Lake," Friends of Great Salt Lake, Second Great Salt Lake Issues Forum, Salt Lake City, Utah, February 1998.

"Transportation, Land Use and Ecology Along the Wasatch Front," Conference Organizer, Wallace Stegner Center for Land, Resources and the Environment, University of Utah College of Law, Salt Lake City, Utah, November 1997.

"The Promises and Perils of Watershed Initiatives," Keynote Presentation to the Ninth Annual Conference of the Colorado Riparian Association, Montrose, Colorado, October, 1997.

Conservation Programs and Water Quality: "Where Are We Now?" National Association of Conservation Districts, Pacific Region, Kawai, Hawaii, September 1997.

"Total Maximum Daily Loads: Lessons from the Clean Air Act," Western States Nonpoint Source Pollution Conference, Park City, Utah, August 1997.

"To Cherish and Renew, Restoring Western Communities and Ecosystems," Conference Organizer, Wallace Stegner Center for Land, Resources and the Environment, University of Utah College of Law, Salt Lake City, Utah, April 1997.

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"Principles of Watershed Protection," to the Meeting of the Watershed Management Committee of the National Research Council, Water Science and Technology Board, Irvine, California, January 1996.

"Addressing Barriers to Watershed Management," Watershed >96, Moving Ahead Together, Baltimore, Maryland, June 1996.

"Watershed Planning: Potential Applications for Great Salt Lake," Friends of Great Salt Lake, First Great Salt Lake Issues Forum, Salt Lake City, Utah, February 1996.

"Watershed Management to Address Agricultural Pollution: Past, Present and Future," presented at The Influence of Social Trends on Agriculture and Natural Resources, A Resource Conservation Act Symposium, Natural Resources Conservation Service, Washington, D.C., July 1995.

"The Urban Watershed: Moving Beyond the Rhetoric," Association of Metropolitan Sewerage Agencies, 1995 Winter Technical Conference, Tucson, Arizona, February 1995.

Water Quality Protection and the New World Gold Mine, at University of Utah College of Law, National Parks and Public Land Ecosystems: Meeting the challenge of Common Boundaries and Conflicting Mandates, Snowbird, Utah, April 1995.

Panelist, National Public Radio Special on Water in the West, at the Western States Nonpoint Source Pollution Conference, Park City, Utah, September, 1994.

AWARDS, AFFILIATIONS AND PROFESSIONAL ACTIVITIES

Co-recipient, National Performance Review "Hammer Award" from Vice President Al Gore as member of EPA Combined Sewer Overflow (CSO) Negotiating Team

Federal (EPA) Advisory Committee on TMDLs (Total Maximum Daily Loads under the Clean Water Act), October, 1996 - 1998.

Board of Directors, Conservation Chair, HawkWatch International, August 1999 - present.

Advisory Board, Friends of the Great Salt Lake, 1995 - present.

Task Force on Assessing Costs of Unfunded Federal Mandates, U.S. Advisory Commission on Intergovernmental Relations, 1994.

President's Award, America's Clean Water Foundation, October, 1992 (Twentieth Anniversary Clean Water Act Award).

Chair, National Clean Water Network, 1990 - 1994 (Network of over 400 national, regional and local organizations working on Clean Water Act reauthorization).

Vice Chair, Water Quality 2000, 1988 - 1994 (Multi-interest group negotiation on long-range U.S. water pollution policy).

Management Advisory Group to Assistant Administrator for Water, U.S. Environmental Protection Agency, 1991- 1994.

League of Conservation Voters, Political Advisory Council, 1991 - 1994.

Anchorage Health and Human Services Commission, 1985-1987.

Anchorage Wastewater System Technical Review Board, 1986-1987.

Founding Board Member, Anchorage Waterways Council, 1985-1987.

COMMENTS ON EPA'S PROPOSED REGULATIONS REGARDING TOTAL MAXIMUM DAILY LOADS, THE NATIONAL POLLUTANT DISCHARGE SYSTEM, AND THE FEDERAL ANTI-DEGRADATION POLICY

SUBMITTED TO THE SENATE AGRICULTURE, NUTRITION, AND FORESTRY COMMITTEE

BY:
JOHN BARRETT
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February 23, 2000

Introduction

My name is John Barrett, I am a fifth generation cotton and grain farmer from Edroy, Texas. I am a 1971 graduate of the United States Naval Academy with a degree in Naval Science and Oceanography. I served on the Environmental Protection Agency's (EPA) federal advisory committee on Total Maximum Daily Loads (TMDL). I currently serve as the agricultural representative on the Texas Coastal Coordination Council and the Management Committee of the Gulf of Mexico Program. My comments today will address EPA's proposed rulemaking to revise the regulations implementing the TMDL program. I will briefly highlight several areas of interest and concern to agriculture.

The proposed regulations are contrary to Congressional intent.

EPA's proposed regulations are unlawful because they go well beyond the authority of the Clean Water Act (CWA). The proposed regulations empower EPA to regulate nonpoint sources of pollution through the TMDL program. Congress did not intend for EPA to possess such power. Congress made a conscious decision to treat point and nonpoint sources differently and separately in the CWA. Point sources are directly regulated by EPA through effluent limitations and a permitting system. By contrast, nonpoint sources are managed by the states through federal grant programs that encourage states to develop nonpoint source management plans.

The proposed regulations permit EPA to list nonpoint source-impaired waters; to develop TMDLs for nonpoint source-impaired waters; and, to establish implementation plans for nonpoint source-impaired waters. In other words, the proposal provides for federal land use regulation. EPA, without the benefit of law, will be telling farmers and ranchers how and when they can harvest their crops and use their land. Cities can regulate land use, some counties can regulate land use, states can do it within limits, but the federal government needs unambiguous statutory authority to regulate land use. By this I mean Congress passing a law, not the EPA administrator passing a regulation.

EPA has already begun this unlawful process of regulating land usage through TMDLs. For example, in northern California, EPA established a nonpoint source sediment TMDL for the Garcia River that regulates how farmers and timber harvesters can use their property. The TMDL has been enforced against nonpoint farmers and timber harvesters in the watershed, forcing them to restrict the amount of timber they can harvest and dictating how and when they can use their land. Congress did not provide or intend federal nonpoint control that allows intervention into local land use issues.

The proposed regulations set unattainable standards.

Congress elected to treat point and nonpoint sources distinctly for good cause. Congress realized that because of its diffuse and complicated nature, nonpoint source pollution did not lend itself to rigid point source-type controls. Rather, nonpoint source pollution had to be managed through flexible standards. Watershed managers and nonpoint source professionals are well aware of this problem. Farmers and ranchers can't control the rain! But nonpoint source TMDLs expect them to. All four components of the term-Total, Maximum, Daily and Load-imply a constant,

engineered and controllable environment. Many environmental groups have long argued that a TMDL has to be just what it says it is -- an enforceable DAILY load. For agriculture, this means that farmers are in jeopardy of breaking the law any time a significant rainfall event occurs. Such an outcome is preposterous. As Congress recognized in 1972, while nonpoint sources can be managed "to the extent feasible," they cannot be expected to meet any quantifiable daily load limitations.

The proposed regulations are impractical.

In its zeal to redefine nonpoint source runoff as a "discharge" subject to 303(d), EPA is attempting to drive a square peg into a round hole. The Federal Section 319 Nonpoint Source Program merely encourages states to reduce pollution "to the maximum extent practicable" through best management practices (BMPs). Section 303(d) has a different bar. Compliance with Section 303(d) is not achieved until water quality standards are attained. For nonpoint source runoff, this raises the not-so-hypothetical possibility that a source would have to be eliminated from a watershed in the event that BMPs and modified BMPs ultimately prove ineffective in attaining water quality standards. This does not make sense to reasonable people who understand the vagaries of weather. The TMDL Federal Advisory Committee reached a consensus agreement that BMPs implemented to achieve TMDLs would have to pass the bar of practicability (economically achievable) as established in Section 319. EPA has failed to introduce the concept of practicability in either the preamble or the proposed TMDL regulation.

The proposed regulations do not adequately address data issues.

Successful TMDL development and implementation will occur when states have attainable water quality standards, when they have 303(d) lists which are derived by an ambient monitoring program, and not by drive-by assessments or windshield monitoring. They will need to devote sufficient resources to the TMDL development process in order to provide scientifically adequate input parameters and robust stakeholder involvement in the entire process. The TMDL program will fail if environmental extremists are permitted to hijack the process to their agenda of federal watershed zoning.

EPA's proposal requires the inclusion of "threatened" waters as well as upstream or downstream areas. Section 303(d) does not require the listing of "threatened" waters and listing of upstream or downstream areas should only be based on reliable water quality data. The Federal Advisory Committee drove this point home, but EPA has ignored the FACA's recommendation in its proposed rule. EPA should revise its standard to require states to establish quality assurance/quality control (QA/QC) programs to ensure the reliability of water quality data on which listing decisions and TMDL calculations are based. EPA should revise its standard for data and require only the use of reliable data, e.g., to require the use of "all reliable and credible existing and readily available water quality-related data and information."

The proposed regulations unlawfully regulate pollution as well as pollutants.

The statute requires the listing of waters for which technology-based effluent limitations -- which govern the discharge of pollutants -- are not stringent enough to meet water quality standards.

The statute requires TMDLs "for those pollutants which EPA identifies . . . as suitable for such calculations." Placing "pollution" impaired waters on the Section 303(d) list can only increase confusion among states and the public over the function of the TMDL program.

The proposed regulations allow EPA to designate nonpoint sources as point sources.

The proposed regulations unlawfully allow EPA to designate nonpoint sources as point sources. They propose to regulate nonpoint sources, private forestry and livestock activities for such practices as harvesting, site-preparation, road construction, thinning, prescribed burning, pest and fire control, land application of organic nutrients and nutrient utilization plans by requiring landowners to obtain point source discharge permits for these land use activities. This proposed action is an unjustifiable expansion of the agency's authority, constitutes significant federal intrusion into private activities and overrides state and private control of land-use decisions.

Agriculture is willing to be a part of reasonable and lawful water quality management programs.

Farmers and ranchers are determined to halt EPA's unlawful regulation of nonpoint sources through the TMDL program. Despite our belief that EPA's actions are beyond statutory authority, agriculture is working at every level to ensure that farmers and ranchers are up to speed on water quality standards and monitoring programs. Farmers and ranchers are engaged in activities and practices to improve and protect water quality. Conservation tillage practices are being used on more than 60 percent of our nations' farmland, saving hundreds of millions of tons of topsoil annually. Over 600,000 miles of conservation buffers have been installed on farms. Thirty-six million acres are being protected through the Conservation Reserve Program. Voluntary nutrient management plans are prepared annually by USDA's Natural Resources Conservation Service for approximately 10,000 farms.

The process to protect water quality must be lawful and reasonable. A new cooperative public policy structure will not be easy as it will take a long time to develop stakeholder consensus, effective interpersonal relationships and trust in the agency for the process to succeed. My experience as a member of a National Estuary Program Management Conference and as a participant in the development of a complex and contentious TMDL has convinced me that the only workable solution to watershed management is the "bottoms up" approach as opposed to "command and control."

Conclusion

Over the decades farm and ranch families have achieved extraordinary conservation gains through voluntary, incentive based programs to conserve fragile soils, wetlands, protect water quality and wildlife habitats. I believe that the EPA's current effort to expand the scope of regulation goes far beyond Congressional intent. I believe the nonpoint source issues outlined in EPA's TMDL proposal are best addressed through incentive-driven programs, implemented by those with the most interest in the environmental quality of America's land and water resources. That is the people who own and work with those resources on a daily basis – America's farmers and ranchers.

John Barrett

Biographical Information

John Barrett is a fifth generation family farmer from San Patricio County, Texas. He graduated from the United States Naval Academy in 1971 with a degree in Naval Science and Oceanography. Since 1995, he has been the representative of agriculture on the Texas Coastal Coordination Council. In 1996 he was appointed by the Administrator of the U.S. Environmental Protection Agency to serve on the Federal Advisory Committee on TMDLs (total maximum daily loads) as a representative of agriculture. He serves on the American Farm Bureau Federation's Water Quality Task Force and represents the Gulf State Farm Bureaus on the Management Committee of the Gulf of Mexico Program.

DOCUMENTS SUBMITTED FOR THE RECORD

FEBRUARY 23, 2000

Statement of the American Farm Bureau Federation

TO THE
SENATE AGRICULTURE, NUTRITION, AND FORESTRY COMMITTEE
REGARDING
ENIVRONMENTAL PROTECTION AGENCY'S PROPOSED REGULATIONS
REGARDING
TOTAL MAXIMUM DAILY LOADS,
THE NATIONAL POLLUTANT DISCHARGE SYSTEM, AND
THE FEDERAL ANTI-DEGRADATION POLICY

February 23, 2000

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STATEMENT OF
THE AMERICAN FARM BUREAU FEDERATION
TO THE
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The Proposed Regulations are Contrary to Law.

Congress did not provide EPA the statutory authority to regulate nonpoint sources under Section 303(d), 33 U.S.C. 1313(d) of the Clean Water Act. However, EPA's proposed rules ignore this fact and improperly expand the Total Maximum Daily Load ("TMDL") program to force states to attain water quality standards through whatever means are necessary, including mandatory controls on nonpoint sources of pollution. If the proposed rules are implemented, existing nonpoint source control programs will be disrupted, state resources will be diverted and farmers and ranchers and other small businesses will be forced to bear enormous costs.

This type of federal regulation of nonpoint sources is not authorized for four reasons: (1) the plain text of Section 303(d), and the statutory definitions of the terms it uses, make clear that only point sources are covered; (2) the structure of the Clean Water Act, in which nonpoint sources are expressly addressed in different sections through different schemes, demonstrates that Section 303(d) regulates only point sources; (3) the legislative history of the relevant sections of the statute indicate unequivocally that Congress was fully aware of the contributions of nonpoint sources, and intended the states, not EPA, to regulate them; and (4) statutory construction counsels against an expansive construction of a statute that would reorder the relationship between the federal and state governments in the absence of clear language doing so more specifically:

- Congress enacted Section 303(d) as part of the Federal Water Pollution Control Act Amendments of 1972. Those Amendments introduced direct federal regulation of "point sources" of pollution through a system of federal permits. As the Supreme Court explained not long after their enactment, "the Amendments are aimed at achieving maximum 'effluent limitations' on 'point sources,' as well as achieving acceptable water quality standards. A point source is 'any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged.'" EPA v. California ex rel. State Water Resources Control Board, 426 U.S. 200, 204 (1976). Section 303 is the statutory mechanism by which EPA can ensure that the effluent

limits on specific point sources are stringent enough to achieve water quality standards. As one court put it, "Section 303 of the Clean Water Act details the statutory provisions concerning water quality standards and implementation plans." Environmental Defense Fund, Inc. v. Costle, 657 F. 2d 275, 279 (D.C. Cir. 1981). Section 303(d) requires states to identify waters within their boundaries that need more stringent effluent limitations to meet water quality standards, after the application of technology-based effluent limitations. 33 U.S.C. § 1313(d)(1)(A). The states must then develop TMDLs for pollutants that impair the identified waters. Id. § 1313(d)(1)(c). A TMDL sets the maximum amount of a pollutant that can be contributed to a water segment without causing a violation of a water quality standard. Costle, 657 F.2d at 294. Once the total load is determined, portions of that total load are "allocated by insertion into NPDES permits, among the various point source dischargers upon the stream segment, taking into account nonpoint source impacts as well." Ibid.

States are required to submit their lists of impaired waters and attendant TMDLs to EPA for approval. 33 U.S.C. § 1313(d)(2). EPA then must either approve or disapprove such lists and TMDLs. Id. If the state fails to submit to the EPA lists and/or TMDLs, or the EPA disapproves such lists and/or TMDLs, then EPA itself must establish the lists and/or TMDLs for the State. Scott v. City of Hammond, 741 F.2d 992, 996 (7th Cir. 1984).

Section 303(d) regulates only point sources of pollution, by virtue of the definitions of the terms it uses. "Effluent limitations" are restrictions placed on point sources of pollution. Section 502(11), 33 U.S.C. § 1362(11). EPA v. California, 426 U.S. at 204. See also Oregon Natural Desert Ass'n v. Dombeck, 172 F.3d 1092, 1096-97 (9th Cir. 1998), cert. denied, 120 S. Ct. 397 (1999). They have nothing to do with nonpoint sources of pollution, which are controlled through "best management practices" pursuant to a separate provision, Section 319. 33 U.S.C. § 1329. For nearly 20 years, EPA properly applied Section 303(d) only to point sources. Since the early 1990s, however, as a result of settlements in a series of lawsuits brought by environmental groups, EPA has changed its interpretation and has sought to expand its Section 303(d) authority into control of nonpoint sources, such as agriculture and forestry.

- If Congress had intended for Section 303(d) to regulate both point and nonpoint sources, there would have been no need for Section 319. In fact, Section 319, enacted in 1987 out of a recognition that a new program to address nonpoint sources was appropriate, is patterned after Section 303(d). Both Sections call for the states to identify waters that fail to meet water quality standards and to take action to bring those waters into compliance. 33 U.S.C. §§ 1313(d), 1329(a), (b). But Section 319 specifically deals with nonpoint sources, and creates a much less significant role for EPA. If EPA is correct, and Section 303(d) regulates both point and nonpoint sources, Section 319 would be superfluous.

- The legislative history of both Section 303 and Section 319 makes clear that Section 319 was not an exercise in statutory redundancy. A court should not defer to an agency construction of a statute where "the legislative history of the enactment shows with sufficient clarity that [it] is contrary to the will of Congress." Japan Whaling Ass'n v. American Cetacean Soc'y, 478 U.S. 221, 233 (1986) (citations omitted). Such is the case here, with respect to both of the relevant sections. The 1972 Senate and House Reports on Sections 301 (which establishes effluent limitations) and 303 made it clear that those sections, and their requirement for the apportionment of discharge loads into specific effluent limitations, were always intended to apply only to point sources. S. Rep. No. 92-414, at 42-48 (1972); H.R. Rep. No. 92-911, at 100-06 (1972). In 1977, during consideration of the Clean Water Act, Congress considered federal regulation of nonpoint sources and expressly rejected it. 123 Cong. Rec. 26690, 26697 (1977). The 1987 legislative history of Section 319 reinforces that, and indicates quite clearly that Congress recognized that "nonpoint pollution is a very different problem to solve than discharges from point sources." 132 Cong. Rec. 32385 (1986) (statement of Senator Bentsen).

- Regulation of nonpoint sources is accomplished through "best management practices," 33 U.S.C. § 1329(a)(1)(C), (b)(2)(A)-(E), which are primarily land use controls. But land use control is historically within the legislative domain of states and their subdivisions, and EPA should not infer that Congress meant to inject itself into that domain in the absence of clear statutory language. Rewis v. United States, 401 U.S. 808, 811-12 (1971). Cf. Printz v. United States, 521 U.S. 898 (1997); New York v. United States, 505 U.S. 144 (1992). While Congress has unmistakably done so for point sources, it equally unmistakably has not done so for nonpoint sources.

Since 1972 the Clean Water Act has divided water pollution sources into two categories, point and nonpoint. A point source is "any discernible, confined, and discrete conveyance ... from which pollutants are or may be discharged." 33 U.S.C. § 1362(14). A nonpoint source is not specifically defined , but by inference is a source of pollution other than a point source. Point sources are subject to the National Pollutant Discharge Elimination System (NPDES), a federal permit scheme which is administered by EPA or by a state which has received EPA's authorization. Id. §§ 1311, 1342(a), (b). Each NPDES permit contains "effluent limitations," which are restrictions on "quantities, rates and concentrations of chemical, physical, biological and other constituents which are discharged from point sources." Id. § 1362(11). The discharge of pollutants from any point source except in compliance with an NPDES permit is unlawful. Id. §§ 1311, 1342; EPA v. California, 426 U.S. at 205. Nonpoint sources are not subject to any federal permit system. Natural Resources Defense Council v. EPA, 915 F.2d 1314, 1316 (9th Cir. 1990); Oregon Natural Resources Council v. United States Forest Service, 834 F.2d 842, 849 (9th Cir. 1987).

In addition to this focus on point sources, the 1972 Act kept in place a program of water quality standards "as a supplementary basis for effluent limitations." EPA v. California, 426 U.S. at 205 n.12. A water quality standard "defines the water quality goals of a water body ... by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses." 40 C.F.R. § 130.3. A typical water quality standard thus might designate a water body for

swimming, and set limits on pollutants like bacteria at levels that make the water safe for swimmers.

Section 303 is the statutory link between point source-limiting effluent limitations and water quality standards. While many effluent limitations are technology-based (i.e., based on EPA's assessment of the best pollution control technology available for particular types of facilities, 33 U.S.C. § 1311(b)(1)(A), (b)(1)(B)), others can be water quality-based, that is, based on State water quality standards, where the application of technology-based standards alone would not achieve water quality standards. Id. § 1311(b)(1)(C), 1313(d); 40 C.F.R. § 122.44(d)(1). See EPA v. California, 426 U.S. at 205 n.12. In the latter case, either the states or EPA use more stringent water quality-based effluent limitations to limit discharges from point sources in order to implement water quality standards. If a state's regulation of point sources proves inadequate, EPA retains residual authority to step in and take over. 33 U.S.C. § 1342(c)(3); Scott v. City of Hammond, 741 F.2d at 996.

Nonpoint sources are addressed under a separate scheme that recognizes their important differences. By the early 1970s Congress had realized that "[t]here is no effective way as yet, other than land use control, by which you can intercept runoff and control it in the way you do a point source." 117 Cong. Rec. 38825 (1971) (Sen. Muskie). Since land use controls have historically been the concern of State and local governments, Congress did not subject nonpoint sources to any federal regulation. As one court has explained, the 1972 Federal Water Pollution Control Act Amendments drew a distinct line between point and nonpoint pollution sources. Point sources are subject to direct federal regulation and enforcement under the Act ... nonpoint sources, because of their very nature, are not regulated under the NPDES. Instead, Congress addressed nonpoint sources of pollution in a separate portion of the Act [Section 208] which encourages states to develop areawide waste treatment management plans. Oregon Natural Resources Council v. United States Forest Service, 834 F.2d at 849; see also United States v. Earth Sciences, Inc., 599 F.2d 368, 371-73 (10th Cir. 1979) (nonpoint sources are not subject to a "regulatory system"). Congress revisited the matter of nonpoint source regulation in 1977, and decided to "continu[e] the section 208 experiment ... judging that these [nonpoint source] matters were appropriately left to the level of government closest to the sources of the problem." 123 Cong. Rec. 26697 (1977).

This minimal federal involvement with nonpoint sources under Section 208 was broadened somewhat – but only somewhat – in 1987 with the addition of Section 319, 33 U.S.C. § 1329. Section 319 continues to recognize that nonpoint source control is first and foremost a matter of land use control, and continues to respect state primacy in that field. It therefore calls upon states to identify nonpoint source impaired waters and submit a list of them to EPA, but bestows only minor information and funding roles on EPA. Id. § 1329(a). The states are then directed to prepare "management programs" that identify "best management practices" for various categories of nonpoint sources. Id. § 1329(b). The difference between "best management practices" and "effluent limitations" is more than semantic. Recognizing the futility of attempting to assign and enforce precise, quantitative limits to nonpoint sources, Congress elected to take a different, and more flexible approach. Consequently, "best management practices" are only intended to reduce nonpoint source pollution "to the extent feasible" or "to the maximum extent practicable," whereas "effluent limitations" are expected to lead to specific,

quantitative reductions in point source discharges of pollutants. Compare 33 U.S.C. §§ 1288(b)(2)(F), 1329(a)(1)(C) with §§ 1311 and 1313(d).

Consistent with this generally more modest federal presence, EPA's role under Section 319 is much more limited than the power it possesses over point sources. It reviews State lists of nonpoint source impaired waters submitted under subsection (a), and the management plans submitted under subsection (c). 33 U.S.C. § 1329(d). If a state fails to submit a satisfactory subsection (a) list, EPA can compile its own, but must notify Congress that it has done so. Id. § 1329(d)(3). If a state fails to submit a satisfactory management plan under subsection (b), a local or regional authority can (with the state's consent) develop one and tender it to EPA, and EPA can offer financial assistance to the local or regional authorities as an incentive. Id. § 1329(e). Significantly, though, if a state fails to produce a satisfactory management plan, and the local authorities do not step in, EPA's role is at an end. Unlike the residual power it holds over point sources, EPA does not have authority to step in and develop its own management plan, since to do so would put it into the land use control business.

EPA's proposal simply cannot be reconciled with this carefully crafted legislative scheme. Whether out of capture by special interest groups, well-intentioned impatience, bureaucratic "mission creep," or some combination of all these, EPA is attempting to use tools that are exclusively reserved for point sources to insinuate itself more directly into the control of nonpoint sources.

Section 303(d) is the mechanism by which the Clean Water Act implements water quality based effluent limitations in areas where "numerous point sources, despite individual compliance with effluent limitations," cause water quality to "fall below acceptable levels." EPA v. California, 426 U.S. at 205 n.12. Section 303(d)(1)(A), which requires states to identify such waters, does so by limiting its focus to waters in which technology-based effluent limitations fail to achieve water quality standards:

> Each state shall identify those waters within its boundaries for which the effluent limitations required by Section 301(b)(1)(A) and Section 301(b)(1)(B) [33 USCS § 1311(b)(1)(A), (B)] are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

1362(11) (emphasis added). Section 303(d)(1)(c) then requires states to establish TMDLs for each of the waters on the subsection (A) list:

> Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a)(2) [33 USCS § 1314(a)(2)] of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which

> takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

Once again, the emphasis on the "relationship between effluent limitations and water quality" indicates that this process applies to point sources. "Effluent limitations" are, after all, "restrictions ... on quantities, rates, and concentrations of ... constituents which are discharged from point sources." 33 U.S.C. §

The limited scope of Section 303(d) is a logical approach to the substantive issue it addresses. Section 303(d) requires the calculation of precise, quantitative load allocations, which are then incorporated into permits for individual dischargers. This makes sense in the context of discharges out of the end of a pipe, which can be controlled through well understood technologies and which can be sampled and measured to determine compliance relatively easily. It is an approach that makes no sense at all in the context of nonpoint sources. Nonpoint source pollution is generally the result of runoff after rainfall. But neither rainfall nor runoff occurs with the predictability and precision that is inherent in the concept of a quantitative total maximum daily load. That is why Sections 208 and 319 of the Clean Water Act use the qualitative concepts of "best management practices" and "management programs" to address nonpoint sources "to the extent feasible" and "to the maximum extent practicable." 33 U.S.C. §§ 1288, 1329.

By virtue of the defined terms it uses, Section 303(d) focuses solely on point sources. While the statutory structure of the rest of the Clean Water Act reinforces the language used in this section, and the supporting legislative history explains and is consistent with the literal text of Section 303, the plain words of the statute are enough by themselves to invalidate EPA's attempt to expand its powers.

None of this means that nonpoint sources are left unaddressed. Section 319 of the Clean Water Act is specifically devoted to "Nonpoint source management programs," 33 U.S.C. § 1329, and would be superfluous if Section 303(d) had already included nonpoint sources.

Section 319, enacted 15 years after Section 303(d), is obviously parallel in several respects. Section 303(d)(1)(A) requires each State to identify waters within its boundaries "for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) ... of this title are not stringent enough to implement any water quality standard applicable to such waters," while Section 319(a)(1)(A) requests states to identify waters within the State "which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards." Further, both Sections call upon the State to take some action with respect to the impaired waters. While the requisite actions under each are quite different—maximum daily load calculations for point sources and best management practices for nonpoint sources – the similarities in structure is clear.

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January 19, 2000

VIA COURIER

W-99-04, NPDES/WQS,
Comment Clerk, Water Docket
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Comments on the Proposed Revisions to the NPDES Program and Federal Antidegradation Policy in Support of Revisions to the Water Quality Planning and Management Regulation

Dear Comment Clerk:

On behalf of the American Farm Bureau Federation ("AFBF"), we appreciate the opportunity to submit comments on the proposed revisions to the National Pollutant Discharge Elimination System (NPDES) program and the Federal Antidegradation Policy (Docket W-99-04). Through its member organizations, the AFBF represents the interest of more than four million member families across the United States.

COMMENTS

Initially, we note that many of our concerns with the proposed regulations are similar to those expressed in our comments submitted regarding the proposed revisions to the water quality management regulations, Part 130, and Total Maximum Daily Loads (TMDLs) and we incorporate by reference all of our comments on those regulations into this docket. Below, we discuss additional concerns specific to this proposal.

1. Silvicultural Activities Are Not Appropriate For Regulation Through the NPDES Program.

We object to the expanded regulation of silvicultural sources as point sources through the NPDES program. Many farmers include "tree farms" and other silvicultural operations on parts of their property not used for crop production. There are several reasons that silviculture should not be regulated under the NPDES program.

As we discussed in our TMDL comments, the EPA does not have the legal authority to impose the proposed regulatory controls on nonpoint sources. The proposed rule would require NPDES permits for a "silvicultural point source" as defined by Section 122.27 and EPA may designate storm water discharges from "silvicultural activities" as requiring an NPDES permit where EPA is establishing a TMDL through the proposed Section 122.26(a)(1)(v)(E). These new NPDES permitting requirements would apparently allow permits to be required for runoff from nursery operations, site preparation, reforestation, thinning, harvesting operations, surface drainage, road construction and maintenance and other activities.

These types of silvicultural activities have all consistently been interpreted as nonpoint source pollution in past regulation. Control of such nonpoint sources should be implemented through state and local initiatives rather than through top-down federal mandates. The Clean Water Act (CWA) is designed to provide such state and local primacy through Sections 208 and 319. The NPDES program is intended to regulate point sources and should not be inappropriately expanded to cover silviculture.

In addition, the exclusion of silvicultural activities from the NPDES program makes practical sense. Nonpoint sources, like silviculture, cannot be precisely controlled because of seasonal variations and unpredictable storm events. Large storms and snowmelt events may contribute large loadings that cannot be controlled in a practical and economical manner. Further, it is difficult to determine the effects of Best Management Practices ("BMPs") on water quality due to changes in weather, natural background and water quality variability. The proposed NPDES permitting process does not and cannot address such extreme natural variations.

2. EPA's Proposed Ability to Designate Sources Intrudes on State Authority.

We object to EPA's proposal to grant itself the authority to designate certain sources as subject to NPDES requirements on a case-by-case basis. Such authority is at odds with the designation authority granted to the states because EPA is not required to conduct the same analysis as a state in deciding whether to require a permit. States must assess beneficial uses to determine if these uses are adversely affected when water quality standards are exceeded or if the standards are to be changed. In contrast, EPA's proposed designation authority is made on a case-by-case basis with little analysis required.

In addition, EPA's new designation authority could be used to override a state's decision not to regulate certain sources when the state has been delegated NPDES program authority. For example, the proposed rules would allow EPA to designate an animal feeding operation ("AFO") as a concentrated animal feeding operation ("CAFO") even when the state has made the decision not to apply the more stringent regulations. Such decisions are best left to the States and should not be imposed by EPA unilaterally.

Moreover, case-by-case designations will exacerbate arbitrary decision-making by EPA Regional Administrators and result in conflicting permitting decisions for similar sources located in different EPA Regions. We discussed the problem of arbitrary decisions in greater detail in our Part 130 comments.

Further, requiring permits based on a case-by-case analysis violates the due process rights of the permittee since there are no clear standards to apply and no hearing rights provided to challenge abusive decision-making. Whether a permit is required for any particular source should be decided based on fixed rules rather than an on-the-spot decision by a federal agency employee. If EPA believes that the current CAFO definition does not cover all sources which should be regulated as CAFOs, then the CAFO definition should be revised rather than allowing EPA to make case-by-case designations in the field.

3. The Proposed Requirements For New and Significantly Expanding Dischargers Are Unauthorized and Interfere With State Decision making.

The proposed restrictions on new and increased discharges to impaired waters unjustifiably impinge on state authority to develop and implement water quality standards. Several of our concerns with the proposal are described below.

A. The Proposed Offset Requirements Are Unwarranted.

EPA apparently is relying on Section 301(b)(1)(C) of the Clean Water Act to impose a requirement that new and significantly increased discharges will require a 1.5:1 offset. We object to the proposed offset requirements for several reasons. First, Section 301(b)(1)(C) only provides that states may include conditions in NPDES permits where necessary to meet water quality standards, treatment standards, or schedules of compliance. The mandatory offsets preclude states from exercising discretion to determine an appropriate period for sources to comply with state water quality standards. The proposal is inconsistent with EPA's past practice allowing states to include compliance schedules in NPDES permits. Requiring mandatory offsets would eliminate states' discretion to allow such compliance schedules and remove an important compliance tool. The EPA should not mandate how states meet water quality standards.

Second, the proposed offset requirement would prevent states from implementing alternative initiatives such as Phased TMDLs. As noted in our Part 130 comments and incorporated herein, the Federal Advisory Committee Act (FACA) Report recognizes such a phased approach as a useful tool for reaching compliance with water quality standards. *See* FACA Committee Report at Section 6.1. Programs such as phased TMDLs could increase voluntary reduction activities which, in turn, could have substantial water quality benefits. Under the phased approach, participating sources actually could increase their discharges, provided that those increases do not interfere with long-term, net progress in improving water quality within a given watershed.

Third, the proposal could improperly be used to indirectly regulate nonpoint sources. Under the rules as proposed, EPA or the states might withhold approval of a permit to coerce a party to obtain an offset from a nonpoint source. Such regulation of nonpoint sources by using private parties should not be permitted.

Fourth, the EPA provides little justification for its arbitrary selection of the 1.5:1 offset ratio. If an offset is required, states should have the discretion to choose the amount of offset. Moreover,

the proposed offsets could require the states to exceed their own statutory authorities. There likely will be instances where a 1.5:1 offset would improve water quality in excess of the standard. States only retain authority to demand that permitted facilities reduce their discharges sufficient to meet water quality standards and, therefore, if a 1.3:1 reduction would suffice to meet the applicable standard, the state would lack statutory authority to require the EPA mandated 1.5:1 offset.

Fifth, the 1.5 to 1 offset requirement is unworkable for general permits. We would propose excluding general permits from any offset requirement entirely since most general permittees will not have collected the data needed to measure the amount of offset. Moreover, the general permit program addresses discharges that, for various reasons, are most suited to group rather than individual discharge permits. The offset program necessarily requires individual consideration of the impacted dischargers. Applying individual offsets to new or increased general permit discharges will frustrate the purpose of the general permit program and preclude state agencies from focusing their attention on those dischargers where individual NPDES permits are required.

B. The Scope of the Proposed New Requirements Is Overbroad.

The proposal is improperly vague since it does not clearly address what type of sources may trigger the new requirements. We object to any suggestion that antidegradation principles or other regulation should be considered for agricultural run-off and other unregulated non-point sources. As noted above, this type of contamination is very difficult to quantify and attribute. In addition, it is difficult to calculate the reduction which is achievable from methods used to manage nonpoint source pollution. Moreover, as discussed in greater detail in our Part 130 comments, EPA does not have the authority to regulate nonpoint sources of pollution. Even the preamble to the proposal correctly notes that EPA and the states cannot regulate such nonpoint sources under the NPDES program. 64 Fed. Reg. 46065.

In addition, we object to the proposed category of "new discharger." The proposed redefinition is confusing, since it applies different standards to a "new discharger" even when the source is not "new." For example, according to the proposal, certain sources which have been discharging without being subject to NPDES requirements might be made subject to the program as a "new discharger." In reality, however, such sources are not "new" at all. Instead, EPA is simply expanding its regulatory web to require NPDES permits for such sources.

Further, the proposed definition of "significant expansion" improperly eliminates state discretion and does not reflect the true impact on the waterbody. If adopted, the program should address only those new and increased discharges that will produce a significant water quality impact. Instead, the proposal would impose the new requirements whenever there is a twenty percent increase in loadings. A fixed percentage should not be used since an increase in loadings depends upon numerous factors including, but not limited to, the size of the receiving stream, the specific pollutant discharged and the location of the discharge on the impaired segment. Instead of using a fixed percentage, states should be left with discretion to decide when an expansion requires new restrictions during NPDES modification or renewal as under current regulations.

C. The Proposed Antidegradation Policy Changes.

In addition to our comments on the proposed impact of the antidegradation policy on listing decisions contained in our TMDL comments, we object to the changes to the Antidegradation Policy proposed at Section 131.12 of the NPDES regulations. These changes would require certain dischargers in a water body that does not attain water quality standards to show "reasonable progress" toward attaining the standard. We do not support this proposed requirement because full information about the contributions from various sources will almost certainly not be available until the TMDL process is complete. Prior to the development of the TMDL, only voluntary stabilization plans such as those proposed in the FACA Report should be used.

4. EPA's Proposals For Expired Permits Exceed Its Authority and Unlawfully Restrict Congress' Express Intent to Create a Permit Shield.

EPA proposes new authority to object to and reissue state-issued and administratively expired NPDES permits in Section 123.44. EPA asserts that Section 402(d) of the Clean Water Act provides the Agency with such authority. *See* 64 Fed. Reg. at 46079. However, Section 402(d) only allows EPA to veto any State-issued permit within 90 days *from the date the state notifies EPA of its decision to issue a permit.* Where EPA fails to veto a state-issued permit within the ninety day notice period, the permit becomes valid and enforceable. When a permit is administratively continued, the state has not yet decided to reissue that permit.

Despite EPA's assertion to the contrary, Congress likely did consider whether the agency may object to and veto permits that are operating under administrative continuance. *See* 64 Fed. Reg. at 46080. Section 402(k) of the Clean Water Act provides that compliance with an issued permit constitutes compliance with all applicable provisions of the Act. *See* 33 U.S.C. § 1342(k). If EPA fails to veto the permit within ninety days from the date the State notifies EPA of its decision to issue a permit, EPA's veto authority expires and the permit remains valid until the state decides whether to reissue it. To allow EPA the ability to reopen continued permits would effectively remove the permit shield granted by Congress under Section 402(k).

Furthermore, states with delegated authority to implement NPDES permitting programs retain authority to issue and reissue NPDES permits. EPA cannot force the states to reopen a permit within a certain number of days after the permit expires. This would effectively create a new, mandatory reopener that is not in existing permits and that is not required by the CWA.

To the extent that EPA insists on adding this new rule, the 90-day period proposed for initiating EPA review in § 123.44(k)(1) is too short. States frequently require more than a 90-day period to revise NPDES permits. By forcing states to act within such a short time-frame, EPA would prevent states from thoroughly reviewing existing permits and instead encourage states to simply re-issue permits to meet the deadline. Such EPA review would intrusively interfere with states' permitting process with no benefit.

5. Economic Impact of the Proposed Rules.

We object to EPA's lack of economic analysis of the proposed rules and apparent plan to adopt the proposal without completing its study of the serious economic impact the rules will have. The EPA certified that the proposed rule would not have a significant economic impact on small entities under the Regulatory Flexibility Act and did not prepare a regulatory flexibility analysis. The EPA also determined that the proposed rule would not result in costs exceeding $100 million or more to state, local and tribal governments or to the private sector.

We question the cost estimates provided by the EPA, especially the estimated $64.24 million cost to the private sector. As detailed in our TMDL comments and incorporated herein by reference, prohibitions on tree harvests and other activities imposed through EPA TMDL plans have resulted in over $12 million in costs to individual farmers on the Garcia River in California alone. We believe that the proposed rules, by increasing regulation of silvicultural activities, will result in significant costs to individual farmers far exceeding $100 million. We will participate in the ongoing Office of Management and Budget review and incorporate the cost data submitted in that proceeding into this response.

Again, we thank you for the opportunity to comment on the proposed regulations.

Sincerely,

Richard W. Newpher
Executive Director
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January 19, 2000

VIA COURIER

Comment Clerk for the TMDL Program Rule,
Water Docket (W-98-31)
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Comments on the Proposed Revisions to the Water Quality Planning and Management Regulation

Dear Comment Clerk:

On behalf of the American Farm Bureau Federation ("AFBF"), we appreciate the opportunity to submit comments on the proposed revisions to the water quality planning and management regulation (Docket W-98-31). Through its member organizations, the American Farm Bureau Federation represents the interest of more than four million member families across the United States.

COMMENTS

I. The Proposed Rules Ignore Important Findings in the FACA Committee Report

EPA established the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) program (the "Federal Advisory Committee Act (FACA) Committee") in November 1996 under authority of the FACA. EPA asked the FACA Committee to review the TMDL program and to develop advice on new policy and regulatory directions by identifying barriers to program success, recommending ways to overcome them, and suggesting criteria to measure the success of each recommendation actually implemented. *See* FACA Committee Report at Section 1.1. While the FACA Committee did not reach consensus on several of the more controversial issues, it at least provided compromise recommendations for most issues addressed. While EPA considered and incorporated some of the recommendations of the FACA Committee in developing the proposed rules, EPA either ignored or did not adequately address others. Specifically, EPA's failure expressly to allow delisting during a listing cycle, its requirement for states to list threatened and expected-to-meet waters and its decision not to authorize expressly phased TMDLs contradicts or fails adequately to consider provisions in the FACA Committee's final report. The FACA Committee devoted substantial time and effort to the recommendations in its final report, and AFBF believes that on the merits those recommendations were sound. At

the very least, since EPA established the committee, it should not simply discard its recommendations without a principled explanation.

A. Listing Cycles and Delisting

The FACA Committee recommended that EPA require states to develop a procedure for submitting listing/delisting petitions to EPA between listing cycles. We support the FACA Committee's recommendation. Leaving waters that have achieved water quality standards on state 303(d) Lists would divert resources from waterbodies that are, in fact, impaired. Moreover, it would be fundamentally unfair to impose restrictions (such as no new or increased discharges, proposed Section 131.12) on regulated parties located on listed waters that actually meet water quality standards for the listed pollutant. AFBF therefore adopts the FACA Committee's recommendation that EPA allow states to delist during a listing cycle if:

a. The listed water attains water quality standards; or
b. New information indicates that the listed water actually meets water quality standards.

See FACA Committee Report at Section 3.6. In addition, we also recognize that the data required to delist a waterbody should parallel the data initially required to list the waterbody.

B. EPA Should Not Require States to Include Threatened Waters on their 303(d) Lists

The FACA Committee also recommended that threatened waters not be listed pursuant to Section 303(d) but rather be placed on a discrete list for focused attention, with the goal of keeping them from becoming impaired. *See* FACA Committee Report at Section 3.3. For the reasons stated in Section II(B)(1), AFBF believes that Section 303(d) does not contemplate the regulation of threatened waters. Thus, the proposed rules should not address such waters.

C. EPA Should Retain its Current Policy Allowing States the Option not to List Expected-to-Meet Waters

The FACA Committee recommended that EPA continue its policy allowing states the option not to list "expected-to-meet" waters. Although the committee did not reach a consensus regarding whether states should exclude expected-to-meet waters without certain specific conditions, all agreed that, if states adequately track progress toward standards attainment, they should have the option to exclude those waters from the 303(d) list. We support this recommendation.

D. EPA Should Expressly Authorize Phased TMDLs.

The final regulations should expressly include a phased TMDL process for use where both ongoing sources and legacy problems impact the listed pollutant. The FACA Committee expressly recognized that phased TMDLs may provide a workable solution for addressing

"extremely difficult problems" such as contaminated sediments. *See* FACA Committee Report at Section 6.1. The FACA Committee went on to expressly recommend that, where necessary, a TMDL implementation plan involving special challenge sources should allow a relatively longer time frame to achieve water quality standards. *Id.* For example, states could require existing sources to achieve necessary load reductions quickly (*i.e.*, within a five-year NPDES permit), even where actually achieving the prescribed load reductions for these "special challenge sources" could take much longer. *Id.* In such situations, "the state may consider relying more on a phased (or iterative) TMDL approach, in which expected loading reductions from special challenge sources over the long-term are factored in when establishing short-term allocations for permit limits for point sources." *Id.*

Although the FACA Committee recommended phased TMDLs for possible use and EPA has expressly included the phased TMDL approach in the GLI rule, the proposed rules do not specifically address phased TMDLs. *See* Final Water Quality Guidance for the Great Lakes System, 60 Fed. Reg. 15416 (March 23, 1995). While the preamble recognizes that special challenge or legacy problems pose additional concerns and may require additional time to achieve water quality standards, 64 Fed. Reg. 46012, 46031 (August 23, 1999), the proposed rules do not consider altering the load reductions to compensate for the difficult to solve legacy problems. Instead, EPA apparently intends to require ongoing sources to achieve greater reductions to compensate for the longer time periods needed to solve the problem.

II. The Section 303(d) Listing Process

A. Section 303(d) Requires the Listing of Waters Impaired by Point Sources

Contrary to EPA's contention that the proposed rules are consistent with existing approaches to water quality management, the proposal improperly expands the TMDL program to force states to attain water quality standards through whatever means are necessary, including mandatory controls on nonpoint sources of pollution. If the proposed rules are implemented, existing nonpoint source control programs would be disrupted, state resources would be diverted and private parties and small businesses would be forced to bear unnecessary costs.

The proposal must be redesigned since Section 303(d) of the Clean Water Act does not authorize EPA to regulate nonpoint sources of pollution. Contrary to EPA's assertions, Section 303(d) of the Clean Water Act does not authorize the regulation of nonpoint sources through the listing of nonpoint source impaired waters and/or the allocation of loads to nonpoint sources that require reductions in nonpoint source contributions to water segments.

EPA argues that its interpretation of Section 303(d) is entitled to deference, however, EPA's may only enact rules within the bounds authorized by the statute and congressional intent. *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 213-14 (1976) (stating that "[t]he rulemaking power granted to an administrative agency charged with the administration of a federal statute is not the power to make law. Rather, it is the power to adopt regulations to carry into effect the will of Congress as expressed by the statute ... the court should not approve an agency's attempt to "extend the

statute 'beyond the point where Congress . . . would stop'"). Indeed, as noted in *National Mining Association v. Corps of Engineers*, federal agencies cannot expand their jurisdiction beyond the scope of the Clean Water Act. 145 F.3d 1399, 1405 (D.C. Cir. 1998) (vacating rule as inconsistent with Congressional intent).

The plain meaning of the Clean Water Act and its legislative history show that Section 303(d) does not authorize the regulation of nonpoint sources. Specifically, Congress intended that Section 303(d) serve as a tool for the calculation of reasonable water-quality based effluent limitations for point source discharges. "Effluent limitations" are restrictions placed on point sources of pollution. They have nothing to do with nonpoint sources of pollution, which are controlled through "best management practices." Since Section 303(d) serves the limited function of developing effluent limitations for point sources, Section 303(d) cannot and does not regulate nonpoint sources of pollution.

Beyond the text and legislative history, it is indisputable that EPA's use of Section 303(d) to regulate nonpoint sources cannot be reconciled with the Clean Water Act's statutory scheme. While Congress was well aware of the problems associated with nonpoint source pollution in 1972, Congress realized that these problems needed special consideration. Thus, Congress decided to treat point and nonpoint sources separately in the Clean Water Act. Point sources are the focal point of the Act. They are regulated by the legislation's centerpiece, a federally enforceable permitting system set forth in Sections 402 and 301 of the Act. *See, e.g.*, 33 U.S.C. §§ 1311, 1342. By contrast, nonpoint sources are dealt with in two separate provisions -- Sections 208 and 319 -- provisions that encourage states to manage nonpoint sources through voluntary, incentive-based programs. *Id.* §§ 1288(b)(2)(F), 1329. If Congress had intended for Section 303(d) to regulate both point and nonpoint sources, there would have been no need for Sections 208 and 319.

In fact, Section 319, enacted in 1987, is patterned after Section 303(d). Both sections call for the states to identify waters that fail to meet water quality standards and to take action to bring those waters into compliance. 33 U.S.C. §§ 1313(d), 1329(a), (b). But Section 319 specifically deals with nonpoint sources. If EPA's interpretation was correct, and Section 303(d) was intended to regulate both point and nonpoint sources, Section 319 would be rendered superfluous. Congress did not intend for such a perverse result. Rather Congress intended for these sections to operate independently. Section 303(d) regulates point sources that contribute to water quality problems and Section 319 addresses similarly situated nonpoint sources.

Congress also divided point and nonpoint source control on jurisdictional grounds. Point sources are regulated at the federal level whereas nonpoint sources are managed by the states. 33 U.S.C. §§ 1288, 1329. EPA's use of Section 303(d) to regulate nonpoint sources, however, undercuts this approach. Section 303(d) does not permit EPA to establish lists and TMDLs that regulate nonpoint sources because Congress did not want EPA meddling in these local land use issues. Such action imperils the fundamental principles of federalism embodied in the Act's structure: that the states and the federal government should regulate only within the confines of the authority conferred upon them by Congress.

As a final distinction, Congress decided to treat point and nonpoint source regulation differently. Recognizing the difficulties involved in predicting and controlling runoff from storm events, Congress elected to manage nonpoint sources with more relaxed standards. Instead of requiring nonpoint sources to achieve the numerical or quantitative limitations imposed on point sources, Congress determined that nonpoint sources should be controlled only "to the extent feasible" or "to the maximum extent practicable." Once again, Section 303(d) is incompatible with this scheme. Section 303(d) requires individual sources to meet quantitative load allocations. Unlike Sections 208 and 319, Section 303(d) does not account for the vagaries of weather. Consequently, nonpoint sources find themselves in an impossible situation: trying to comply with arbitrary and unattainable regulatory restrictions. Given all the care and attention Congress gave to nonpoint source issues in drafting Sections 208 and 319, it is evident that Congress did not intend for agriculture and forestry to be faced with such a dilemma.

Consequently, the proposal would unnecessarily disrupt existing water quality management programs by attempting to apply federal controls to nonpoint sources which have traditionally been managed by the states. Including such waters in the TMDL process would contravene the clear Congressional intention to set a much more limited federal agenda for nonpoint source control than was established for point source controls in Sections 301, 303(d), and elsewhere in the Act. Nonpoint source pollution control is, has been, and must remain an area of state and local supremacy -- a status that would be radically undermined by the proposal's application of the command and control approach of Section 303(d).

B. Section 303(d) Requires the Listing of Waters that "are not stringent enough to implement any water quality standard"

The proposed rules ignore the plain language of the statute. The statute requires that only waters that fail to attain water quality standards be listed and have TMDLs prepared for them. However, in an effort to expand the breadth of Section 303(d), the proposed rules unlawfully require the listing of "threatened waters," waters that violate antidegradation requirements and waters that are expected to meet water quality standards within the next listing cycle.

a. Threatened Waters

The proposed rules require the listing of "threatened waters," which are defined as water bodies "that currently attain water quality standards, but for which existing and readily available data and information on adverse declining trends indicate that water quality standards will likely be exceeded by the time the next list of impaired or threatened water bodies is required to be submitted to EPA." 64 Fed. Reg. 46047. Section 303(d) plainly requires the listing of waters that "are not stringent enough to implement any water quality standard," *i.e.*, waters that violate water quality standards. It does not require the listing of waters that "cannot reasonably be expected to attain or maintain" applicable water quality standards as Congress mandated in Section 319 of

the Act. Since Congress did not expressly provide for the listing of threatened waters in Section 303(d), EPA's attempt rewrite the statute is unlawful.

The listing of these "threatened waters" will necessarily lead to an explosion of TMDLs based on little more than speculation. The proposed regulation fails to define adequately the meaning of "adverse declining trend" and sanctions the use of evaluated data to determine when this arbitrary "declining trend" is at hand. Under such circumstances, states and EPA will be listing waters based solely on a decline in fish population or the presence of some stream bank instability. This was not what Congress intended. Section 303(d) compels the listing of waters impaired by identifiable pollutants that have caused a water quality standard violation, nothing more. If EPA insists on the listing of threatened waters in its final regulation, the regulations should require that those listing decisions be based solely on reliable and credible monitored data.

b. Antidegradation Policies

The proposed rules also require the listing of waters that violate antidegradation policies. The Clean Water Act provides that water quality standards are designated uses and the water quality criteria for such waters based upon those uses. 33 U.S.C. § 1313(c)(2)(A). Thus, antidegradation policies are not "water quality standards" and a violation of an antidegradation policy therefore cannot form the basis for a listing decision.

c. Expected-to-Meet Waters

The proposed rules reverse EPA's current policy and will require states to list expected-to-meet waters. Not only is this new policy inconsistent with the language of the Clean Water Act, but EPA has failed to offer any justification to support its shift in policy. Section 303(d) only requires states to list waters where BPT and secondary treatment are insufficient to attain water quality standards. Where waters are expected-to-meet standards based on BPT or secondary treatment, it is only logical that those controls are sufficient to attain standards and, therefore, those waters need not be listed. Absent a showing by EPA that its change in policy is supported by the Act, the TMDL program should not require states to list expected-to-meet waters.

C. Section 303(d) Requires the Listing of Waters Impaired by "Pollutants"

We oppose the proposed expansion of the Section 303(d) listing program to force states to add waters impaired or threatened by "pollution" as opposed to waters impaired by specific "pollutants." EPA partially recognizes that the TMDL program is limited to "pollutants" by interpreting Section 303(d) to only require TMDL development where a specific pollutant is identified. *See* 33 U.S.C. § 1313(d)(1)(C). While we applaud EPA's recognition that TMDLs are not required absent identification of a pollutant, the attempt in the proposal to include "pollution" impaired waters along with "pollutant" impaired waters in separate categories within states' Section 303(d) lists will result in confusion, unnecessary work and cause a misallocation of limited state and private sector resources.

Since Section 303(d) lists exist for the very purpose of establishing TMDLs, waters not requiring TMDLs -- i.e., waters impaired by "pollution" rather than "pollutants" -- do not belong on these lists. Placing "pollution" impaired waters on the Section 303(d) lists can only increase confusion among states and the public over the function of the TMDL program. We urge the EPA to limit the waterbodies on Section 303(d) lists to those affected by specific pollutants for which TMDLs must be developed. Forcing states to include other waters on such lists is unnecessary and will reduce the resources states should be directing towards TMDL development.

D. Listing Waters Impaired by an Unknown Cause is Unlawful

The proposed rules require states to list and develop TMDLs for waters impaired by one or more pollutant(s) or by an *unknown cause*. *See* proposed Section 130.27(a)(1). However, the language of Section 303(d) expressly requires development of TMDLs *only* for waters impaired by pollutants:

> Each state shall establish for the water identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the administrator identifies under section 304(a)(2).

33 U.S.C. § 1313(d)(1)(C).

Thus, unless a state develops actual data to establish that a *pollutant* is causing a violation of a water quality standard, EPA lacks authority to require states to list the water or to develop a TMDL for it.

E. Listing Waters Impaired by Atmospheric Deposition is Unlawful

Impairment caused by atmospheric deposition of pollutants should not be a basis for including waters on Section 303(d) lists. The regulation of airborne pollution is governed by the Clean Air Act -- not the Clean Water Act. If the Clean Water Act was intended to regulate such sources, it would have expressly done so. Section 303(d) was drafted and designed to provide a mechanism for the calculation of water quality-based effluent limitations for point sources of pollutants. It is not an appropriate or workable vehicle for addressing sources or problems of a different sort that may impact water quality.

Further, it is not feasible to quantitatively incorporate these impacts into TMDL calculations. The technology does not exist to measure accurately the impact of atmospheric deposition on water quality or to determine the source of the deposition. The burden EPA would impose on the states to address this problem -- even if it were achievable -- would be overwhelming.

Therefore, we urge EPA to eliminate impairment caused by atmospheric deposition from the requirements for Section 303(d) listing and TMDL development. Any pollution caused by

atmospheric deposition can be more effectively managed by other programs than the TMDL program.

F. Listing Waters Impaired by Certain Heat Excesses is Unlawful

The proposed rules require waters impaired by heat excesses from nonpoint sources (such as "solar radiation, channel and habitat modification and lack of stream flow") to be listed and to have TMDLs established for them. This proposal contravenes Congressional intent.

Heat excesses due to nonpoint sources are not a source of pollutants. The term "heat" as used in the pollutant definition was intended only to apply to heat that is discharged into water, namely heat from point sources such as steam-electric generating plants. Solar radiation is not discharged, it is a naturally occurring event. Further, channel and habitat modification and lack of stream flow are not "discharged." Accordingly, they do not meet the definition of "pollutants."

Additionally, the plain language of Section 303(d) makes clear that Congress intended to treat temperature impairments separate and distinct from all other impairments. It did this by creating Sections 303(d)(1)(B) and 303(d)(1)(D), provisions that utilize the more flexible "balanced indigenous population" standard and require only that states "estimate" total maximum daily thermal loads. The proposed rules correctly recognize this distinction, but erroneously suggest that Congress intended for the looser standard only to apply to thermal discharges from point sources, leaving thermal excesses from nonpoint sources to be treated under the more strict standards set forth in Section 303(d)(1)(A).

Such an interpretation is illogical. Nonpoint sources of heat are much more difficult to control and predict than point sources of heat. If Congress believed that thermal discharges for point sources were entitled to more lenient treatment, surely it would have intended for heat excesses from nonpoint sources to be handled similarly.

But that is not the case. EPA argues that Congress "wanted lists and total maximum daily thermal loads to address the problems presented by discharges of heat from point sources." 64 Fed. Reg. 46017. It follows then that Congress never intended for nonpoint sources of heat to be regulated by Section 303(d). After all, past regulations use the terms "heat" and "thermal discharge" interchangeably.

G. Listing Decisions Should be Based on Reliable and Credible Data

We support and agree with the recommendation of the recent Federal Advisory Committee that states should be encouraged to establish QA/QC programs to assure the reliability of water quality data on which listing decisions and TMDL calculations are based. However, the proposed requirements in §§ 130.21, 130.22, 130.23 and 130.25 that a state assemble and consider "all existing and readily available data and information" do not ensure that the data used for listing will be reliable and credible.

We believe it is the responsibility of EPA to reject state-submitted lists of impaired waters that include waters for which data are inadequate or of questionable validity. As an alternative to the language in the proposal, we suggest that states be required to consider "all existing reliable, credible and readily available water quality-related data and information." Indeed, EPA suggests that it would support such a change. *See* 64 Fed. Reg. at 46018 - 46019 (advocating the use of "the best available data" and "reliable and credible data and information.") This point simply needs to be made explicit in the regulations.

To ensure that states follow consistent approaches to their data, EPA should include a workable description of acceptable data for listing decisions and TMDL calculations in the proposed rules. The current descriptions in §§ 130.21, 130.22, 130.23 and 130.25 are too vague since they fail to provide any standards by which a state can judge whether the data is reliable.

In addition, the rule should require that the state possess reliable and credible data in order to list a waterbody. Waterbodies should not be listed simply because they appear on a prior 303(d) list, 305(b) report or other water assessment as suggested by the listing in § 130.22(b). When preparing a Section 303(d) lists, states and EPA are now required to "assemble and evaluate all existing and readily available water quality-related data and information." 40 C.F.R. 130.7(b)(4). If the original basis for listing is inaccurate, such waterbodies should not be listed. The proposal contemplates an arbitrary listing process of slapping together one master list from a variety of sources. Such a process will lead to unnecessary and unreasonable regulation since many of these lists are compiled without valid and reliable scientific data.

Further, the proposal should require states to evaluate the original basis for their other lists of impaired waters and ensure that waters are not added to the Section 303(d) list where the data used to justify the original listing are inadequate, of questionable validity or simply not applicable to the purposes of the Section 303(d) list. Each listing program identifies waters for which some degree of focus is appropriate based on the distinct objectives of that program, and each program has its own data quality standards. Accordingly, "impairment" for purposes of one program may not constitute impairment for purposes of another. Some of the significant distinctions between these programs and Section 303(d) listing are as follows: (1) Section 305(b) reports may tend to err on the side of overstating impairment, because a major purpose of the program is to identify needs for future monitoring efforts; and (2) Section 319 assessments, unlike Section 303(d) lists, must include threatened waters, in addition to impaired waters, and may be influenced by a state's desire to secure Section 319 grant funds.

While we support the concept of prior review of each state's listing methodologies, including the public comment process, which is embodied in § 130.23, we do not believe that the proposed rule goes far enough to ensure that the listing methodology is grounded on reliable data. The proposal should clarify that listing decisions must be supported by reliable and credible data and waterbodies should not be listed where such data is unavailable or questionable.

H. Listing Decisions Should Not be Based on Fish Advisories

As proposed, states could erroneously conclude that Section 130.25 authorizes listing decisions based solely on the existence of a fish advisory. The applicable provision reads: "Your list must include all waterbodies that, based on all existing and readily available data and information, are impaired or threatened by individual pollutants, multiple pollutants, or pollution from any source." 64 Fed. Reg. 46012, 46048. In the case of a fish advisory, a state could conclude that the waterbody's designated use (fish consumption) is impaired and the state therefore must include the waterbody on its Section 303(d) List. However, listing decisions based on designated uses, without consideration of the accompanying criterion, is inconsistent with the statutory language.

Moreover, fish advisories sometimes include certain substances in order to trigger further investigation. Listings based solely on fish advisories would allow states to list waters for every substance included in the advisory regardless of the risk actually presented. Furthermore, most -- if not all -- states issue fish advisories without providing for public review and comment, and without an independent determination that adequate and current data supports issuance of the advisory. In fact, many states base fish advisories on entirely different methodologies than those used to develop water quality criteria. States therefore should not list waters based solely on fish advisories; but, instead, should list waters only after careful review of the underlying data and a determination that sufficient and properly developed data support the listing decision.

I. Listing Should Be Done on a Five-Year Cycle

AFBF supports a five-year listing cycle as the most efficient means of tracking changes in water quality; *provided that* EPA also expressly authorizes states to list/delist waters during the five-year cycle. With this caveat, a five-year listing cycle makes the most sense. Generally, changes in water quality are not significant enough to justify the resources necessary to develop Section 303(d) lists during shorter intervals. In addition, a five-year cycle would provide states greater opportunities to coordinate NPDES permit renewals with water quality-based effluent limits developed through the TMDL process. By coordinating NPDES permit renewals with listing cycles, states could monitor changes to particular watersheds more efficiently. Finally, and perhaps most importantly, a five-year listing cycle would allow states adequate time to develop sufficient and reliable data to support listing decisions.

J. EPA Should Not Dictate How States Determine High Priorities

AFBF opposes mandatory high priority categories. The states are best positioned to make priority ranking determinations about their individual waters and should be given the discretion to do so. Moreover, states should not be placed in the untenable position of proving a negative -- that an impairment does not affect a listed species in order to justify its ranking as anything other than high priority.

K. The Delisting Procedures Should be Streamlined

Procedures and data requirements for the removal of waters from the Section 303(d) lists should be no more rigorous than the requirements for listing the waters initially. The test for delisting should be whether the water still meets the requirements for listing, i.e., whether it still requires establishment of a TMDL and whether reliable and credible data still indicate impairment by one or more pollutants. In particular, there should be a simple, expedient process for delisting waters that are found to be listed erroneously.

The proposed § 130.29(b) might be read to prevent removal of a listed waterbody until the next listing cycle even where data shows that the listing is incorrect. This section should be revised to allow removal of waterbodies at any time in case of errors or where information shows the original basis for listing does not apply.

III. The Section 303(d) TMDL Establishment Process

A. Section 303(d) Requires TMDLs for Pollutants that are "suitable for calculation as "daily loads"

Section 303(d)(1)(C) expressly limits TMDL establishment to pollutants that are "suitable for such calculation." In December of 1978, EPA avoided the difficult task of determining which pollutants were suitable for daily load calculation, finding instead that "[a]ll pollutants, under the proper technical conditions, are suitable for the calculation of total maximum daily loads." 43 Fed. Reg. 6066. Notwithstanding the fact that EPA has failed to properly adhere to Congress' mandate, there are still no "proper technical conditions" under which "daily loads" can be established for nonpoint source impaired waters. In fact, EPA seems to agree. *See* 64 Fed. Reg. 46031. Thus, in order to avoid this impasse, the rules propose that TMDLs can be daily, monthly, seasonal or annual averages. At least one court has held that such an approach is unlawful. *Sierra Club v. Hankinson*, 939 F. Supp. 865 (N.D. Ga. 1996) (holding that Georgia did not comply with Section 303(d) because its wasteload allocations were not "daily load limits").

Furthermore, we believe that the regulations should contain a requirement for the states, tribes and EPA to prepare and submit a written analysis and explanation of whether or not a "daily" load is suitable for calculation in the particular water body at issue prior to TMDL establishment. If it is not, the TMDL should not proceed.

B. TMDLs Should Not Have Implementation Plans

We oppose the proposed requirements for an implementation plan as part of a TMDL. Section 303(d) provides no authority for the preparation or establishment of an implementation plan. It merely envisions the translation of wasteload allocations into water quality-based effluent limitations for point sources. Since this was the intended purpose of Section 303(d), there is no need for a formal implementation mechanism.

But even assuming Section 303(d) permitted the preparation of implementation plans, there is no authority to require the plans to include "reasonable assurances" that load allocations be achieved. Indeed, the words "reasonable assurances" do not exist in Section 303(d).

Further, Congress went to great lengths to ensure that EPA did not meddle in local land use decisions by delegating nonpoint source control to the states in Sections 208 and 319. The proposed rules undercut this approach, allowing EPA to prepare implementation plans that dictate how and when nonpoint sources can use their land. Implementation of a nonpoint source TMDL is clearly an inappropriate area for federal micro-management. Thus we urge EPA to remove all requirements for implementation plans from the proposal. States should have the freedom to implement their TMDL programs at their discretion.

C. EPA Should Revise Section 130.33(b)(9) to Expressly Authorize Future Growth Allocations of Zero

The preamble provides that, "States, territories and authorized tribes must include an allowance for future loading in their TMDL that account for reasonably foreseeable increases in pollutant loads and carefully document their decision-making process." 64 Fed. Reg. 46012, 46032. However, EPA lacks authority to *require* states to allocate for future growth. While the preamble does provide that states may allocate for future growth at zero, this is not at all clear from the text of the regulation. *See* Section 130.33(b)(9). Therefore, EPA either should eliminate proposed Section 130.33(b)(9) or, at a minimum, clearly indicate that states may, but are not required to, allocate for future growth.

Moreover, EPA's proposal to include allocations for future growth is internally inconsistent. While EPA is encouraging states and local governments to adopt "Smart Growth" policies and requirements to reduce future loads, the preamble, as drafted, indicates that smart growth actually will reduce an individual discharger's allocation for growth: "Where adoption and/or implementation of smart growth policies and requirements will reduce future loadings, the allowance for future loadings may be reduced accordingly." *Id.* A discharger implementing smart growth policies will have planned its expansions carefully. Thus, these dischargers should be compensated and receive larger, rather than smaller, allocations.

D. Endangered Species Act Considerations

While we do not oppose the concept of federal agencies commenting on how endangered species may be affected by TMDLs through public participation in proposed § 130.37(d), we note that it is the water quality standards, not the potential impact on protected species, that dictate the TMDL measurements.

Furthermore, we oppose any attempt to impose ESA Section 7 consultation obligations in connection with state TMDL actions.

E. EPA Approval Process

We are concerned that the proposal would allow EPA nearly unlimited discretion in making decisions whether to approve or disapprove Section 303(d) lists and TMDLs. The proposal should give clear direction to the states and EPA Regions as to the requirements which must be met to obtain EPA approval of a Section 303(d) list or TMDL. Currently, such approval decisions are often made on a case-by-case basis and often lead to inconsistent results. For example, David Smith, EPA's TMDL coordinator for Region 9, has explained:

> EPA's regions have a great deal of discretion in how to apply regulations once they're established, and we are certainly obliged to apply the regulations, but when it comes to most decisions that we make in the regions, Carol Browner does not decide them; they're decided by the regional administrator or by the regional administrator's designees.

December 9, 1999 Deposition of David Smith, p. 80 (copy attached as Exhibit 1).

The broad discretion given to EPA and its regions can result in inconsistent and arbitrary decision making. EPA's ability to threaten states with disapproval or withholding federal funds provides many opportunities for abuse in the absence of clear standards. The proposal does little to prevent such administrative abuses -- indeed, its flexibility facilitates them. For example, the preamble to the rule notes that EPA can implement "nonpoint pollution controls for impaired waters on a case-by-case basis." 64 Fed. Reg. 46034. EPA also contends that it may direct how states use Section 319 grants. *Id.*

Since the proposal contemplates that EPA disapproval and/or grant restrictions will act to prod the states to submit conforming Section 303(d) lists and TMDLs, the rule should also provide clear direction as to the limited circumstances when EPA will exercise such options. In light of the better positioning of the states to develop and implement nonpoint source controls, the rules should clarify that EPA will not take such coercive actions to force states to implement such controls. The failure of the current rule to set clear limits on coercive actions by EPA is likely to lead to abuses and confusion.

IV. Definitions

We object to several of the definitions proposed in § 130.2 for the reasons stated above. In addition, we discuss below some additional concerns with specific definitions.

"Pollutant"

We do not understand the purpose or rationale for expanding the statutory definition of "pollutant" to include certain drinking water contaminants. The term is defined in the Clean Water Act and EPA should not engage in a redrafting effort. In addition, the purpose of water

quality standards in the Clean Water Act is not to turn waterbodies into potable sources. Waterbodies will necessarily be treated prior to consumption to remove pollutants. Therefore, we suggest that the term be defined in the regulations as it is in the Clean Water Act.

"Load Allocation"

EPA's new definition of "load allocation" is inconsistent with Congressional intent. First, it does not account for the distinctions between wasteload allocations for point sources and load allocations for nonpoint sources. The prior regulations made these distinctions clear, defining "load allocation" as:

> The portion of a receiving water's loading capacity that is *attributed* either to one of its existing or future nonpoint sources of pollution or to natural background sources. Load allocations are *best estimates of the loading*, which may range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting the loading. Wherever possible, natural and nonpoint source loads should be distinguished. [emphasis added] 40 C.F.R. 130.2.

These regulations underscored the fact that a "load allocation" is only an "estimate." It is an estimate of the amount of pollutants flowing into an impaired water that is "attributed" to *either* nonpoint sources or natural background. By contrast, a wasteload allocation is not an estimate of the flow but rather an actual allocation. The wasteload allocation is the amount "allocated" to a point source so that the impaired water will meet the water quality standard, *after* the loading from the nonpoint sources and background are *considered*.

The new proposal conspicuously neglects to make this point. The new proposal merely defines a load allocation as a portion of the load "allocated" to nonpoint sources of a pollutant, implying that nonpoint source load allocations are intended to be implemented through control measures as opposed to serving their intended informational function.

"Total Maximum Daily Load (TMDL)"

EPA's revamped definition of TMDL goes too far. As contemplated by the Clean Water Act, TMDLs are simply a method of numerically calculating effluent limitations for point sources. The proposed definition radically expands the TMDL into a catch-all regulatory system which far exceeds what is authorized by the Act.

First, the definition states that TMDLs must be established for threatened waters, yet there is no statutory authority for this requirement. Section 303(d) expressly provides that TMDLs shall be established for waters that have failed to meet water quality standards, not waters that look like they might fail to meet water quality standards. Furthermore, states will have difficulty determining when a water body is "threatened." For example, assuming that TMDLs regulate nonpoint sources, the variability of weather make it impossible to predict whether or not a water

body that may appear to be threatened this year will in fact be threatened or will fail to attain water quality standards next year. This will lead to guessing games and over-regulation.

In addition, the proposal dictates that TMDLs be established to implement standards year-round. TMDLs should not be unnecessarily restrictive in low flow seasons. If necessary, TMDLs for different seasons should be established.

Moreover, as discussed earlier, this definition's embedded requirement for an implementation plan renders the definition objectionable since such plans are not authorized.

"Impaired Waterbody"

The proposal defines "impaired waterbody" to include waters impaired by "pollution" or an "unknown pollutant." The definition also differentiates between thermal discharges from point sources and thermal discharges from other sources. None of these mandates is supported by statutory authority. The Clean Water Act is devoid of any mention that waters impaired by pollution or unknown pollutants should be listed. To the contrary, it suggests that only waters impaired by identifiable pollutants that are suitable for calculation should be listed. The listing and TMDL requirements are coextensive. It makes little sense to spend the time and money gathering the data necessary to list waters that will not receive TMDLs.

"Reasonable Assurance"

The proposed § 130.2 (p) provides that "[f]or nonpoint sources you must demonstrate reasonable assurance by specific procedures and mechanisms that ensure load allocations for nonpoint sources will be implemented for that waterbody. . . Examples of specific procedures and mechanisms which may provide reasonable assurance for nonpoint sources include state, territorial, and authorized tribal regulations, local ordinances, performance bonds, contracts, cost-share agreements, memorandums of understanding, site-specific or watershed-specific voluntary actions, and compliance audits of best management practices." 64 Fed. Reg. 46047.

While this definition pays lip service to voluntary measures, in practice EPA will rely on the breadth of the definition to require regulatory controls. In fact, EPA warns that if "voluntary measures do not show progress, the state, territory or tribe may need to establish a regulatory approach." However, as discussed above, there is no authority in the Clean Water Act for EPA to force states to impose regulatory controls on nonpoint sources.

The definition should make clear that "reasonable assurances" for nonpoint sources can be met solely by voluntary measures. The Clean Water Act does not allow EPA to require any more from the states.

V. The Economics of the Proposed Rules

The proposal will have a serious economic impact on farmers, individuals and small business owners. In addition to the other serious flaws with the proposal discussed elsewhere in our comments, the EPA failed to prepare the required economic analyses of the impact on these entities and has not fully recognized the significant costs the new rules will require.

The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act, requires Federal agencies to conduct an initial regulatory flexibility analysis describing the impact of the regulatory action on small entities. Although the EPA certified that this proposal would not have a "significant economic impact on a substantial number of small entities," the EPA apparently ignored substantial costs that the rules will impose on farming operators and individuals. Such costs will result directly from the proposal, since the proposal requires states to develop TMDLs and implementation plans which apply to nonpoint sources.

According to the proposed Section 130.36, if states fail to follow the proposed rules or if EPA chooses to regulate interstate or boundary waterbodies, EPA will produce and implement its own TMDLs and plans. Therefore, the EPA incorrectly certified that the proposal did not affect individuals and businesses since EPA asserts the authority to regulate such businesses and individuals as part of the proposal.

The costs of implementing the TMDL management strategies will be significant and will be borne in large part by small entities, such as agricultural producers, forest landowners, and rural communities. Once a TMDL is in place, the landowners within the watershed will need to implement preventative and/or restorative land management practices. Through experience with the current TMDL program, AFBF has found that significant costs result when TMDLs are applied to farming and agricultural operations. According to the proposal, a TMDL is required to allocate loads both to contributing point and nonpoint sources. These allocations are intended to restrict the amount of effluent that may be discharged into an impaired water body from contributing sources. Once these quantitative load allocations are established, the proposal requires that they be implemented by point and nonpoint sources alike. EPA provides that point source allocations are implemented through NPDES permits whereas nonpoint source load allocations are implemented through a wide variety of state, local, and federal programs, many of which utilize Best Management Practices ("BMPs") to control nonpoint source pollution.

Many members of the AFBF own land and/or live along or near waters listed on the Section 303(d) lists in various states and therefore will be subject to the federal TMDL allocations. TMDL load allocations will require many of the AFBF members, those who engage in nonpoint source activities, to implement BMPs that are based upon the load allocations set in the TMDL. BMPs are restrictions placed on land usage, such as adjusting planting and harvesting dates, removing sediment from runoff, engaging in crop rotation, building dikes, creating buffer zones and controlling the rate, timing and method of fertilizer applications. 40 C.F.R. §130.2(m) (defining BMPs to include "structural and nonstructural controls and operation and maintenance

procedures"). The costs to these farmers and agricultural operators have not been quantified by EPA in its analysis of the proposed rules.

For example, limits imposed under an EPA TMDL adopted for the Garcia River in California alone have imposed well over $12 million in costs on individual farmers. According to estimates by professional foresters, the TMDL limits imposed on Larry Mailliard will cost him $10,602,000 at a minimum. *See* Declaration of Michael Howell, ¶ 9 (attached as Exhibit 2). Similar limits on William Barr will cost him a minimum of $962,000. *See* Declaration of Michael Howell, ¶ 10. Likewise, similar limits have also cost Guido and Betty Pronsolino a minimum of $758,000. *See* Declaration of Randy Jacobszoon, ¶ 9 (attached as Exhibit 3).

These significant costs to farmers and landowners may outweigh the benefits from the proposed rules, especially where voluntary nonpoint management programs are already being used to effectively control these sources. EPA should evaluate the significant costs to individuals and small businesses from applying TMDL requirements on nonpoint sources against the potential benefits before adopting the proposed rules.

In addition to analyzing costs imposed by the proposed rules on individuals and small businesses, under the Federal Unfunded Mandates Reform Act, the EPA must prepare a written statement, including cost-benefit analyses, for proposed rules with "Federal Mandates" that may result in state, local and tribal governments' costs in the aggregate, or costs to the private sector, of $100 million or more in one year. By suggesting that this rule will cost such governmental bodies less than $25 million in any one year, EPA ignores the significant impact on cooperating federal agencies, tribes, or other state agencies such as departments of agriculture, natural resources and forestry, soil and water conservation districts, and others which will be involved in implementing the rules and developing TMDLs. EPA's arbitrary and capricious failure to prepare a Regulatory Impact Statement which thoroughly accounts for these costs can invalidate the proposed rules. *See Thompson v. Clark*, 741 F.2d 401 (D.C. Cir. 1984).

As examples of the EPA's glaring omissions, the EPA's estimated costs in the proposal do not fully account for the cost to federal agencies (such as the Forest Service and USDA) resulting from watershed assessments and prioritization, developing land treatment plans, monitoring and evaluating progress and adapting to needed changes in management, and working with other landowners and stakeholders within a watershed which will be required by the proposed rules.

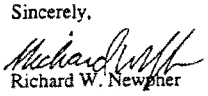
Further, the EPA states that the proposal is not subject to review by the Office of Management and Budget ("OMB") under Executive Order 12866 because the proposal is not a "significant regulatory action" without any explanation. Based on our experience with the current TMDL system, the proposal will have an annual effect on the economy far exceeding $100 million and raises several serious policy issues which require review of the proposal by OMB.

The failure of the EPA to evaluate the costs of the proposal requires that the rules not be implemented and a thorough study of the economic impact of the proposal be undertaken. We

urge the EPA to prepare a regulatory flexibility analysis and carefully analyze all the costs of the proposal so that the adverse economic impact of the rules can be eliminated.

Again, we thank you for the opportunity of comment on the proposed rules.

Sincerely,



Richard W. Newgner
Executive Director
Washington Office

1 State expend 319 money in that way. And so I think that
2 that is -- that statement and the cite to those two
3 sections of the Act is really a reach.
4 Region 9's perspective is that direct federal
5 authority over non-point sources doesn't exist and
6 certainly we've never asserted that type of authority in
7 context with any of the TMDL s that we've established.
8 Q. Is Carol Browner your boss?
9 A. Ultimately she is.
10 Q. If she tells Region 9 to do something, does
11 Region 9's perspective make any difference in the world?
12 A. EPA's regions have a great deal of discretion in
13 how to apply regulations once they're established, and we
14 are certainly obliged to apply the regulations, but when
15 it comes to most decisions that we make in the regions,
16 Carol Browner does not decide them; they're decided by
17 the regional administrator or by the regional
18 administrator's designees. So while it's true that --
19 I'm not even sure it's true that she is my boss, I
20 honestly don't know the answer, but certainly we pay very
21 close attention to the directions we receive from
22 headquarters but what we implement are the regulations in
23 the statute.
24 Q. Certainly Congress is your boss, is it not?
25 A. Ultimately.

EXHIBIT 1

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Attorneys for all Plaintiffs (see signature page for complete list of plaintiffs' attorneys)

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

GUIDO A. PRONSOLINO and BETTY J. PRONSOLINO as TRUSTEES for the GUIDO A. PRONSOLINO AND BETTY J. PRONSOLINO TRUST, THE MENDOCINO COUNTY FARM BUREAU, THE CALIFORNIA FARM BUREAU FEDERATION and THE AMERICAN FARM BUREAU FEDERATION, Plaintiffs, v. FELICIA MARCUS, Regional Administrator, U...ed States Environmental Protection Agency Region 9, CAROL M. BROWNER, Administrator, United States Environmental Protection Agency, and THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Defendants.	No. C 99-1828 WHA DECLARATION OF MICHAEL HOW

EXHIBIT 2

1
2 DECLARATION OF MICHAEL HOWELL
3
4 MICHAEL HOWELL, being duly cautioned that he is making this Declaratio
5 penalty of perjury, states as follows:
6 1. My name is Michael Howell. I live in Mendocino County, California, and
7 been a licensed Professional Forester in the State of California since 1981. Among my cl
8 are Larry Mailliard and William Barr.
9 2. In my capacity as a Professional Forester I am generally familiar with the F
10 Practice Act & Board of Forestry requirements that the California Department of For
11 (CDF) implements on timber harvesting. When I prepare a Non-industrial Timber Manager
12 Plans (NTMPs) or Timber Harvest Plans (THPs), I incorporate the rules of the Forest Pra
13 Act and Board of Forestry Rules.
14 3. I first learned of the USEPA Total Maximum Daily Load (TMDL) for the Gr
15 River in the fall of 1997. At that time, the TMDL was in proposed form and had not b
16 formally adopted by EPA, so I did not take it into account in the NTMPs and THPs I prep
17 at that time.
18 4. I submitted a draft THP for Larry Mailliard on February 4, 1998. The THP
19 reviewed by, among others, CDF and the Regional Water Quality Control Board (the Regi
20 Board). On March 20, 1998, CDF requested that I provide them with additional informa
21 concerning the mitigations present in the THP to address EPA's recently established TM
22 5. On May 18, 1998, the Regional Board made specific recommendations regar
23 compliance with the TMDL. Many of these recommendations do not have any basis in
24 Forest Practice Rules but are requirements contained in the Draft Attainment Strategy for
25 Garcia River TMDL (as of the date of this declaration, the Draft Attainment Strategy has
26 been adopted by the State). These requirements included that the Mailliards refrain f
27 harvesting in certain areas; retain more than five trees greater than 32 inches dbh per linear
28 of certain watercourses; redesign certain roads; inventory sediment delivery sites; commi
correcting all inventoried sites as part of timber harvest operations; and rock certain roads.

6. Mr. Tom Osipowich of CDF told me that if we did not comply with the Regi Board's recommendations regarding EPA's TMDL, that the plan would not be signed.

7. I then called Frank Reichmuth of the Regional Board to discuss these matters. Reichmuth echoed Mr. Osipowich, stating that USEPA was forcing the State to implement t measures. Mr. Osipowich stated that he would not sign off on the THP until we agree comply with the TMDL requirements outlined by the Regional Board.

8. On May 14, 1998, Ms. Holly Lundborg visited the Mailliard Ranch to evaluate proposed THP relative to the Garcia River TMDL. During the inspection, Ms. Lundb recommended that the THP be amended to include a baseline sediment inventory and commitment to correct all sediment sites identified as part of timber harvest operati Because of the threat of denial and the fact that the plan had been held up for 2 months w the CDF and Regional Board worked out TMDL issues, we incorporated these recommendati into the plan.

9. It is difficult to provide a precise estimate of the total cost to the Mailliards of TMDL-based restrictions in their THP. However, at a minimum I estimate that those c include the following:

a. Ownership inventory of controllable sediment sources @ $5.00/acre - $60,000.00;

b. Ownership inventory of unstable areas @$3.00/acre - $42,000.00;

c. The retention of five standing conifer greater than 32" dbh per every 100" of all Class I and II watercourses within the life (into perpetuity) of the THP. There is approximately 210,000 feet of Class I and II watercourses o the property which would require:

210,000 - 100 = 2,100 zones

2,100 x 5 trees > 32" dbh = 10,500 trees > 32" dbh

A 32" dbh tree has approximately 1,000 board feet of timber with a value to the landowner at today's market of approximately $1,000.00. Therefore, by retaining 5 trees

1 greater than 32" dbh per every 100 feet of Class I
2 and II watercourses the minimum cost to landowner
3 will be at least $10,500,000.00.
4 These are by no means the only costs. They are simply those for which I can prov
5 reasonably reliable estimates.
6 10. Later in the summer of 1998 I went through a similar process for William B
7 During the review process for his NTMP, the Regional Board made a number
8 recommendations based on EPA's TMDL. I responded to their recommendations by includ
9 several requirements in Mr. Barr's NTMP, like I had done for the Mailliard's THP, that wo
10 not otherwise be mandated. These included the following:
11 a. Ownership inventory of controllable sediment sources
12 of $8.00/acre - $10,000.00;
13 b. The retention of five standing conifers greater than 32"
14 dbh per every 100" of all Class I and II watercourses
15 within the life (into perpetuity) of the NTMP. There
16 is approximately 25,410 feet of Class I and II watercourses
17 on the property which would require:
18 25,410 feet - 100 = 254 zones
19 254 x 5 trees > 32" dbh = 1,270 trees > 32" dbh
20 A 32" dbh tree has approximately 1,000 board feet of
21 timber with a value to the landowner at today's market
22 of approximately $750.00. Therefore, by retaining 5
23 trees greater than 32" dbh per every 100 feet of Class I
24 and II watercourses the minimum cost to landowner will
25 be at least $952,000.00.
26 11. I argued with Ms. Lundborg about these requirements, in particular the inclusi
27 of the requirement to retain 5 conifers greater than 32" dbh along every 100 linear feet o
28 Class II watercourse. Ms. Lundborg agreed to retain 28" dbh trees if 32" dbh trees were

present. These are by no means the only costs. They are simply those for which I can reasonably reliable estimates.

MICHAEL HOWELL

Signed at Ukiah, California this
_____ day of _____, 1999.

_____
Notary Public

MAYER, BROWN & PLATT
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Attorneys for all Plaintiffs (see signature page for complete list of plaintiffs' attorneys)

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

GUIDO A. PRONSOLINO and BETTY J. PRONSOLINO as TRUSTEES for the GUIDO A. PRONSOLINO AND BETTY J. PRONSOLINO TRUST, THE MENDOCINO COUNTY FARM BUREAU, THE CALIFORNIA FARM BUREAU FEDERATION and THE AMERICAN FARM BUREAU FEDERATION, Plaintiffs, v. FELICIA MARCUS, Regional Administrator, United States Environmental Protection Agency Region 9, CAROL M. BROWNER, Administrator, United States Environmental Protection Agency, and THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Defendants.	No. C 99-1828 WHA DECLARATION OF RANDY JACOBSZOON

EXHIBIT 3

DECLARATION OF RANDY JACOBSZOON

RANDY JACOBSZOON, being duly cautioned that he is making this Declaration under penalty of perjury, states as follows:

1. My name is Randy Jacobszoon. I live in Mendocino County, California, and have been a licensed Professional Forester in the State of California since 1995. Among my clients are Guido and Betty Pronsolino.

2. In my capacity as a Professional Forester I am familiar with the requirements that the California Department of Forestry (CDF) imposes on timber harvesting. When I prepare Non-industrial Timber Management Plans (NTMPs) and Timber Harvest Plans (THP), I incorporate the CDF requirements as a matter of course.

3. I first learned of the USEPA Total Maximum Daily Load (TMDL) for the Garcia River in the fall of 1997. At that time, the TMDL was in proposed form and had not been formally adopted by EPA, so I did not take it into account in the NTMPs and THPs I prepared at that time.

4. The first NTMP/THP that I submitted to CDF for approval following EPA's adoption of the TMDL for the Garcia River was the Gianoli THP. To the best of my recollection, I submitted the Gianoli THP in June 1998 to CDF for a process known as "First Review." First Review is a procedure whereby a Professional Forester such as myself can submit a draft NTMP/THP to CDF for review. CDF then typically returns the draft NTMP/THP with questions and recommendations. In my experience, the Professional Forester normally responds to CDF's questions and recommendations (some of which come to CDF from other interested agencies, such as the Regional Water Quality Control Board) at an on-site inspection known as the Pre-Harvest Inspection.

5. When CDF returned the Gianoli THP to me, in the summer of 1998, the Regional Water Quality Control Board included a substantial number of recommendations that did not appear to me to have any basis in CDF's own regulations specifically a site-specific sedimentation reduction plan for the THP area.

6. During the Pre-Harvest Inspection for the Gianoli THP, I therefore asked the representatives of CDF and the Regional Water Quality Control Board who were present why these recommendations were included. The Regional Water Quality Control Board representative who was present, Holly Lundborg, told me that the Regional Water Quality Control Board was beginning to make these and other recommendations because EPA had adopted a TMDL for the Garcia River. She also said that until the Regional Water Quality Control Board could adopt a TMDL and an attainment strategy of its own (something that has still not been done as of the date I am signing this Declaration), it would be implementing EPA's TMDL on a temporary basis. Ms. Lundborg made it clear to me that the issues raised by the Regional Water Quality Control Board were (a) directly based on the EPA TMDL and (b) mandatory if the THP was to be approved. In order to get CDF approval of the Gianoli THP, I therefore included the items needed to satisfy the TMDL in the final version of the THP.

7. Later in the summer of 1998 I went through a similar process for Guido and Berry Provolino. During the NTMP review process, the Regional Water Quality Control Board made a number of recommendations based on EPA's TMDL. I responded to their recommendations by including several requirements in the Provolino's NTMP, like I had done in the Gianoli THP, that would not otherwise be mandated. These included the following:

a. Ownership inventory of controllable sediment sources from all roads, landings, skid trails and agricultural facilities must be converted to NTMP by 6/1/2000.

b. Ownership inventory of unstable areas must be amended to NTMP by 6/1/2002.

c. Retention of at least five standing conifers greater than 32" dbh per 100 feet on all class I and II watercourses. If trees greater than 32" dbh do not exist, the five largest trees must be saved.

d. No timber harvesting, road construction, reconstruction or upgrading of roads shall occur between October 15 and May 1.

8. Later in the summer of 1998, I spoke to Ms. Lundborg again about the restrictions that were being required in the NTMPs to satisfy EPA's TMDL. She responded that these were indeed required, and that NTMPs would not be approved without them. I observed that it was likely that a lawsuit would be filed over those restrictions. Ms. Lundborg agreed, but said that the Regional Water Quality Control Board had no choice because EPA required those restrictions in order to achieve the EPA issued TMDL.

9. It is difficult to provide a precise estimate of the total cost to the Pronsolinos of the TMDL-based restrictions in their NTMP. However, at a minimum I estimate that those costs include the following:

a. Ownership inventory of controllable sediment sources - $5,000.00

b. Ownership inventory of unstable areas - $3,000.00

c. The retention of five standing conifer greater than 32"dbh per every 100' of all class I and II watercourses within the life (into perpetuity) of the NTMP. There is approximately 15,000 feet of Class I and II watercourses on the property which would require:

15,000 feet ÷ 100 = 150 zones

150 x 5 trees > 32" dbh = 750 trees > 32" dbh

A 32" dbh tree has approximately 1,000 board feet of timber with a value to the landowner at today's market of approximately $1,000.00. Therefore, by retaining 5 trees greater than 32 dbh per every 100 feet of Class I and II watercourses the minimum cost to landowner will be at least $750,000.00.

These are by no means the only costs. They are simply those for which I can provide reasonably reliable estimates.

RANDY JACOBSZOON

Signed at Ukiah, California
this _____ day of November, 1999.

_____
Notary Public

PROOF OF SERVICE

I am employed in the County of Cook, State of Illinois. I am over the age of 18 a not a party to the within action; my business address is 190 S. LaSalle Street, Chicago, Illinois 60603.

On November 23, 1999, I certify that I served the foregoing document described a **DECLARATION OF RANDY JACOBSZOON** by overnight delivery to

S. Randall Humm
U.S. Department of Justice
Environmental Defense Section
601 D Street N.W.
Washington DC 20004

and by U.S. Mail to

Joseph J. Brecher
BRECHER & VOLKER LLP
436 14TH Street, Suite 1300
Oakland, CA 94612

R. Scott Puddy
Leboeuf, Lamb Greene & McCrae, L.L.P.
One Embarcadero Center, Suite 400
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La Juana S. Wilcher
Paul C. Freeman
D. Randall Benn
Leboeuf, Lamb Greene & McCrae, L.L.P.
1875 Connecticut Ave., N.W., Suite 1200
Washington, D.C. 20009-5728

Executed on November 23, 1999, at Chicago, Illinois.

Susan E. Brice
Type or Print Name

Signature

** TOTAL PAGE.32 **

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

OCT 22 1999

The Honorable Carol M. Browner
Administrator
Environmental Protection Agency
401 M Street S.W.
Washington, D.C. 20460

Dear Ms. Browner:

Thank you for the opportunity to review and comment on the Environmental Protection Agency's (EPA) Proposed Revisions to the Water Quality Planning and Management Regulations, 40 CFR Part 130, regarding Total Maximum Daily Loads (TMDL); and the Proposed Revisions to the National Pollutant Discharge Elimination System Program and Federal Antidegradation Policy, 40 CFR Parts 122, 123, 124, and 131, as published in the *Federal Register* on August 23, 1999. USDA combined comments on these two proposed regulations because many of our concerns are similar for each proposal.

We share with EPA common goals and dedication to water quality protection, and we have a long history of working cooperatively in this regard. Past disagreements were over the approach to meeting our common goals. We continue to believe that programs based on land management decisions, planned with consideration toward water quality criteria, are most successful when dealing with nonpoint source (NPS) pollution control. We believe this approach avoids costly analyses that yield information of insufficient precision and accuracy for establishing meaningful NPS pollution control, and it may avoid unnecessary litigation. In developing our water quality programs, we rely on extensive analytical and field tested methods that have been developed over many years using the best science. We offer these comments and emphasize that we wish to work constructively toward a comprehensive water quality program that is efficient, uses the best scientific information, reduces litigation, and most importantly, results in improved water quality.

In general, we feel that if the proposed rules are implemented, they will likely cause disruption to existing NPS control programs that have proven to be effective and will unnecessarily divert scarce resources to a top-down, process-oriented approach that may not work for NPS pollution control. We realize that implementation of NPS pollution programs has been varied throughout the nation over the past two decades. We believe this situation is primarily due to a lack of funding and the same commitment that was made for point sources. We would like to work with EPA on developing the following alternatives to the proposed regulations as they relate to agricultural and silvicultural operations:

The Honorable Carol M. Browner
Page 2

1. Strengthen activities of Sections 208 and 319 so that these become the primary tools for addressing NPS pollution, including agricultural and silvicultural operations. As you know, the magnitude of NPS problems is more daunting and complex than with point sources, yet EPA appears intent to manage NPS in the same manner as point sources, but accelerated. It has taken 27 years of hard work on point sources – and billions of dollars – to obtain the water quality improvements we have today. To control NPS, we need a broader timeframe and greater commitment to adequate funding, enhanced partnerships, local decision making, and use of proven land management techniques, including voluntary, incentive-based programs.

2. Use the existing EPA Water Quality Handbook (i.e., "SAM32") as guidance for States and encourage them, through increased funding and flexibility, to develop effective programs to control silvicultural and agricultural NPS pollution, consistent with Sections 208 and 319.

3. Supplement existing agreements between the Forest Service and States to identify management standards for road construction, reconstruction, and operation and maintenance.

Our specific comments on the proposed rules are enclosed. They are organized by *background, legal, limitations of science, costs, redefining nonpoint source, scope, relation to Coastal Zone Management Act, threatened waters, episodic events, reasonable progress, and top-down approach.*

If I can be of further assistance regarding our suggestions and comments, please contact me.

Sincerely,

Glenda Humiston

James R. Lyons
Under Secretary
Natural Resources and Environment

Enclosure

cc:
Glenda Humiston, Deputy Under Secretary, Natural Resources and Environment, USDA
Anne Kennedy, Deputy Under Secretary, Natural Resources and Environment, USDA
Michael Dombeck, Chief, Forest Service, USDA
Pearlie S. Reed, Chief, Natural Resources Conservation Service, USDA

USDA COMMENTS ON PROPOSED RULES TOTAL MAXIMUM DAILY LOADS (TMDL) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

INTRODUCTION

The Department of Agriculture (USDA) has a long working relationship with the Environmental Protection Agency (EPA) and we appreciate the opportunity to comment on the proposed rules for revisions to the Total Maximum Daily Load (TMDL) regulations and revisions to Federal Antidegradation Policy and National Pollutant Discharge Elimination System Program (NPDES) in support of revisions to the Water Quality Planning and Management Regulation.

Through our science-based experience, USDA considers that the most effective means for controlling the generation of nonpoint source (NPS) pollution, such as those activities cited in the proposed EPA rules, is by designing and applying preventative and restorative watershed management practices. The success in applying these practices to control NPS pollution on agricultural land, forests, and rangelands is well documented and demonstrated in scientific and historical literature, as well as in anecdotal reports. Consequently, the potential impact of the proposed regulations is problematic because they would alter the manner in which effective NPS control programs have been managed. For instance, changing the designation of silvicultural practices from NPS to point sources is inconsistent with authorities provided in the Clean Water Act (CWA), established management programs, scientific evidence, and management experience. Although we agree there is a need for greater efforts to control NPS pollution, the proposed regulations will place an added and unnecessary burden on the continuing progress for effectively controlling NPS pollution in waters of the United States.

Before providing you with our concerns with the proposed rules, we offer the following commendations on the TMDL rule:

- The manner in which the regulations address endangered species.
- The recognition of air pollution as a cause of water quality impairment.
- The recognition that watershed assessment will be needed to separate point sources from nonpoint sources even in watersheds where both sources impact water bodies.

BACKGROUND

We believe that Congress provided for distinct and separate programs for point and NPS pollution and intended that both silvicultural and agricultural operations would be controlled under the NPS program.

- Section 208 requires the control of agricultural and silvicultural sources, to the "extent feasible", under a NPS program.
- Section 319 requires the identification of waters limited by NPS pollution and the development of Best Management Practices (BMPs) to control those sources to the "maximum extent practicable".

- Section 319 recognizes that any regulatory program to control NPS pollution is at the State, not at the Federal, level.

It is unfortunate that EPA has continually given less emphasis to Section 319, perhaps because it is not a required Federal regulatory program. EPA has never published regulations for its implementation, except for the underfunded grant program provided for under that section; rather, EPA has directed its efforts toward incorporation of NPS into point source programs, i.e., Section 303 TMDL, and Section 402 NPDES permit program. However, Section 319 does provide for development of a permit program for NPS pollution control, at a State's discretion.

The proposed regulations will undermine 27 years of the USDA working cooperatively with EPA, States and the communities at large in the development of an effective NPS control program. Instead, we encourage the strengthening and proper funding of Sections 208 and 319 activities and increased commitment to making NPS control programs work under these authorities.

In the spirit of the President's Clean Water Action Plan, the Forest Service and Natural Resources Conservation Service (NRCS) are available to help, through review and comment, EPA prepare regulations for the effective, science-based control of NPS pollution under Sections 208 and 319 of the CWA.

LEGAL

We have numerous legal concerns with the proposed regulations. We are concerned with the applicability of CWA Sections 303 and 402 to silviculture and agriculture; the distinction between point versus NPS pollution; the consistency of the proposed regulations with Executive Order (EO) 31332 on Federalism, issued August 5, 1999; and, with the proposed definitions of "pollution" and "pollutant."

Federal courts have long recognized that Congress specifically drew a distinction between point sources and NPS pollution, and excluded the latter from control under TMDL and NPDES. Please refer to Oregon Natural Resources Council v. U.S. Forest Service, 834 F.2d 842 (9th. Cir. 1987); Natural Resources Defense Council v. EPA, 915 F.2d 1314 (9th Cir. 1990); Oregon Natural Desert Association v. Dombeck, 172 F.3d 1092 (9th. Cir. 1998); and Idaho Conservation League v. Caswell, 1996 U.S. Dist LEXIS 21980 (Idaho 1996). These court decisions found that silvicultural activities, including road building, were examples of NPS pollution excluded by Congress from NPDES; see Oregon Natural Resources Council, and Idaho Conservation League, supra; see also, Trustees for Alaska v. EPA, 749 F.2d 549 (9th Cir. 1984). We believe Congress did not think it necessary to expressly exclude silviculture and agriculture from coverage under 303 or 402 because pollution from those sources was already addressed in Sections 208 and 319.

The control of NPS under Section 319 mirrors the control of point sources under Section 303, but specifically leaves the development of control programs, including the consideration of a

regulatory approach, with the States (Section 319(b)(2)(B)). Therefore, Congress recognized that additional processes, such as Federal permits, to control NPS pollution were duplicative and not needed to comply with Section 101. Since the States have either voluntary or regulatory approaches to NPS pollution control, and all States with voluntary approaches have "Bad Actor" laws, the draft proposed NPDES regulations appear to ignore the Congressional intent of Sections 101(b) and 319 of the CWA for the control of silviculture and agriculture related pollution. Moreover, the proposed regulation appears to be in conflict with EO 31332, Section 4(a), which states that a Federal statute can only preempt State law "where the statute contains an express preemption provision or there is some other clear evidence that the Congress intended preemption of State law... Section 319(b)(2)(B) specifically gives the responsibility for development of NPS controls to the States, including the determination of the need for a regulatory enforcement program.

We disagree with the proposed redefinition that would differentiate between "pollutant" and "pollution." The proposal is legally incorrect, is not in keeping with the intent of Congress, and it complicates a rather simple issue. The CWA currently defines "pollutant" (paragraph 502(6)) with an exhaustive list of chemical, physical, biological, and radiological water quality constituents that, when evident in water, constitute pollution. The CWA currently defines "pollution" (paragraph 502(19) as that "caused by man-made or man-induced alteration of water quality." Congress simply defined what a pollutant is and then said for the pollutant to become pollution, it had to be caused by human intervention, thereby excluding natural background levels of water quality constituents. We believe it inappropriate for EPA to use an artificial distinction between "pollutant" and "pollution" to exceed the CWA authorities related to "low flow", "degraded aquatic habitat", and "riparian habitat."

Based on science, we know of the relationship of water quality to water flow, aquatic habitat, and riparian areas. However, the CWA (paragraph 101(g)) authorized States to control water flows and allocate water quantities within its jurisdiction. A low flow, even caused by human intervention, cannot be regarded as pollution unless a CWA-defined pollutant is present. Additionally, we agree with the EPA view that aquatic habitat is essential in reflecting the assurance of the "biological integrity of the nation's water." However, we do not agree that "degraded aquatic habitat" is either a "pollutant" or "pollution" in accordance with the CWA. The condition or health of aquatic habitat is the result or consequence of water quality, not the cause of pollution.

We are equally troubled by the EPA view of riparian habitat. We recognize the important role of riparian areas in providing for and protecting water quality. We also know of the importance of riparian habitat for its aquatic and terrestrial fauna and flora. We do not agree that 'riparian habitat' is a pollutant or pollution; like aquatic habitat, riparian habitat is a product of its associated water quality and other environmental and anthropogenic factors.

LIMITATIONS OF SCIENCE

A weakness of trying to apply the TMDL process and NPDES permits to NPS water quality compliance, load determination, and load allocation is the current technical and scientific barriers to connecting water quality standards to specific NPS and BMPs. We are concerned with the lack of appropriate recognition of these weaknesses in the subject regulations.

We are also concerned that the full breadth of scientific knowledge may not be used appropriately by EPA when dealing with NPS. For instance, the proposed revisions to the NPDES regulation reference a piece of scientific literature as stating that "silviculture contributes approximately 8 to 9 percent of the nonpoint source pollution to the Nation's waters." We have been informed that this statement is not contained in the paper to which it is attributed (D. G. Neary and J. L. Michael, 1989, "Effect of Sulfometuron Methyl on Ground Water and Stream Quality on Coastal Plain Forest Watersheds"). It is vital to public decision making that scientific findings are used and referenced correctly.

The USDA strives to meet and assist others to meet water quality standards (WQS) because they have legal status in that they are the measures of success or indicate the need for more stringent pollution controls. Due to natural background and variability of water quality, it is very difficult to relate WQS to the effectiveness of individual BMPs and measured water quality values in the water column. An expectation that land managers can provide certainty that WQS will be met under all circumstances before activities take place, as may be required by National Environmental Protection Act and/or by a NPDES permit, is neither reasonable nor achievable. Available time and funding for applying science and current models of NPS pollutants do not allow sufficient precision and reliability to:

- relate the effect of NPS pollution to WQS;
- allocate water column or in-channel parameters by individual BMP or land user; and,
- allocate effects/loads by individual BMP or land user.

This lack of precision and reliability significantly limits the validity of the TMDL and NPDES permitting process in establishing load allocations for specific management practices or for individual landowners in agricultural, forest, and rangeland environments. It is expected that more sophisticated models will be too expensive for project-level monitoring due to high data demands and cost of operation. For these reasons, BMPs are currently based on technology and not based on current WQS (existing 40 CFR 130, and the EPA's "Nonpoint Source Controls and Water Quality Standards)." USDA has and will continue to work with others to improve:

- science and technology to control NPS pollution;
- estimates of the magnitude and sources of NPS pollution;
- relationships between NPS pollution and WQS; and,
- relationships between land management practices and water quality.

The variability of agricultural, forest, and range environments, and the limited time and funds available to measure actual concentrations of pollutants for each watershed, lead to the

alternative of using properly verified and calibrated models for estimating pollutant loads for TMDL and permitting purposes. However, the development and use of models may also tie up scarce funds and time that could be used for effective field surveys to identify pollution sources and design and apply BMPs to protect and improve water quality. Therefore, developing and using models should be done very judiciously. Confidence and reliability for most modeled estimates of pollutants of concern in agricultural, forested or range environments are expected to be less than what current science can provide with sufficient time and funding. Based on available science, USDA would expect that a modeled estimate for sediment in forested environments, for instance, to have a precision and reliability less than plus or minus 100 percent, at the 95 percent confidence interval. This level of precision and reliability is the best that can be expected when requiring TMDLs and NPDES permits for some agricultural and silvicultural practices. It seems this level of precision and reliability would be inadequate when placing a performance requirement on a permitee or anyone to meet specified pollutant loads for these NPS situations.

Due to the lack of precision and reliability of modeling results, pollution trading between point sources and NPS should only be considered with the understanding that the certainty associated with estimates and control of point sources is generally greater than the certainty associated with estimates and control of NPS. When addressing pollution trading, the regulations should recognize limits imposed by our scientific understanding.

COSTS

The cost analyses for the TMDL and NPDES proposed rules are inadequate and incomplete. There are no costs displayed for Federal agencies affected by the rule, such as the NRCS and Forest Service, and costs for the private sector are not adequately recognized and accounted for. For instance, the proposed rule would impose significant cost on the Forest Service for the more than 192 million acres of public lands that are under its direct management, as well as the millions of acres under local or private control where it provides assistance. The proposed rule's impact on the private sector will create additional workload and costs for USDA in providing technical and potential financial assistance for TMDL development and implementation. Despite the requirements of EO 12866, the proposed rule ignores these costs, as well as the direct impact on farmers, ranchers, and small woodlot operators.

The following are our specific comments for each proposed rule:

TMDL

The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act, generally requires Federal agencies to conduct an initial regulatory flexibility analysis describing the impact of the regulatory action on small entities. The EPA Administrator certified that this proposed rule would not have a "significant economic impact on a substantial number of small entities." Based on many years of planning and implementing watershed protection projects with State and local government entities, we do not believe this to be an accurate statement. The calculated costs of implementing TMDLs set out in the rule

appear to be limited to the impact on State water quality agencies only. This ignores the impact on cooperating Federal agencies, Tribes, or other State agencies such as departments of agriculture, natural resources and forestry, soil and water conservation districts, and others which will be involved. Additionally, the costs of implementing the TMDL management strategies will be very significant and will, very likely, be borne by small entities, such as agricultural producers, forest landowners, and rural communities. Unlike many point source polluters, most of these small entities will not be able to pass on the cost of implementing these pollution controls to their customers because food, fiber, and timber producers do not control the purchase price of their products.

Under the Federal Unfunded Mandates Reform Act, the EPA must prepare a written statement, including cost-benefit analyses, for proposed rules with "Federal Mandates" that may result in State, local and Tribal governments' costs in the aggregate, or costs to the private sector, of $100 million or more in one year. The EPA is suggesting that this rule will cost less than $25 million in any one year. Planning and implementing BMPs and pollutant management strategies will cost more than $100 million annually based on past similar experiences in USDA. If the cost of the proposed rule imposes costs in the hundreds of millions of dollars, and potentially billions of dollars, then it is essential that Federal agencies, States, and the public have a greater awareness of these costs and alternative means of achieving the desired end.

We expect the assistance to States, Tribes, and the EPA in the development and implementation of TMDLs to significantly add to USDA workload during the next 8 to15 years. This workload and associated costs will result from watershed assessments and prioritization, developing land treatment plans, monitoring and evaluating progress and adapting to needed changes in management, and working with other landowners and stakeholders within a watershed. We feel that the analyses in the proposed regulations for the RFA, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, and EO 12866 may be inadequate. Once a TMDL is in place we understand that the landowners within the watershed will need to implement preventative and/or restorative land management practices to achieve water quality when impairment is caused by NPS pollution. This will increase the need for Forest Service assistance to non-industrial forest landowners through State foresters, and NRCS assistance to farmers and ranchers to support landowners in the application of additional or different practices. We believe there is a cost to the Federal government that is not recognized in the current analyses. In addition, there may be additional operating costs incurred by the private landowner.

NPDES

Contrary to paragraph three, Section V of the preamble, "...if adopted, would not directly regulate, or impose any new or additional requirements, on small entities," we feel that significant costs will be incurred by Federal agencies, State, Tribes, local agencies, and many small entities. Section V actually describes the significant added costs to the private sector when each respondent will spend an average of 82 hours per silvicultural activity to collect information required by this proposed rule. Nine million small entity private landowners own 58 percent of the Nation's productive non-industrial forestlands. Most contractors working with these landowners to conduct forest management, build roads, plant trees, and other practices, are small,

independent businesses. Approximately 85 percent of timber purchasers and road-building contractors on forestlands meet the definition for small businesses. As currently written, the proposed regulations put Federal primacy over these businesses and make the business environment more uncertain for long-term investment and growth.

Additionally, the costs do not estimate those that will be incurred by Federal, State, Tribes, and local governments. It would be more helpful to the public, and the large and small entities affected by the proposed rule, if the costs for implementation were more adequately considered and disclosed.

REDEFINING NONPOINT SOURCE

NPDES

We are concerned about the source of information used in the proposed NPDES rule to judge that State NPS control programs have failed to the extent that regulations need to be expanded for silviculture. There is credible literature cited, albeit misused, as to silvicultural operations contribution to NPS pollution, but not to its affect on the beneficial uses of water. The citations in Section IIIB of the preamble are not clear as to whether or not BMPs were appropriately applied. In May 1996, the EPA and senior officials of State agencies (Association of State and Interstate Water Pollution Control Administrators) issued guidance for an approach for States to strengthen their NPS pollution programs. Since it is unclear what published information EPA is using to substantiate the need for redefining silvicultural situations as point sources, we wonder whether the May 16, 1996, guidance was not enough, inappropriate, not in place long enough to be effective, or failed to effectively strengthen NPS control programs by the States. We also are concerned that redefining silvicultural situations as point sources may be viewed as the first step to redefining other agricultural situations as point sources.

It appears in Sections IIIA and IIIB in the preamble that EPA is assigning to itself additional authorities at the Federal level that it is hesitant to assign to States. In addition, EPA does not require of itself the same rigor as it does of a State in making a determination as to the need for a permit. We understand that States are required to conduct an assessment of beneficial uses to determine if these uses are adversely affected when water quality standards are exceeded or if the standards are to be changed. Based on this assessment, the States determine what additional measures are needed. The proposed EPA assignment of additional authorities to itself and requiring less of a standard of itself than it does of a State to determine if a permit is required appears to be contrary to Section 101(a)(5), 101(b), and 101(f) of the CWA. This may leave EPA open to questions of arbitrary and capricious actions by the community it is regulating.

It appears that the proposed regulations are focusing NPDES permitting requirements on land use and not on activities that effect water quality. This may unnecessarily lead to questions regarding the traditional roles of States and local communities having primacy over land use. Some examples where the proposed rule is focused on land use are:

- The proposed regulations do not recognize the vast extent that Federal agencies practice and/or support private landowners to practice silviculture and build and maintain roads for silvicultural purposes. These agencies include the Fish and Wildlife Service, Bureau of Land Management, National Park Service, Department of Defense, Department of Energy, Bureau of Indian Affairs, NRCS, and the Forest Service. These same agencies usually have or assist with activities that have similar effects on water quality as silvicultural roads (e.g. prescribed burning for domestic and wildlife grazing, road building for access for grazing and recreation sites, and Federal Highway Administration Forest Highway construction), but these activities are not addressed in the regulations. Lack of inclusion of these other activities furthers the impression that EPA is changing the definition for NPS pollution contrary to Congressional intent and case law.

- States and counties practice silviculture and provide and operate Forest Highways and roads for access to practice silviculture and other management activities. Counties manage 10 percent of the Nation's forests. As written, the draft regulations will provide Federal primacy on these lands contrary to Section 101(b) of the CWA. Therefore, the proposed regulations do not seem to be a practical approach to controlling NPS pollution due to silvicultural use on these lands.

- The term "reforestation" is not qualified and one must assume a permit could be needed if reforestation occurs subsequent to catastrophic events, such as wildfires or restoring a road after a flood. In addition, the proposed draft regulations are unclear about prescribed fire for the reduction of fuels to reduce the risk of wildfires. This is not a practical situation for land managers and subjects them to a high degree of uncertainty and potential increased costs.

A more practical approach is already in place in Sections 208 and 319 of the CWA to control pollution from problems caused by silvicultural operations.

TMDL

Many of the proposed TMDL rule changes are based on EPA's new interpretations of the existing law and redefinition of terms that appear to reinforce the position that EPA has the authority to include NPS pollution under Sections 301 and 303. By treating NPS pollution like point sources, most normal agricultural activities, such as growing crops, grazing activities, animal husbandry, and silvicultural operations, could become subject to future, unreasonable regulatory action. This position causes concern within USDA.

The effluent limitations that are required by Section 301 and 303 of the CWA apply to point sources only. In the existing regulation for TMDLs, the EPA established a new term, "load allocation." This term does not appear in the CWA. The basic concept in the existing regulation is that for water quality-limited waters, TMDLs are to be established that include "waste load allocations" for point sources, "load allocations" for NPS, and "natural background loads." A calculated TMDL is the sum of all three elements. It was commonly understood that NPS and natural background loads were to be estimated for the purpose of setting appropriate waste load

allocations, not for establishing NPS load limitations. The proposed regulation could be perceived as a move toward future regulatory controls for NPS based on load allocations.

Relative to this issue, we are concerned that the EPA confuses the CWA and existing EPA regulation. In the TMDL preamble, background, item 1, second paragraph, it states that "Section 303(d) of the CWA requires States, Territories and authorized Tribes to identify and establish a priority ranking for water for which *existing pollution controls* are not stringent enough to attain and maintain ... water quality standards" (emphasis added). Section 303(d) actually refers to "effluent limitations," not "existing pollution controls." Following the language of Section 303(d), a reasonable person would conclude that TMDLs are to be focused on controlling point sources. One would need to ignore the Act's actual wording to bring control of NPS under the TMDL process.

The EPA's rationale for the blurring of Section 303(d)'s original intent is explained in the TMDL preamble, item 4(b). The proposed direction will probably prevent the EPA from effectively addressing NPS in their existing programs. Congress drew a distinction between point sources and NPS in the CWA that is not adequately recognized in the proposed regulations. Section 319 outlines a NPS program for this purpose that is parallel to the Section 303(d) process for point sources. The proposed regulations will eliminate the effectiveness of Section 319. If Congress had meant for all pollution sources to be covered under Section 303, there would have been no need for the 1987 amendments that added Section 319. This new direction may unnecessarily trigger significant public controversy and break-up partnerships that have been forged to address water quality. USDA is prepared to assist the EPA to address NPS pollution on USDA public lands, and to provide assistance to private land owners/users through a voluntary, incentive approach.

SCOPE

Although the proposed NPDES regulations are limited in scope, Section V of the preamble leaves room for eventual efforts by EPA to not recognize any part of silviculture as NPS of pollution (see paragraph 7 of Section V). The rule also duplicates already existing guidance for TMDLs that address a watershed improvement plan when water quality is found to be impaired. Therefore, the proposed rule is redundant to regulations under Section 303, and to Sections 208 and 319 of the CWA. This redundancy is contrary to Section 101(f) of the CWA.

RELATION TO COASTAL ZONE MANAGEMENT ACT

Another concern is the relationship of the proposed TMDL and NPDES regulations with the regulations for controlling NPS pollution control under the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), administered by EPA and the National Oceanic and Atmospheric Administration (NOAA). There is an appearance that the proposed TMDL regulations will supercede Section 6217 of CZARA because NPS is being treated differently than administered under Section 6217.

Section 6217(g) of CZARA requires EPA to publish (and periodically revise thereafter), in consultation with NOAA, the U.S. Fish and Wildlife Service, and other Federal agencies, "guidance for specifying management measures for sources of nonpoint pollution in coastal waters." Management measures are defined in paragraph 6217(g)(5) as:

> "economically achievable measures for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives."

State Coastal Nonpoint Pollution Control programs must provide for the implementation of management measures that are in conformity with this management measures guidance.

In the management measures guidance published by EPA, a description of Section 6217 and the legislative history was included. This description indicated:

> "the legislative history (floor statement of Rep. Gerry Studds, House sponsor of section 6217, as part of debate on Omnibus Reconciliation Bill, October 26, 1990) confirms that, as indicated by the statutory language, the 'management measures' approach is technology-based rather than water-quality-based. That is, the management measures are to be based on technical and economic achievability, rather than on cause-and-effect linkages between particular land use activities and particular water quality problems. As the legislative history makes clear, implementation of these technology-based management measures will allow States to concentrate their resources initially on developing and implementing measures that experts agree will reduce pollution significantly. As explained more fully in a separate document, 'Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance', States will follow up the implementation of management measures with additional management measures to address any remaining coastal water quality problems."

The EPA guidance document further states:

> "The legislative history also indicates that the management measures guidance, while patterned to a degree after the point source effluent guidelines' technology-based approach (see 40 CFR Parts 400-471 for examples of this approach), is not expected to have the same level of specificity as effluent guidelines. Congress has recognized that the effectiveness of a particular management measure at a particular site is subject to a variety of factors too complex to address in a single set of simple, mechanical prescriptions developed at the Federal level. Thus, the legislative history indicates that EPA's guidance should offer State officials a number of options and permit them considerable flexibility in selecting management measures that are appropriate for their State. Thus, the management measures in this document are written to allow such flexibility in implementation.

"An additional major distinction draws in the legislative history between effluent guidelines for point sources and this management measures guidance is that the management measures will not be directly or automatically applied to categories of nonpoint sources as a matter of Federal law. Instead, it is the State coastal nonpoint program, backed by the authority of State law that must provide for the implementation of management measures in conformity with the management measures guidance. Under section 306(d)(16) of the CZMA, coastal zone programs must provide for enforceable policies and mechanisms to implement the applicable requirements of the State Coastal Nonpoint Pollution Control Program, including the management measures developed by the State 'in conformity' with this guidance."

In light of the EPA guidance and EPA's description of the legislative history, we believe there needs to be a more extensive identification of how the TMDL process will relate to the CZARA process. For instance, the proposed TMDL regulations should specify how implementation plans will relate to ongoing NPS activities under the CZARA. How will a State's Section 6217(g) 15-year program implementation strategy be coordinated with respective TMDLs? If a State receives approval for its coastal nonpoint program, why would a waterbody to be addressed under Section 6217 need to be listed on a Section 303(d) list or have a TMDL established? How does EPA intend to manage, on the one hand, Section 6217, with its NPS control approach closely aligned with Section 319, and on the other hand, manage a TMDL and NPDES program that is more oriented to a point source regulatory approach? If the "management measures" approach of CZARA is technology-based rather than water-quality-based, and is not expected to have the same level of specificity as effluent guidelines, how would that relate to the specific assignment of pollutant loads for NPS under TMDL? In the 'Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of CZARA', EPA and NOAA recognized that all water quality problems attributable to NPS may not be resolved within 15 years. If this is the EPA position, how would this type of situation be managed under a TMDL implementation plan?

Additionally, the proposed NPDES regulations should disclose how silvicultural operations under the CZARA will be permitted.

SECTION 303(d) LIST OF IMPAIRED OR THREATENED WATERS

There is a very close relationship between Section 303(d) lists of impaired or threatened waters and the Section 305(b) Water Quality Assessment Reports submitted by States. There is also a very high likelihood that States will identify the same waterbodies on each. This is problematic due to the questionable value of Section 305(b) reports. Numerous concerns have been raised by various groups and organizations about the credibility of Section 305(b) reports. For instance, the United States Geologic Survey (USGS) wrote in its 'Water Supply Paper 2400', published in 1993, that "two major difficulties preclude the analysis of use-support data for determining national water-quality conditions and trends. First, State-to-State differences in the standards and criteria used to determine use support make it difficult to interpret regional patterns in water quality; and second, methodological changes over the history of the 305(b) program preclude any

analysis of trends." In light of USGS' position, USDA wonders whether the 305(b) reports will be helpful to accurately portray the conditions for waterbodies that cross State borders. It has also been reported by others that there have been problems with the accuracy of "measured" miles of rivers and streams in the 305(b) reports, along with the number of miles of "assessed" or "surveyed" rivers or streams. If the simple matter of measuring miles of a river or stream are not accurately portrayed in 305(b) reports, how credible will the identification of impaired or threatened waterbodies be when the information is transformed to a 303(d) list?

Threatened waters are water bodies that presently meet WQS but, because of trends in water quality data, may not meet standards in the future. The Federal Advisory Committee Act (FACA) Committee, which the EPA established, recommended that these waters be put on a special list. The EPA has chosen not to implement the recommendation and will require threatened waters be included on the impaired water list. Since there is a difference between threatened and impaired waters, and each may receive different management and incentive approaches, EPA should accept the FACA Committee recommendation and not co-mingle these categories of waters on the same list.

The definition of Part 4 waterbodies as proposed at 130.27 may cause the development of a TMDL when effective controls are already in place. Part 4 waterbodies must become Part 1 waterbodies if WQS are not met at the next listing cycle (two years). In fact, appropriate land management controls may be in place and water quality may be improving, but WQS may not yet be attained. This may be because it takes longer than two years for a given watershed to respond to treatment, and not because the treatment is incorrect. The recovery process often takes more than two years. Establishment of an improving trend in water quality for a waterbody should be sufficient to maintain Part 4 waterbody status.

Regarding the data and information used to determine which waterbodies to include or remove from the Section 303(d) list, at paragraph 130.23(e) of the TMDL proposed regulation indicates that the methodology used must "specify exactly what conditions must exist before the waterbody is removed from the list of impaired and threatened waterbodies." Identifying conditions that could remove a waterbody from the list of impaired and threatened waterbodies, in many instances, is difficult at best. There are many conditions, both individually and cumulatively, that can impact water quality. To "specify exactly what conditions must exist" excludes the States' ability to utilize adaptive management techniques. The removal of the word "exactly" from the subject paragraph would provide more leeway for states to better adapt to new science and technology that address water quality issues. The methodology should also provide alternatives to allow new information/technology to become incorporated into assessment protocols.

NATURAL BACKGROUND, EPISODIC EVENTS, AND WATER QUALITY STANDARDS

The TMDL and NPDES rules assume that all NPS pollutant loads can be controlled all the time, regardless of seasonal variations or frequency of occurrence of large storm events. It appears the proposed rules ignore the fact that large storms and significant snowmelt events may contribute large loadings that cannot be controlled in a practical and economical manner. Rather, BMPs are

usually designed to control the runoff from 10- to 25-year frequency storm events as a maximum. Some of the larger storms will have runoff that carry loads that are greater than the total average annual loading and cannot be reasonably controlled by BMPs. A permitting process will not overcome the basic physical and natural phenomenon, either. The proposed rules need to reflect these natural and extreme variations.

Moreover, many episodic violations of WQS are caused by poor land use and practices that were applied more than 50 to 100 years ago which produce sediments that are still in the stream channel or by the "natural" variability of water quality. Where State WQS provide that these episodic events do not exceed the criteria, there is no violation of WQS. Where State WQS do not allow criteria to be exceeded by these episodic events, WQS will be violated regardless of the activity, or lack of activity. However, where the beneficial uses of the water are not impaired by the criteria being exceeded, or the violations are caused by the "natural" variability of water quality, the State should be encouraged to amend its WQS in the interest of effectively controlling NPS.

REASONABLE PROGRESS

The Antidegradation Policy proposed at Section 131.12 of the NPDES Regulation states that a new discharger into a water body that does not attain WQS must show reasonable progress toward attaining the standard. While it may be possible to prevent further impairment from a land disturbing activity, it will be difficult or impossible to show improvement from such an activity. This requirement, coupled with the large number of waterbodies identified as limited, may preclude land management activities on a large number of watersheds.

TOP-DOWN APPROACH

Although EPA provides States much of the authority to implement TMDLs and NPDES permits, the proposed regulations generally establish a top-down approach. Such an approach usually alienates the very partners and cooperators with whom working relationships should be fostered. It can also serve to stifle creativity and the development of cost-effective implementation approaches at the State level. Although the proposed rule seems to envision extended public involvement and calls for multi-party agreements and actions, EPA is proposing a prescriptive approach with short, unrealistic deadlines. USDA recommends that EPA incorporate a greater level of flexibility, incentives, and assistance for States, Tribes, and local governments, and their partners in these proposed rules.

# # #

DEPARTMENT OF AGRICULTURE
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WASHINGTON, D.C. 20250

OCT 22 1999

Mr. Gregory Beatty
Environmental Protection Agency
Room 2304 NEM, Mail Code 4203
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Dear Mr. Beatty:

Thank you for the opportunity to review and comment on the Environmental Protection Agency's (EPA) Draft Guidance Manual and Example National Pollutant Discharge Elimination System Permit for Concentrated Animal Feeding Operations (CAFO).

The Department of Agriculture (USDA) shares EPA's common goals and dedication to water quality protection. However, we are concerned with the approach that EPA is fostering in the proposed Guidance Manual. The proposed manual appears to be establishing policy (not guidance) without the authorization of statute or regulation. Additionally, the proposed manual would cause most animal feeding operations (AFO) with more than 300 animal units (AU) to be defined as CAFOs, thus requiring a permit. We feel that regulating and issuing permits for many of the livestock production facilities in the United States will create unnecessary financial burdens. Also, the capacity for technical assistance does not presently exist to address the workload effectively in the timeframe proposed in the Guidance Manual. In general, we feel that the course of action and criteria outlined in the proposed Guidance Manual would cause a disruption to existing nonpoint source control programs and may create a potentially cumbersome permitting process in addition to widespread litigation.

We offer these comments and emphasize that we wish to work constructively with EPA and others toward a comprehensive water quality program that is efficient, uses the best scientific information and technology, reduces bureaucratic burden, minimizes potential for litigation, and, most importantly, results in improved water quality.

Section 2.3.3 Pages 2-6
The defining criteria for AFOs with 300 to 1,000 AU that could cause them to be classified as CAFOs states: "A man-made channel or ditch that was not created specifically to carry animal waste but nonetheless does so during storm events should be considered a man-made conveyance."

USDA views this clarification statement as problematic and detrimental to voluntary natural resource conservation efforts. Conservation practices or Best Management Practices (BMPs) such as terraces, filter strips, grassed waterways, and restored or created wetlands installed on land units that may have manure applied on or adjacent to them could be identified as man-made conveyances. These conservation practices are frequently used in combination with other

practices, such as proper waste utilization and nutrient management, in a resource management system that is intended to prevent polluted run-off. Under this proposed identification criteria, most AFOs that USDA and others provided technical assistance for in the installation of these conservation practices would be classified as CAFOs. This would mean that an extremely large number of AFOs would become CAFOs just because the operators are attempting to be good stewards. In other words, voluntarily applying conservation systems would make the conservationist open to more rigid regulation. Also, as a result, livestock operators with less than 1,000 AU would resist future voluntary implementation of land treatment conservation practices for fear of being designated a CAFO.

Voluntarily installed conservation practices that improve the ability of the land to use nutrients in animal waste and minimize their presence in surface water run-off and ground water should not be the deciding criteria for classification as a CAFO. EPA should encourage installation of these types of practices, not discourage them. The mere presence of these practices does not create a greater risk than that which would exist had the practices not been installed. Many of these conservation practices or BMPs are planned and designed to divert run-off, control erosion, and filter pollutants from run-off. We recommend that criteria should focus instead on quantity of animal waste applied in relation to the ability of the land to assimilate and crops to use the nutrients applied. A distinction needs to be made that BMPs or conservation practices installed on a field to correct a natural resource problem should not be included in the broad category of man-made conveyances which may carry animal wastes directly to a receiving water body without appropriate assimilation of treatment.

Also, with respect to the man-made conveyance criteria, the presence of field tile lines (subsurface drains) needs to be better addressed. A large percentage of the cropland fields in the United States have some subsurface drainage present, and including all these operations as potential CAFOs is unrealistic and not based on sound science. Moreover, the negative water problems that have been associated with subsurface drains are commonly the result of over-application of waste water through irrigation systems or manure. Land with subsurface drains receiving manure applications in accordance with acceptable nutrient management guidelines should not be included in the "conveyance" definition.

Section 3.2.2, Pages 3-8

This section addresses discharges in excess of a 25-year, 24-hour storm. The terms "chronic rainfall events" and "catastrophic events" are ambiguous; they need to be defined. The phrase "exceedence of water quality standards" needs to be defined, as well as the basis for this determination. Does "exceedence of water quality standards" refer to the discharge of the point source, or the water body the point source outlets into? We have a concern, that if this "exceedence" refers to the point source, that this statement could be applied to all CAFOs. If all CAFOs are required to have zero discharge up to a storm event, left to the discretionary decision of a permit writer, development of a Comprehensive Nutrient Management Plan (CNMP) would be almost impossible.

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Section 3.2.3
We strongly disagree with the last paragraph. Operational records and detailed plans required, as part of a CNMP, should NOT be available to the public. The Natural Resources Conservation Service has a policy of not releasing conservation plans to the public. This is a "right to privacy" issue; making these plans public will increase the number of unwarranted nuisance suits brought against livestock producers.

Section 3.2.3
The Certified Crop Advisory Program of the American Society of Agronomy does not have a certification program for individuals to develop CNMPs. The section of the Guidance Manual should be changed to reflect this matter.

Section 3.3.2.1
Testing soils annually to determine nutrient contents (except possibly nitrogen) is too frequent. The proposed guidelines will create an unnecessary burden. Most Land Grant Universities recommend 3-5 years.

Section 3.3.2.2
A sound, scientifically developed CNMP will include all of the necessary components to address water quality concerns related to manure, organic waste, and waste water management. This section implies that EPA will require additional BMPs above and beyond those in a CNMP. This requirement is not part of the Unified National Strategy for Animal Feeding Operations and should not be part of the Guidance Manual.

In addition, while chemical handling may need to be addressed, it should not be part of a CNMP.

Section 5 and Section 1.2
These sections state "Round 1 CAFO permitting is to be coordinated with the Coastal Non-point Pollution Control Program and the Total Maximum Daily Load (TMDL) program" and "Large CAFOs are encouraged to be permitted by January 2000 and smaller CAFOs not later than the end of 2002." These timetables are not possible to achieve since TMDLs have not been developed in most States and may only be developed 10 to 15 years in the future. A clarification is needed to resolve this conflict. Additionally, if the proposed criteria in Section 2.3.3 are not changed, the number of CAFOs needing CNMPs and technical assistance will far exceed the capacities of the available qualified public and private consultants who provide these services.

General
It is suggested that the following terms used in the proposed manual should be defined or explained in order to avoid confusion and misinterpretation, and allow uniform application and interpretation:

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Section 1.2	"significant manure production"
Section 2.2	"commonly owned fields"
Section 2.3.5	"director"
Section 2.3.1	"Best Professional Judgement (BPJ)"
Section 3.2.2	"chronic and catastrophic rainfall" events
Section 4.3	"exceptionally large", "significant expansion"
Appendix F,	"significant environmental concern"
Appendix F, Part V, Section C	"representative sampling"

If we can be of further assistance regarding our comments and suggestions, please feel free to contact us.

Sincerely,

James R. Lyons
Under Secretary
Natural Resources and Environment

cc:
Glenda Humiston, Deputy Under Secretary, Natural Resources and Environment, USDA
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Statement of the

AMERICAN SOCIETY OF CIVIL ENGINEERS

on the

Environmental Protection Agency's

Proposed Water Quality Management Regulations

before the

Committee on Agriculture, Nutrition and Forestry

U.S. Senate

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February 23, 2000

Mr. Chairman and Members of the Subcommittee:

The American Society of Civil Engineers (ASCE) is pleased to submit this statement for the record on the projected revisions to the water quality planning and management regulation governing Total Maximum Daily Loads (TMDLs) that was proposed by the Environmental Protection Agency (EPA) last year. See Proposed Revisions to the Water Quality Planning and Management Regulation, 64 Fed. Reg. 46,011 (Aug. 23, 1999) (to be codified at 40 C.F.R. Part 130). ASCE remains deeply concerned about the protracted implementation schedule in the proposed regulation, believing it to be in violation of the Clean Water Act.

ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 123,000 civil engineers in private practice, government, industry and academia who are dedicated to the advancement of the science and profession of civil engineering.

The Society's diverse members are directly concerned with the proposed changes to the water quality planning and management regulations in their professional practice areas. Among those areas are environmental engineering, water resources engineering and water resources planning and management. ASCE is a non-profit educational and professional society organized under part 1.501(c)(3) of the Internal Revenue Service rules.

A. STATUTORY AND REGULATORY BACKGROUND

The Federal Water Pollution Control Act, or Clean Water Act, is the principal law governing pollution in the nation's streams, lakes, and estuaries. 33 U.S.C.A. §§ 1251-1387 (West 2000). The Act has three major elements. First, states must set water quality standards to protect "designated uses" of certain bodies of water; the standards then are used to effluent limits for individual sources. Next, the federal government is required to set industrywide, technology-based effluent standards for dischargers. Finally, all dischargers must obtain a permit issued by the federal government or authorized states that specifies discharge limits under the National Pollutant Discharge Elimination System (NPDES) program. The discharge limits essentially are the stricter of the water-quality-based limit and the technology-based limit.

The Act's regulatory provisions impose progressively more stringent requirements on industries and cities in order to meet the statutory goal of zero discharge of pollutants, and it authorizes federal financial assistance for municipal wastewater treatment construction.

Industries were to meet pollution control limits first by use of "Best Practicable Technology" and later by improved "Best Available Technology" (BAT). Cities were to

achieve secondary treatment of municipal wastewater (roughly 85 percent removal of conventional wastes), or better if needed to meet water quality standards. Sometimes, however, the use of BATs does not result in the reduction of pollutant loads in a body of water. In those cases, the Act requires the EPA and the states to establish the "total maximum daily load" for a body of water.

All of the Act's programs are administered by the EPA, while state and local governments have major day-to-day responsibility for implementing the law. More than 40 states currently are authorized to issue NPDES permits. Nevertheless, various federal agencies continue to invest heavily in the pollution-control programs under the Clean Water Act. "[T]otal federal annual spending for nonpoint-related programs remained relatively constant from fiscal year 1994 through fiscal year 1998 at about $3 billion, although obligations among some programs increased significantly during this period." U.S. General Accounting Office, Water Quality: Federal Role in Addressing and Contributing to Nonpoint Source Pollution (1999).

Section 303(d) of the Act, 33 U.S.C.A. § 1313(d), requires states to identify pollution-impaired water segments and develop "total maximum daily loads" (TMDLs) that set the maximum amount of pollution that a water body can receive without violating water quality standards. The Act imposes a mandate on the states to identify waters that cannot meet federal effluent limitations and to establish TMDLs for pollutants identified by the EPA. If a state fails to identify its impaired waters or establish the required TMDLs, the EPA must do so. The first listed waters and TMDLs were due to the EPA in mid-1979, or 180 days afer the Agency published the first list of pollutants regulated under section 303(d).

A TMDL includes a quantitative assessment of water quality problems, pollution sources, and pollution reductions needed to restore and protect a river, stream, or lake. TMDLs may address all pollution sources, including point sources such as sewage or industrial plant discharges, nonpoint sources, such as runoff from roads, farm fields, and forests, and naturally occurring sources, such as runoff from undisturbed lands. If a state fails to develop TMDLs, the EPA is required under section 303(d) to develop a priority list for the state and establish a federal TMDL for the impaired body of water.

The TMDL program, in effect, helps the various government agencies to identify impaired waters and, after the application of BATs fails to control pollutants, establish priorities for their protection through the formation of plans to manage excess pollutants entering the affected bodies of water. The EPA's water programs and their state counterparts

> are increasingly emphasizing watershed and water quality-based assessment and integrated analysis of point and nonpoint sources. Better Assessment Science Integrating Point and Nonpoint Sources (BASINS) is a [modeling] system developed to meet the needs of ... agencies. It integrates a geographic information system (GIS), national watershed data, and state-of-the-art environmental assessment and modeling tools into one convenient package. Originally released in September 1996, BASINS addresses three objectives: (1) to facilitate examination of environmental information, (2) to provide an integrated watershed and modeling framework, and (3) to support analysis of point and nonpoint source management alternatives. It supports the development of TMDLs, which require a watershed-based approach that integrates both point and nonpoint sources.

U.S. EPA, BASINS 2.0 <http://www.epa.gov/OST/BASINS/basinsv2.htm, updated 5/24/99; downloaded 8/25/99>.

Section 305(b) requires states to prepare a water quality inventory every two years to document the status of water bodies that have been assessed. Under section 304(l), states identified all surface waters adversely affected by toxic (65 classes of compounds), conventional (such as BOD, total suspended solids, fecal coliform, and oil and grease), and nonconventional (such as ammonia, chlorine, and iron) pollutants from both point and nonpoint sources. Under section 314(a), states identify publicly owned lakes for which uses are known to be impaired by point and nonpoint sources.

The TMDL program is technically complex and largely dependent upon the states for implementation. When TMDLs are established, wastewater treatment plants for communities and industry may need new technology. States and EPA enforce the TMDLs through permits which include the pollutant limits and a schedule for compliance. For waters impaired by nonpoint source runoff, because there are no federal controls over these sources under the Clean Water Act, the primary implementation measures will be state-run nonpoint source management programs coupled with state, local, and federal land management programs and authorities. See 33 U.S.C.A. § 1329.

Most states have lacked the money to do TMDL analyses, which involve a complex assessment of point and nonpoint sources and mathematical modeling.[1] Moreover, the cost of reducing the pollutants may become a factor. "[A] large number of the nation's waters cannot meet water quality standards with point-source control alone. In some cases, it may be cost prohibitive to reduce point-source loading further." Carl W. Chen et al., Decision Support System for Total Maximum Daily Load, 125 J. OF

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[1] The Administration proposes to spend $45 million in FY 2001 on grants to the states to assist them in developing their TMDL programs. See Office of Management and Budget, Budget of the United States Government, Fiscal Year 2001 937 (2000).

ENVTL. ENGINEERING 653 (1999).

Meanwhile, the EPA has been reluctant to interfere with the states to move the TMDL program along. The Agency also appears to have lacked the resources to do the TMDL analyses itself. Congressional commentators therefore have noted critically that there has been little implementation by the EPA or the states of the TMDL provision since 1979.

Illustrative of this point is the fact that in recent years, national and local environmental groups have filed more than 20 lawsuits against EPA, claiming the Agency has failed to fulfill its Clean Water Act requirements. The EPA is concerned about diverting agency resources from other high-priority water quality activities in order to meet the courts' orders, especially if other lawsuits yield similar results. In October 1996, the EPA created an advisory committee to solicit advice on the TMDL implementation problem. Recommendations from the advisory committee, received in July 1998, form much of the basis for the current TMDL rulemaking.

In 1997, the EPA Office of Water issued guidelines to the Agency's regional administrators in an effort to give greater impetus to the TMDL program. According to those guidelines, "If a State fails to meet its obligations under section 303(d), [the EPA regional offices] will need to step in. <u>However, it is my goal that every State will succeed in fully meeting the requirements of section 303(d) and taking the needed action to implement approved TMDLs."</u> Memorandum from Robert Perciasepe, Assistant Administrator for Water, to Regional Administrators, New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs) (Aug. 8, 1997)

(emphasis in original) <http://www.epa.gov/OWOW/tmdl/ratepace.html, downloaded 9/1/99>.

Despite the issues and lack of progress in implementing the 1972 requirements, it is not clear at this point whether Congress will reauthorize the Clean Water Act in the 106th Congress in order to address the TMDL matters. But it is, of course, entirely up to Congress to determine which changes, if any, are needed in the current TMDL program.

B. PROPOSED REVISIONS TO THE PART 130 REGULATIONS

The EPA carries out the TMDL program under the Part 130 regulations (Water Quality Planning and Management). 40 C.F.R. Part 130. The overall purpose of the current water quality management program is to establish federal policy requirements for water quality planning, management and implementation under the Clean Water Act. The Agency intends the management process is to be "a dynamic one, in which requirements and emphases vary over time." The TMDL program creates a process for identifying water-quality limited segments that require waste-load allocations under the NPDES permit program.

"A TMDL is established to attain or maintain the water quality standard for a specific pollutant that has been identified as the cause of an impairment or threat to a water body." See 64 Fed. Reg. at 46,030. States must set their TMDLs "at levels necessary to meet water quality standards[,] with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between pollutant loads and water quality." See id.

In the proposed rule, the EPA announces nine major changes to the current regulatory scheme under Part 130. The proposal would:

- Revise definitions of "TMDL," "wasteload allocation," and "load allocation."
- Amend definitions of "impaired water body," "threatened water body," "pollution," "pollutant," "reasonable assurance" and "water body" that clarify EPA's existing interpretation of these terms.
- Add a new requirement for a more comprehensive list and a new format for the list.
- Add a new requirement that states, territories and authorized Tribes establish and submit schedules for establishing TMDLs for all water bodies impaired or threatened by pollutants.
- Establish a new requirement that the listing methodologies developed by states, territories and authorized Tribes be more specific, subject to public review, and submitted to EPA on January 31 of every second, fourth or fifth year.
- Create a possible change in the listing cycle so that states, territories and authorized Tribes submit lists to EPA on October 1 of every second, fourth or fifth year beginning in the year 2000.
- Make it clear that TMDLs include 10 specific elements.
- Create a new requirement for an implementation plan as a required element of a TMDL.
- Establish new public participation requirements.

On the same date that the Agency proposed to amend the TMDL regulation, the EPA proposed a regulation to revise the National Pollutant Discharge Elimination System (NPDES) program to strengthen the overall federal water quality management program. See Revisions to the National Pollutant Discharge Elimination System

Program and Federal Antidegradation Policy in Support of Revisions to the Water Quality Planning and Management Regulation, 64 Fed. Reg. 46,058 (Aug. 23, 1999) (to be codified at 40 C.F.R. parts 122, 123, 124 and 131). This regulation would allow the Agency to object to a state's decision to allow an NPDES permit to lapse for discharges into impaired bodies of water with or without TMDLs. Specifically, the rule would spell out the Agency's "discretionary authority to object to, and reissue, if necessary, State-issued expired and administratively continued permits authorizing discharges into water bodies in the absence of an EPA[-]approved or [-]established TMDL." Likewise, it also would grant the Agency the discretion to issue NPDES permits for discharges into impaired bodies of water with established TMDLs. It needs to be stressed that the second proposed rule would not mandate a particular EPA regulatory response under the first proposed rule in the absence of specific TMDLs for discrete bodies of water in any state, regardless of the legal status of a discharge permit for given pollutants, however.

Additionally, the EPA has attempted in the August 23 proposed rulemaking to get at the remaining sources of pollution under the Act's section 319 management program for Nonpoint sources of pollution. These sources include agricultural runoff, which the Agency has identified in its most recent 305(b) report to Congress as one of the last remaining sources of unregulated pollution in the nation's lakes and rivers. See U.S. Environmental Protection Agency, The Quality of Our Nation's Waters: Water Quality Report to Congress (1998) <http://www.epa.gov/watrhome/305b/index.html, downloaded 1/27/00>.

Critical to this effort to move TMDLs into the area of watershed protection is

section 304(f), which requires the EPA to issue guidelines on how to identify and evaluate the extent of Nonpoint sources of pollutants and methods to control them, including pollution resulting from "agricultural and silvicultural activities, including runoff from fields and crop and forest lands; ... ." See 33 U.S.C.A. § 1314(f) (emphasis added). Thus, farmers, ranchers and other sources of Nonpoint discharges may be asked to use alternative methods in their operations to prevent fertilizers and pesticides from reaching rivers. See Congressional Research Service, Clean Water Act and TMDLs (1997). It is for this reason that "[t]he TMDL issue has been controversial, in part because of requirements and costs now facing states to implement this provision of the law. Industries, cities, farmers, and others may be required to use new pollution controls to meet TMDL requirements." See Congressional Research Service, Clean Water Act Reauthorization (1999).

C. THE PROPOSED TMDL RULE WOULD DELAY THE COMPLETION OF THE TMDL PROCESS FOR MANY YEARS IN VIOLATION OF THE CLEAN WATER ACT

One of ASCE's principal criticisms of the current TMDL program is the slowness with which states have developed their TMDLs. ASCE believes that the August 23 proposed rule on TMDLs would exacerbate the problem of long delays in the implementation of the program. The fact that the EPA might invoke the requirements of the second proposed rulemaking of August 23 and issue NPDES permits for those impaired waters where no TMDLs have been established – in effect bypassing the requirements of section 303(d) – could not solve the Agency's long-term problem caused by the lack of the lawful TMDLs, which are required by the Act. Nor could it provide any greater protection for human health and the environment. From a purely environmental perspective, the TMDLs are designed to help identify impaired waters in

the first place: if there are no TMDLs, how is the EPA to know where to begin to issue or reissue permits? Without TMDLs there is no way for federal or state regulators to set priorities or even to know which water bodies are most seriously impaired.

The EPA, then, must return to section 303(d) to establish rational answers to the national problem of impaired water bodies. We wish to stress that the requirements of section 303(d) are imperative, not discretionary; the section creates a positive duty which the states and, in their failure to act, the EPA were bound to obey expeditiously. The passage of nearly 30 years does not lessen the force of the mandate.

Although a great many routine administrative matters are committed to an agency's discretion, including a limited power to not enforce existing regulations, "Congress did not set agencies free to disregard legislative direction in the statutory scheme that the agency administers." Heckler v. Chaney, 470 U.S. 821, 833 (1985). A reviewing court, moreover, will uphold the deadlines established in an act of Congress absent specific language in the law granting an agency the flexibility to postpone a congressionally mandated regulatory requirement.

The mandatory nature of the TMDL requirements is beyond dispute. See, e.g., Scott v. Hammond, 741 F.2d 992, 998 (7th Cir. 1984) (holding that the Clean Water Act "undoubtedly imposes mandatory duties on both the states and the EPA"); Alaska Center for the Environment v. Reilly, 762 F. Supp. 1422, 1429 (1991) ("Section 303(d) expressly requires the EPA to step into the states' shoes if their TMDL submissions or lists of water quality limited segments are inadequate") aff'd sub nom. Alaska Center for the Environment v. Browner, 20 F.3d 981 (9th Cir. 1994); Defenders of Wildlife v. Browner, 909 F. Supp. 1342 (1995) (same); Natural Resources Defense Council v. Fox, 909 F. Supp. 153 (1995) (same); Sierra Club v. Hankinson, 939 F. Supp. 865

(1996) (same); Raymond Profitt Foundation v. EPA, 930 F. Supp. 1088 (1996) (same); and Idaho Conservation League v. Browner, 968 F. Supp. 546 (1997) (same). See also Idaho Sportsmen's Coalition v. Browner, 951 F. Supp. 962 (1996) (the "extreme slowness" of the EPA's proposed 25-year schedule for implementing TMDLs in Idaho would violate the Clean Water Act). EPA is under court order via consent decrees in at least 18 cases to complete TMDLs in 16 states. See U.S. Environmental Protection Agency, Total Maximum Daily Load Program, Overview of TMDL Cases (9/1/99) <http://www.epa.gov/owow/tmdl/lawsuit2.html>.

The failure of the states to complete the program has been the subject of protracted litigation in Georgia, New York, California, Alaska and other states. Ironically, it was the states that urged adoption of the TMDL requirements, see Oliver A. Houck, TMDLs IV: The Final Frontier, 29 ENVTL. L. REP. 10,469 (1999). In addition, as one critic has noted,

> [T]he states have badly breached their responsibilities to identify waters that remain polluted and then to promulgate total maximum daily loads (TMDLs) for these waters under §303(d) of the Act. The TMDL process is a crucial mechanism for ratcheting down levels of pollution in watercourses that fail to meet water quality standards despite the application of technology- based controls to point sources. The goal of the TMDL process is the central goal of the Clean Water Act - to deliver truly clean water to Americans by identifying the additional controls that must yet be made to point and nonpoint sources in order to render waters suitable for uses such as fishing and swimming. Despite the importance of the TMDL process and the plain obligations it imposes on the states, the states have generally sought to avoid their duties in this area in an ignoble way. As one recent commentator put it, "The states have been all in favor of the responsibility for regulating water pollution through their water quality standards, right up to the point that they had to do it."

Drew Caputo, A Job Half Finished: the Clean Water Act After 25 Years, 27 Envtl. L. Rep. 10,574 (1997) (emphasis added).

Moreover, the states' failure to carry out the TMDL program – regardless of the reasons for their dereliction – does not free the EPA from the responsibility of filling the gap left by the states in the regulatory scheme established by Congress. To fail to do so would be to allow the states the power to invalidate an act of Congress through inaction.

Yet despite the abundant case law, the unambiguous mandate of section 303(d) and the fact that the EPA knows the TMDL program has moved at a "historically low" pace, the Agency's 1997 guidelines and proposed rule can only delay things further. The guidelines could well push the completion of the program even farther into the future by asking – not requiring – the states to develop their TMDLs over the next thirteen years, beginning with program submissions in 1998. See Perciasepe Memorandum, supra ("These State schedules should be expeditious and normally extend from eight to thirteen years in length, but could be shorter or slightly longer depending on State-specific factors.").

The TMDL rulemaking may well compound the problem of implementation for the future in other ways as well. Significantly, the proposed rule would remove from the Part 130 regulations the current EPA-imposed requirement that states identify the bodies of water for which TMDLs will be established in the two years immediately following a decision to set priority rankings for their impaired waters. Instead, the Agency would substitute a requirement that the states establish TMDL schedules "as expeditious[ly] as practicable," but not less than fifteen years after the August 23 rule is promulgated. 64 Fed. Reg. at 46,027. Finally, the EPA "recommends" that states should make it their "goal" to establish TMDLs for their impaired waters within five years of the effective date of the revised Part 130 standards. Taken together, these steps do

not appear to be picking up the TMDL program pace appreciably.

Therefore, despite the states' admittedly poor showing over the past 20 years, we continue to believe that the Agency should keep strict compliance deadlines in the Part 130 regulations. We are concerned that – by eliminating the current deadlines in Part 130 and by authorizing a further slowdown of up to thirteen years (as in the 1997 guidance) – the EPA is sending the wrong signal to the states, potentially letting them off the Act's strict water-quality hook for many years and providing them with a legal excuse for additional, wholly unnecessary regulatory delays. Assuming that all states were to take until 2011 to complete their TMDL calculations, that would mean the program would not be in place nationwide until nearly 40 years after the TMDL requirement was enacted in 1972 and more than 30 years after the 1979 deadline triggered under section 303(d)(2).

Nothing in the Clean Water Act supports the proposition that Congress authorized or intended for the EPA or the states to delay the implementation of the TMDL program for decades after enactment. Indeed, the language of section 303 requires the states to adopt water quality standards, which must precede the adoption of TMDLs, six months after enactment, i.e., no later than April 1973. 33 U.S.C.A. § 1313(a)(3)(A).[2] With the science and engineering readily available to complete the program rapidly, there is no technical reason for continued delays.

For the foregoing reasons, we believe that Congress must make certain that the Agency establishes and enforces a strict schedule for the states to complete the implementation of their TMDL programs. We suggest that Congress amend the Clean

[2] We have already noted that the first TMDLs were due to the EPA by mid-1979.

Water Act to ensure that the Agency's recommended five-year "goal" proposed on August 23 be in the form of a new, mandatory TMDL deadline. At the same time, we believe that Congress must conduct vigorous oversight of the TMDL program to guarantee that the EPA moves expeditiously to adopt state TMDLs in the absence of rapid federal or state implementation of the proposed rulemaking.

D. THE EPA IS CORRECTLY ATTEMPTING TO USE THE TMDL PROGRAM TO REDUCE THE DISCHARGE OF POLLUTANTS INTO WATERSHEDS FROM NONPOINT SOURCES

As noted above, the EPA intends to use the TMDL program to focus on the management of point and nonpoint sources of pollution throughout a given watershed.

> The TMDL specifies the amount of a pollutant that needs to be reduced so that the waterbody will achieve State water quality standards, allocates reductions in the pollutant or pollutants among the sources in a watershed, and provides a guide to taking on-the-ground actions needed to restore a waterbody. TMDLs can focus on a small segment of a waterbody or on a group of waters in a larger watershed.

See Review of the Environmental Protection Agency's New Agricultural and Silvicultural Regulatory Programs: Hearing Before the Subcomm. on Department Operations, Oversight, Nutrition and Forestry of the House Comm. on Agriculture, 106th Congress 83 (1999) (statement of J. Charles Fox, Assistant Administrator for Water, Environmental Protection Agency) (emphasis added) (hereinafter House Agriculture Oversight Hearing).

Indeed, the Agency makes it clear that all potential pollutant sources already are subject to the TMDL program under current EPA Part 130 regulations. "TMDLs are established [under current rules] for water body and pollutant combinations for water bodies impaired by point sources, nonpoint sources, or a combination of point and nonpoint sources." 64 Fed. Reg. at 46,013 (emphasis added). To date, no nonpoint sources have been regulated as point sources under the National Pollutant Discharge

Elimination System (NPDES). The August 23 proposal merely would extend some wasteload allocations for impaired water bodies to apply to a single point source or group of point sources that already are subject to a general NPDES permit. Id. at 46,016. These aggregate allocations covering permitted point sources are a sensible solution to the problem of managing runoff from multiple sources, none of which is easily identifiable by itself. This is a long way from saying that nonpoint sources would themselves be subject to an NPDES permit, however. Indeed, nonpoint sources will be subject to nothing more stringent than nonregulatory, cost-effective "best management practices" (BMPs) to prevent runoff in the first place, according to the Agency's August 23 proposed revisions to water quality management plans. See 64 Fed. Reg. at 46,052-46,053. Possible BMP prevention measures could include curbs, dikes, water bars, vegetative ground cover to prevent erosion, rotational grazing, crop rotation, in-paddock livestock feeding and watering, better calculation of fertilizer and pesticide needs, ditch stabilization and a number of other affordable runoff control means.

Nevertheless, critics in Congress, the states and industry have attacked this BMP approach as wrong, arguing that the EPA may not extend the TMDL program under the state-delegated powers in section 319 to reach any nonpoint sources in order to moderate the impact of runoff from farms and forests, no matter how indirect or benign the proposed regulatory regime. See, e.g., House Agriculture Oversight Hearing at 7 (statement of Rep. Goodlatte) ("I sincerely doubt that the EPA will be able to prove ... that they have [sic] the statutory authority to implement the regulations we are reviewing today."); at 18 (statement of John Barrett, Texas cotton farmer); and at 25 (statement of Arthur R. Nash Jr., Deputy Director, Michigan Department of

Environmental Quality) (criticizing the TMDL proposal for failing to establish a federal-state partnership). It has even been argued that the EPA may not identify those waters that have been impaired by nonpoint sources. id. at 106.

Such criticisms are unwarranted. To be sure, section 319 of the Act requires the states to implement management programs for nonpoint sources of pollution. The federal presence is weak and almost entirely passive.[3] To make matters worse, Congress chronically has underfunded the section 319 programs.[4] See Note, Agriculture, Nonpoint Source Pollution, and Regulatory Control: The Clean Water Act's Bleak Present and Future, 20 HARV. ENVTL. L. REV. 515, 526 (1996). Nevertheless, a key element of the section 319 management program is the information developed under the water quality standards provisions of section 303. And of course the law requires the Agency – not the states – to issue guidelines on the best way to identify nonpoint sources of pollution. See 33 U.S.C.A. § 1314(f). One type of pollutant that is specifically to be regulated under the Act is "agricultural waste discharged into water." Id. at 1362(6).[5]

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[3] Section 319 replaced the even weaker nonpoint source program under section 208.

[4] The Administration is proposing to increase state nonpoint source grants by $50 million in FY 2001, in part to assist states in preparing TMDLs. It also is proposing to increase section 106 grant funding by $45 million for state TMDL programs.

[5] The Act excludes agricultural storm water discharges and return flows from irrigated agriculture from its definition of point sources. Id. at 1362(14). This exemption is narrow and does not extend to other point-source releases from agricultural operations. See, e.g., Concerned Area Residents for the Environment v. Southview Farm, 34 F.3d 114 (2d. Cir.1994) (evidence that liquid manure runoff from a large dairy farm was primarily caused by over saturation of fields with manure, rather than rain, supported finding that the agricultural storm water discharge exemption in the Clean Water Act did not apply to the dairy farm).

ASCE believes that one should not read section 319 in isolation in order to shield nonpoint sources from BMPs or to prevent the EPA from otherwise seeking to ease the worst effects of nonpoint sources of pollution based upon a watershedwide approach under the section 303(d) TMDL program. It is a well-established maxim of statutory interpretation that every act of Congress must be read in its entirety in order to give effect to a coherent regulatory scheme. Acts of Congress "should not be read as a series of unrelated and isolated provisions." Gustafson v. Alloyd Co.. 513 U.S. 561, 570 (1995). Read in their entirety, the provisions of the Act require the EPA to oversee the implementation of state pollution control measures for nonpoint sources and to intervene aggressively in their absence.

In any case, the states cannot now plausibly argue that their failure over the past 30 years to adopt the protective watershed protection measures required under section 303 somehow entitles them to greater deference to deal with agricultural runoff and other nonpoint pollution sources under their section 319 authority. The state management programs under section 319 are highly dependent upon the information developed in the section 303 planning process. If the federal-state partnership has been threatened at all, it has been jeopardized by the states' delinquency in implementing the TMDL program enacted in 1972.

E. THE EPA SHOULD IMPROVE THE SCIENTIFIC VALIDITY OF TMDLS BY ADOPTING A NEW METHOD OF CALCULATING THE LOADS IN ORDER TO PROMOTE THEIR USE ON A WATERSHED BASIS

ASCE supports the use of a watershed management program to protect critical water bodies. The Society believes the EPA should consider the adoption of a decision support system to calculate total maximum daily loads and agrees that the Agency

should redefine them in order to identify what a TMDL is and what it must contain. We believe these changes would provide greater regulatory clarity, encourage the use of TMDLs and ensure greater consistency among states, territories and authorized Tribes in the use of TMDLs so that the program may protect entire watersheds where necessary and possible. See Michael M. Wenig, How "Total" Are "Total Maximum Daily Loads"? - Legal Issues Regarding the Scope of Watershed-Based Pollution Control Under the Clean Water Act, 12 TUL. ENVTL. L.J. 87 (1998) (concluding that the TMDLs process "should be pursued to the fullest practical extent because it provides a technical, flexible framework for addressing cumulative sources of watershed harm; in short, it promotes an ecosystem approach").

ASCE strongly supports basin-wide water resources management. The Society encourages all government agencies charged with implementing the Clean Water Act to manage and regulate water on a watershed basis. ASCE further supports integrating programs and goals across political boundaries. Any federal regulations defining the goals and standards for watershed management should permit flexibility and accommodate regional needs, however.

In order to provide greater scientific certainty, ASCE strongly recommends that the Agency consider the adoption of a new method for calculating TMDLs. We believe that EPA and the states ought to follow a decision support system that goes beyond the established watershed modeling program — the BASINS model — now used by the government to analyze a watershed approach to TMDL development.

> BASINS is strictly a simulation model, which provides no guidance on how to calculate TMDLs. Following the traditional command and control approach, BASINS is used by regulatory agencies to make analyses and decisions on TMDLs. The new environmental policy, however, requires a

> change in the way TMDLs are determined and implemented. ... As an alternative to BASINS, a decision support system has been developed hat goes beyond a watershed model. It includes a road map for stakeholders to follow and provides scientific information along the way.

Chen, *supra*, at 653 (emphasis added).

A dynamic watershed simulation model such as is contained in the Watershed Analysis Risk Management Framework (WARMF) described in the recent literature accounts for meteorology, point-source loads, reservoir flow release, flow diversion data and, significantly for this rulemaking, air quality. Integration of the effects of air pollution in the calculation of TMDLS for impaired water bodies is important, given the EPA's acknowledged lack of hard data on this problem. See 64 Fed. Reg. at 46,022 ("EPA recognizes that data, analytical approaches and models to establish TMDLs for pollutants originating from air deposition may not be immediately available, especially for pollutants subject to long range transport in the atmosphere.")

The dynamic watershed simulation model within the WARMF is superior to the BASINS model. It is easy to adapt the model to any "real" river basin and check the results against observed data because all observed data were collected under dynamic conditions. WARMF allows its users to specify the intended use and the criteria to be met. It then calculates the TMDL to protect the intended use of the water body. The model's graphical user interface makes it easy for stakeholders, not just technical experts, to run and to understand. In addition, WARMF can calculate multiple possible TMDL solutions, allowing stakeholders to negotiate the most acceptable solution. The model has an algorithm to evaluate pollution trading between point and nonpoint source loads. Each of these features is necessary in order to calculate the proper TMDLs under the EPA's guidelines.

In addition to its scientific and engineering capabilities, the WARMF would aid in the calculation of TMDLs to a greater degree of certainty and ensure the adoption of a consensus watershed management plan.

Mr. Chairman, that concludes our prepared remarks. We would be pleased to answer questions from the Subcommittee. If you have any questions, please contact Michael Charles of our Washington Office at (202) 789-2200 or by E-mail at mcharles@asce.org.

# # #

Decision Support System for Total Maximum Daily Load

By Carl W. Chen,[1] Member, ASCE, Joel Herr,[2] Laura Ziemelis,[3] Robert A. Goldstein,[4] and Larry Olmsted[5]

Abstract: A decision support system (DSS) was developed to calculate total maximum daily loads (TMDLs) of various pollutants for water quality limited sections (WQLS) within a river basin. The DSS includes a watershed simulation model, a database, a consensus building module, and a TMDL module that provides a worksheet for the calculations. The system can generate multiple combinations of waste load allocation and non-point-load allocation to meet the water quality criteria for the intended uses of the WQLS. Considering various possible solutions, the regulatory agency and local stakeholders can negotiate an option most agreeable to all parties. The methodology is demonstrated with an example application in the Catawba River Basin, which extends from North Carolina to South Carolina.

INTRODUCTION

Waste discharges into all receiving waters in the United States are regulated by the Federal Clean Water Act (CWA). The waste dischargers are required to apply for a permit under the National Pollution Discharge Elimination System (NPDES). The act is administered by the U.S. Environmental Protection Agency (EPA). The authority to issue NPDES permits has been delegated to the states.

To date, the NPDES permit has only been applied to point source dischargers. Point-source control has improved the water quality in a majority of rivers. However, a large number of the nation's waters cannot meet water quality standards with point-source control alone. In some cases, it may be cost prohibitive to reduce point-source loading further. For a cost-effective solution to the remaining water quality problems, it may be necessary to include non-point-source control in watershed management plans.

Under section 303d of the CWA, regulators are supposed to identify water quality limited sections (WQLS) of rivers that cannot meet the standard with point-source control alone. The regulators are then required to determine the total maximum daily load (TMDL) of pollutants, including non-point-source load, that will not lead to water quality violations.

The states, which are authorized to issue NPDES permits, have been slow to provide 303d lists of WQLS and determine their TMDLs. The EPA ignored their inaction until environmental groups won legal challenges against them for not enforcing the law. Under a court order, the EPA is now forcing states to provide a 303d list of rivers. Once on the list, no new NPDES permits can be issued on a WQLS until a TMDL has been calculated. The determination of the TMDL for a WQLS on the first list must be completed in two years. The TMDL must include non-point-source load [load allocation (LA)], point-source load [waste load allocation (WLA)], margin of safety, and a growth factor. It must consider the water quality conditions for all seasons. The act also requires a public allocation of the assimilative capacity defined by the TMDLs. After the TMDLs for the first 303d list are completed, states are to update the list every two years. The goal is to determine TMDLs for all WQLS in the next 8–10 years. After that, states must revisit the TMDL in a continuous planning process.

In view of the new requirements, the EPA and the states are revamping the permitting process. The old procedure issued each NPDES permit separately and renewed the permit every five years. The new procedure uses a watershed approach: All permits are issued and renewed together every five years.

To support the development of TMDLs using a watershed approach, the EPA has distributed BASINS (Lahlou et al. 1996). However, BASINS is strictly a simulation model, which provides no guidance on how to calculate TMDLs. Following the traditional command and control approach, BASINS is used by regulatory agencies to make analyses and decisions on TMDLs.

The new environmental policy, however, requires a change in the way TMDLs are determined and implemented. It requires a public allocation of assimilative capacity, involving local stakeholders in the decision making process. Since stakeholders have diverse interests and priorities, it is difficult to devise a decision model to accommodate them all.

As an alternative to BASINS, a decision support system (DSS) has been developed that goes beyond a watershed model. It includes a road map for stakeholders to follow and provides scientific information along the way. With this information, stakeholders can discuss, debate, vote, and eventually form coalitions, and reach a consensus on TMDLs. For a consensus approach to be successful, however, it is critical to find several possible solutions of TMDLs from which the regulator and local stakeholders can choose. The present paper describes the DSS developed to calculate TMDLs for a river basin. Examples of TMDL calculations will be demonstrated with an application to the Catawba River Basin of North Carolina and South Carolina.

METHODOLOGY

Several issues must be considered in developing a DSS for TMDL calculations. One item is the conceptual approach. In the air pollution control field, there is a big bubble concept. According to this concept, one can calculate the total amount of pollutant that can be released to the bubble before exceeding the air quality standard. The total can then be allocated to individual dischargers. This is referred to as a top-down approach.

In the water pollution control field, waste discharges are confined to waterways. Because the entire watershed cannot be considered a completely mixed reactor, the top-down approach cannot be used to perform the waste load allocation. We, therefore, formulated a bottom-up approach. According to

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this approach, there can be many WQLS in the entire river basin. These WQLS are the control points for which TMDLs are to be calculated. Each TMDL is the allowable loading from the watershed area tributary to a WQLS. The calculation can proceed from the most upstream control point to the most downstream control point of the river basin.

Another item to consider is the type of model to use. In the past, TMDLs were determined only for point-source dischargers. For that, steady-state water quality models (e.g., QUAL-IIe) were used to calculate TMDLs, based on a critical low flow condition, defined as the minimum seven-day average flow in 10 years (7Q10).

There are a number of problems with using a steady-state model under a low flow condition. For many rivers, steady-state conditions rarely exist in nature. Critical flow conditions occur infrequently, and when they do, water quality may not be the only issue of concern. The TMDLs are supposed to prevent many different water quality problems. Some of these problems, such as high total suspended sediment or high algal density, may not occur during the critical low flow period. Also, estimating 7Q10 values requires long-term records. These records may be available for some gauging stations, but are probably not available for most WQLS. Furthermore, a receiving water model such as QUAL-IIe cannot address management issues related to changing land use, which can lead to changes in both point- and non-point-source loads.

For these reasons, we use a dynamic watershed model to simulate runoff and non-point-source loads from catchments, account for point-source loads, route water and pollutants through rivers and reservoirs, and predict water quality throughout the river basin. The watershed model computes a TMDL by adjusting the pollutant loads upstream of a WQLS until the predicted water quality meets a specified criterion.

The water quality criterion by itself is also an issue to consider. Often, a criterion is set for a national standard not relevant to local conditions or a single minimum value is used as the criterion without recognizing the dynamic nature of the watershed system. In our system, the stakeholders can relate water quality criteria to local intended uses. The criteria can be specified in several different statistics, i.e., minimum daily value, minimum seven-day mean, minimum seven-day geometric mean, maximum daily value, and likewise. The dynamic watershed model will simulate seasonal variations of flow and water quality, and generate percent compliance information for stakeholders.

The TMDLs require a margin of safety. In the past, the margin of safety was incorporated by using conservative estimates for everything, i.e., a low value of 7Q10, a high value of waste load, a small decay coefficient, and even a higher water quality standard. The compound effect of several conservative estimates can result in unrealistic TMDLs. To eliminate the compound effect of conservative assumptions, we choose to use realistic numbers in all model simulations. It is left to the regulator and stakeholders to apply a safety factor to the final answer.

The TMDLs also need to account for growth according to the EPA guidelines. In our approach, a planner can make a projection of future land use and point-source load. The projected land use and point-source load can be inputted to the model for the TMDL calculations.

There is no question that the new requirement for stakeholders' consensus is better than the old command and control approach. The question is how to involve stakeholders in the decision making process. For that, we use a Windows graphical user interface (GUI). The GUI provides a road map to guide stakeholders through the decision making steps. The GUI displays the magnitude and spatial distribution of point- and non-point-source loads on a map so that stakeholders can understand where the pollutants come from. The GUI displays an easy to understand map to show whether the pollution loads will produce water quality that meets the criterion for intended uses. In short, the GUI allows stakeholders to make informed decisions, using a sophisticated watershed model as the analytical tool.

Watershed Analysis Risk Management Framework (WARMF)

The DSS described in the present paper is WARMF. WARMF contains five tightly integrated modules (Fig. 1). The engineering module is a dynamic watershed simulation model. The data module provides meteorology, air quality, point-source load, reservoir flow release, and flow diversion data to drive the simulation model. It also contains observed flow and water quality data to check against model results. The knowledge module contains reference information about legal constraints. The TMDL module can guide stakeholders through a series of steps to calculate TMDLs using the watershed approach. The consensus module helps stakeholders reach a consensus on a watershed management plan.

All of these modules are integrated by the GUI. The GUI not only provides menus for the user to issue commands, but also automatically furnishes data to the models and stores output for display in the form of color-coded geographic information system maps, bar charts, and spreadsheets.

The present paper focuses on the TMDL module. All necessary scientific calculations to determine TMDLs are performed by the engineering module.

Engineering Module

The models embedded in WARMF were adapted from many well established simulation codes. The main computing engine was taken from the Integrated Lake-Watershed Acidification Study (ILWAS) model (Chen et al. 1983; Gherini et al. 1985). The ILWAS model divides a watershed into land catchments, stream segments, and lake layers. Land catchments are further divided into canopy and soil layers. These watershed compartments are connected to form a network for hydrologic and water quality simulations.

The ILWAS code was enhanced to handle a river basin with multiple reservoirs. Land use was modified to include any land use (e.g., farms and urbanized areas). Algorithms for erosion, deposition, resuspension, and transport of sediment were adapted and modified from ANSWERS (Beasley et al. 1980; Beasley and Huggins 1991). The pollutant accumulation on the land surface was modified from the Storm Water Management Model (Chen and Shubinski 1971; "SWMM" 1992). Instead of using export coefficients, a better mixing and wash-off algorithm was used to simulate the processes that generate

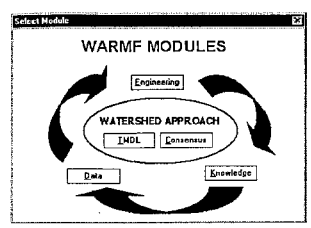


FIG. 1. Modular Design of WARMF Decision Support System for Watershed Management

non-point-source loading. The capability to evaluate the effect of buffer strips was added. Changes were made to accept point-source discharges. The water quality parameters were expanded from those important to acid-base chemistry to include conventional water quality parameters such as biochemical oxygen demand (BOD), fecal coliform, dissolved oxygen, nutrients, algae, total suspended sediment, and pesticides. The sediment sorption-desorption of pesticides and phosphorus and the kinetics of nutrients and algal dynamics were adapted from WASP5 (Ambrose et al. 1991). The formulations of WARMF were documented in Chen et al. (1998).

TMDL Module

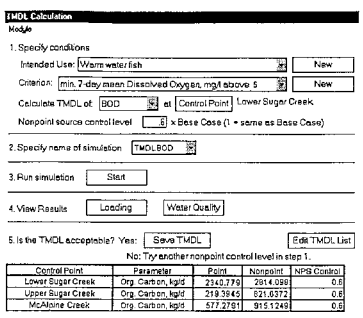
The purpose of the TMDL module is to provide a road map for TMDL calculations (Fig. 2). The road map has the appearance of a simple worksheet; however, the engineering module actually performs the calculations and feeds the answers to the worksheet.

TMDL calculations require five steps: specify conditions, specify name of simulation, run simulation, view results, and determine whether there is a solution. If a solution is found, the point-source allocation (WLA) and non-point-source allocation (LA) can be saved. If a solution cannot be found, users can make adjustments and perform another simulation run.

Step 1: Specify Conditions

WARMF can calculate TMDLs for multiple parameters and control points; however, it is necessary to specify the basis of calculations for one condition at a time. The basis of calculations includes five items: intended use, water quality criterion, control parameter, control point, and level of non-point-source control. The program provides a list of typical intended uses, i.e., cold water fish habitat, warm water fish habitat, swimmable water, public water supply, and aesthetics. The user can either select one from the list or push the New button to enter an intended use not on the list.

The criterion specifies a water quality condition that must be met in order to support the intended use. It includes a quality parameter, metrics of evaluation (e.g., minimum or maximum value, seven-day average, 30-day geometric mean, etc.), and a percent compliance requirement. The list of criteria for various intended uses is usually specified through the consensus module. Over here, the user will only select an item from the list. To examine the effect of the criterion on TMDLs, the user can push the New button and follow the steps to enter a revised criterion.



Control Point	Parameter	Point	Nonpoint	NPS Control
Lower Sugar Creek	Org. Carbon, kg/d	2340.779	2914.098	0.8
Upper Sugar Creek	Org. Carbon, kg/d	219.3945	621.0372	0.8
McAlpine Creek	Org. Carbon, kg/d	577.2761	915.1249	0.8

FIG. 2. Road Map for TMDL Calculation

The third item to specify is the parameter to control in order to meet the water quality criterion. This parameter may be different from the parameter in the criterion. For example, to meet the criterion of algal density requires the control of TMDL for phosphorus or nitrogen, depending on which nutrient is limiting. The TMDL of BOD or ammonia may be calculated to meet the dissolved oxygen criterion. If TMDLs for both BOD and ammonia are to be determined, WARMF can only do one parameter at a time. The user could first specify a given treatment level of BOD and then have WARMF calculate a TMDL for ammonia.

If an irrelevant control parameter is selected, WARMF will alert the user with a message after finding that the selected control parameter has no effect on the water quality criterion. The user can then go back and select the correct control parameter.

The fourth item to specify is the location of the control point (WQLS), where the water quality criterion must be met. This is done by using the mouse to point and click on the control point location on the basin map.

The fifth item to specify is the control level of non-point-source load. WARMF calculates the existing non-point-source load and then applies a fractional multiplier to reduce its value to the specified control level. Under such specified level of non-point-source control, WARMF then calculates the point-source load allocation for the WQLS to still meet the water quality criterion.

If the user specifies little or no non-point-source reduction, it may not be possible to meet the criterion even with zero point-source loading. In this case, WARMF will advise the user that there is no solution, and it will be necessary to go back and try another alternative with increased non-point-source control. To offer multiple solutions to stakeholders, it may be necessary to calculate TMDLs under several levels of non-point-source control. WARMF does not calculate a total TMDL and split it between point- and non-point-source loads. WARMF's approach takes into account the timing difference of point- and non-point-source loads. The water quality impacts of point- and non-point-source loads are different on a per unit weight basis.

Step 2: Name of Simulation

The name of the simulation scenario is specified in this step. It can be any one word name descriptive of the simulation case (e.g., TMDLBOD). The name is used by the scenario manager, and all data associated with this scenario are saved under this name.

Step 3: Run Simulation

This step initiates the model run. WARMF will incorporate the specified non-point-source reduction and vary the point-source loading until the criterion is met with less than 1% to spare.

Step 4: View Results

WARMF simulates hydrology, non-point-source load, and water quality. Loading and water quality are two important simulation results to review in this step. Selecting Loading reveals bar charts showing the contribution of point- and non-point-source loading for different areas of the river basin. Selecting Water Quality shows the resulting water quality in a color-coded basin map. When a river section can meet the criteria for its specified uses, its is shown in green. Otherwise, it is shown in red. Under an acceptable scenario of TMDLs, all WQLS should be in green.

Step 5: TMDL Acceptable?

If a TMDL solution is found, the user can save the results into a list of acceptable TMDLs. If no solution is obtained, the user is advised to go back to step 1 for a higher level of control on non-point-source loads. A spreadsheet of all successful TMDLs can be displayed.

After the TMDL calculations are completed for a control point, the user can move on to the next control point downstream. As the control point moves downstream, WARMF will simulate the cumulative effect of all upstream pollution loads and their decay. TMDLs for the first control point may be adjusted downward to meet the water quality criterion for the downstream control point.

EXAMPLE APPLICATION

The methodology described above will be demonstrated with an example. WARMF has been adapted to the entire Catawba River Basin, but the smaller Sugar Creek drainage area near Charlotte, North Carolina will be used to determine TMDLs in this example. Fig. 3 shows the basin map of the entire Catawba River Basin, which extends from North Carolina to South Carolina. Fig. 4 shows the Sugar Creek Basin, which includes Upper Sugar Creek, McAlpine Creek, and Lower Sugar Creek. This example is hypothetical and is not an official TMDL calculation for the state of North Carolina.

Model Adaptation

To apply the model to the Catawba River Basin, digital elevation maps (DEMs) for that region were downloaded from the U.S. Geological Survey Web site. The DEMs were imported into WARMF to create a basin map to display on the computer monitor. The entire river basin, with a drainage area of approximately 5,000 sq mi, was divided into land catchments for runoff and non-point-load simulation. Fig. 3 shows one shaded catchment area. Runoff and nonpoint load from this area are routed to the river segment inside the catchment.

Land use data in ArcView shapefile format were imported to describe the surface characteristic of catchments. Point-source data were compiled from state and local agencies, and assigned to either river segments or reservoirs. Meteorological records from 21 stations were obtained from the National Climatic Data Center. Each meteorological station was assigned to nearby catchments, and precipitation and temperature adjustment factors were applied to account for orographic effects.

Model Validity

Model simulations were performed, and the results were compared to observed hydrology compiled from the U.S. Geological Survey and observed water quality from the EPA STORET. Graphical comparisons of simulated and observed data were used extensively to give stakeholders confidence in the validity of the model.

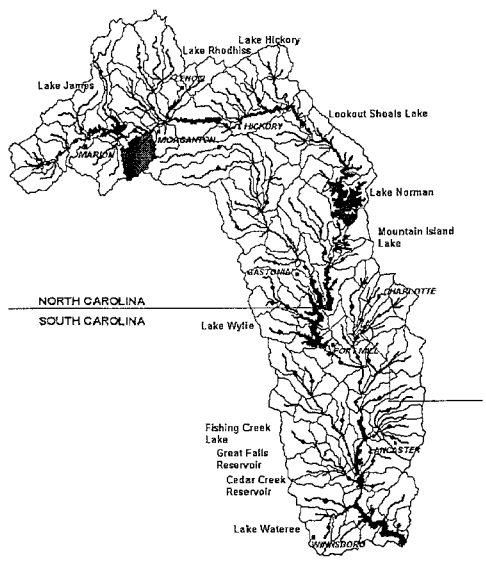


FIG. 3. Representation of Catawba River Basin by Network of Land Catchments, River Segments, and Reservoirs, with One Catchment Shaded

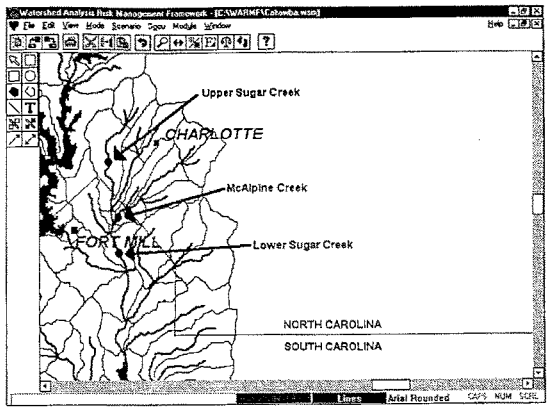


FIG. 4. Upper Sugar Creek, McAlpine Creek, and Lower Sugar Creek Areas of Catawba River Basin

The time period of the simulation is two years, from September 1992 to September 1994. Fig. 5 compares the simulated and observed temperatures at Upper Sugar Creek. Fig. 6 compares the simulated and observed dissolved oxygen at Upper Sugar Creek. Both comparisons show a good match for the model. Similar plots for McAlpine Creek and Lower Sugar Creek also show a good match.

For a statistical analysis, two parameters were used to calculate the discrepancy between the time series of simulated and observed data. The residual error was calculated by

$$R = \sum \frac{S - O}{n} \tag{1}$$

where R = residual error; S = simulated value; O = observed value; and n = number of observations. The absolute error was calculated by

$$A = \sum \frac{|S - O|}{n} \tag{2}$$

where A = absolute error. The absolute error can also be expressed as a percent

$$A(\%) = \sum \frac{|S - O|}{O} * 100 \tag{3}$$

Table 1 presents the residual and absolute errors of the model. The small residual errors suggest that overprediction

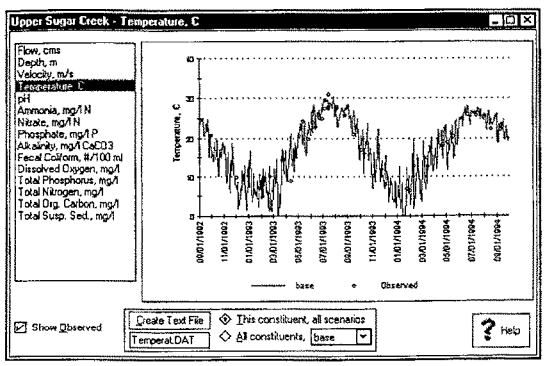


FIG. 5. Simulated and Observed Temperatures at Upper Sugar Creek

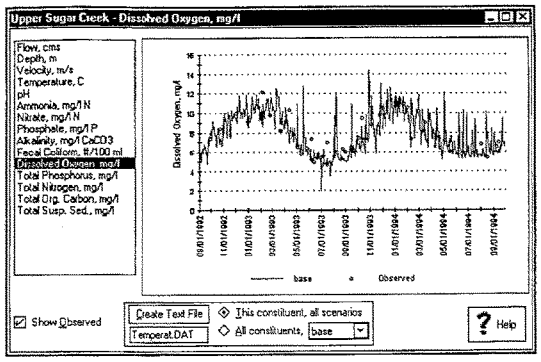


FIG. 6. Simulated and Observed Dissolved Oxygen at Upper Sugar Creek

TABLE 1. Residual and Absolute Errors of WARMF

Items (1)	Monitoring Stations: Upper Sugar Creek (2)	McAlpine Creek (3)	Lower Sugar Creek (4)
	51[a]	74[a]	62[a]
Temperature	—	—	—
Residual error (°C)	−0.01	−0.2	−0.18
Absolute error (°C)	2.43	2.50	2.08
Absolute error (%)	17.51	17.06	14.75
Dissolved oxygen	—	—	—
Residual error (mg/L)	0.11	−0.44	0.51
Absolute error (mg/L)	1.19	1.09	0.96
Absolute error (%)	16.55	14.16	14.14

[a]Number of observations.

and underprediction of the model are quite even for both temperature and dissolved oxygen. The absolute error is approximately 2.5°C for temperature and 1 mg/L for dissolved oxygen. The percent absolute error is roughly 16% for temperature and 15% for dissolved oxygen.

TMDL for BOD

The intended use for Upper Sugar Creek, McAlpine Creek, and Lower Sugar Creek was selected to be warm water fish habitat. The water quality criterion was a minimum seven-day average dissolved oxygen above 5 mg/L, requiring 100% compliance. The control points were Upper Sugar Creek first, then McAlpine Creek, followed by Lower Sugar Creek. The control parameter was BOD loading. The control levels of non-point-source loading ranged from 1.0 (0% reduction) to 0.6 (40% reduction).

Table 2 presents the alternative allocations of point- and non-point-BOD loads calculated by WARMF. For Upper Sugar Creek, there were no solutions for the trial allocations 1 and 2. This indicated that the water quality criterion was still exceeded with a 10% reduction of non-point-source loads and zero-point-source loading. A check on the water quality condition showed that Upper Sugar Creek was indeed colored red in the basin map. Allocations 3 and 4 suggested a significant trade-off between non-point-source allocation (LA) and point-source allocation (WLA). A 30% reduction of LA and an 86% reduction of WLA are required to meet the water quality criterion. A 10% additional reduction of LA will relax the WLA reduction by 22%.

TABLE 2. Alternative Allocations of Point and Nonpoint BOD Loads

Items (1)	Nonpoint reduction (%) (2)	Point load (kg/day) (3)	Nonpoint (kg/day) (4)	Total (kg/day) (5)
(a) Upper Sugar Creek				
Control point	—	—	—	—
Base condition	—	599	1,368	1,967
Allocation 1	0	No solution	—	—
Allocation 2	10	No solution	—	—
Allocation 3	30	84	958	1,042
Allocation 4	40	219	821	1,040
(b) McAlpine Creek				
Control point	—	—	—	—
Base condition	—	400	1,525	1,926
Allocation 1	0	363	1,525	1,889
Allocation 2	10	400	1,373	1,773
Allocation 3	30	524	1,068	1,591
Allocation 4	40	577	915	1,492
(c) Lower Sugar Creek				
Control point	—	—	—	—
Base condition	—	1,432	4,690	6,122
Allocation 1	0	1,004	4,690	5,694
Allocation 2	10	1,343	4,221	5,564
Allocation 3	30	2,010	3,283	5,293
Allocation 4	40	2,341	2,814	5,155

For McAlpine Creek, a small reduction of WLA from 400 kg/day to 363 kg/day is adequate with a zero reduction of LA. A 40% reduction of LA, however, can allow a 44% increase of WLA. For Lower Sugar Creek, the water quality under the base condition cannot meet the criterion. A reduction of WLA from 1,432 to 1,004 kg/day is needed with a zero reduction of LA. A 10% reduction in LA almost eliminates the need for a reduction of WLA. A 30% reduction of LA allows for a 40% increase in LA.

As shown in Table 2, multiple solutions can exist for different combinations of point- and non-point-source loads. The combined total TMDLs for point- and non-point-source allocations may not be the same for all acceptable solutions. In

some allocations, a small reduction of non-point-source load can accommodate an increase of point-source load.

Because of the cost differential between point and nonpoint controls, there is an opportunity for pollution trading. How to arrive at a cost sharing scheme, in which the point-source dischargers may pay for some non-point-source control in exchange for a less stringent requirement for their load reductions, can be evaluated through the consensus module of WARMF (Chen et al. 1997).

Upper Sugar Creek appears to be the most water quality restricted area within the Sugar Creek Basin. Without some help from non-point-source control, its water quality cannot meet the criteria with a zero discharge of point-source load. Even with a 40% reduction of LA, a 64% reduction of WLA is still needed in order to meet the criterion. In McAlpine and Lower Sugar Creeks, on the other hand, a 40% reduction of non-point-source allocation will allow an increase of point-source allocation.

CONCLUSIONS

In a river basin, there can be multiple water quality limited sections. The TMDL of a pollutant must be calculated for each section, moving from the most upstream one to the most downstream one.

There may be many combinations of point-source and non-point-source loads that can meet the water quality criterion. Multiple feasible solutions can provide an opportunity for the regulator and stakeholders to find the most agreeable TMDLs.

The point- and non-point-source loads for the feasible solutions may not add up to the same total, because of the timing difference in their discharges. This timing difference produces different water quality responses in the receiving water. WARMF, which contains models, a database, and a road map for TMDL calculation, is a tool that can guide regulators and stakeholders to calculate TMDLs for various pollutants at various water quality limited sections of a river basin.

ACKNOWLEDGMENTS

The development of WARMF has been a long-term research project. Under several contracts, funding has been provided by the Electric Power Research Institute of Palo Alto, Calif., the Duke Power Company of Huntersville, N.C., and the Water Resources Bureau of the Ministries of Economic Affairs, Taipei, Taiwan. For the Catawba River application, Tim Leonard of Duke Power furnished the land use data in GIS format. Ty Ziegler of Duke Power compiled the operation data of 11 reservoirs in the Catawba River Basin. Bill Foris of Duke Power furnished NPDES data, Hydrolab water quality data of reservoirs, and STORET water quality data of rivers. Many stakeholders from the state agencies of North and South Carolina, universities, county agencies, and Duke Power Company have become beta testers of WARMF. They have contributed ideas and data to the project.

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February 9, 2000

Senator Trent Lott
Senator Tom Daschle
Senator Richard Lugar
Senator Tom Harkin
Senator Robert Smith
Senator Max Baucus
Rep. Dennis Hastert
Rep. Richard Gephardt
Rep. Larry Combest
Rep. Charlie Stenholm
Rep. Bud Shuster
Rep. James Oberstar

Dear Member of Congress:

The undersigned agricultural, forestry, and conservation organizations are writing to express our strong concerns that the Environmental Protection Agency's Total Maximum Daily Load (TMDL) proposed rulemaking goes well beyond EPA's authority in the Clean Water Act (CWA). Furthermore, the TMDL proposed rule would jeopardize successful state and federal voluntary, incentive-based programs currently working to reduce production agriculture's impact on our nation's water quality.

We represent a vast array of agricultural interests, all of which have a concern about our environment and have a long history of being stewards of the land by implementing sound conservation practices. Agriculture has made substantial investments and made significant progress in protecting our natural resources through voluntary, incentive-based programs. These programs have led to many successes and will continue to help the agricultural community build upon the ongoing progress of improving water quality.

We welcome the Administration's January 7th announcement that they will seek $1.3 billion in the FY2001 budget for additional conservation programs to help family farmers take further steps to protect water quality and the environment. This initiative is the correct approach to solving water quality problems because it recognizes the importance of flexible, incentive-based, and site-specific programs. These initiatives should be fully funded, implemented, and evaluated before additional "command and control" strategies, such as the proposed federal TMDL regulations are promulgated.

The TMDL rulemaking would have a crippling impact on agricultural activities and individual farm, forestry, and ranch operations. The TMDL rule is counterproductive and contradicts ongoing progressive efforts. Enforcement-based programs, such as the TMDL rule will significantly impact successful, voluntary initiatives, as farmers and other voluntary stewards will justiably wait to invest limited resources toward regulatory compliance efforts. It does not make good sense or sound public policy for the federal government to promote economic environmental partnerships with farmers on one level, then saddle them with increased regulatory requirements and burdens.

In addition, we would like to clearly state our strong support for the positions expressed in USDA's letter and comments to EPA, and forwarded to Administrator Carol Browner on October 22, 1999, by Under Secretary for Natural Resources and Environment Jim Lyons. USDA's letter and comments are attached for your interest.

We in the production agriculture, agribusiness, forestry, and conservation community echo USDA's strong and accurate concerns regarding the TMDL rulemaking process. According to USDA's comments, the EPA TMDL proposed rulemaking <u>would:</u>

- alter the manner in which effective non point source (NPS) control programs have been managed;
- change the designation of silvicultural practices from NPS to point source, which is inconsistent with authorities provided in the CWA;
- place an added and unnecessary burden on the continuing progress for effectively controlling NPS pollution in waters of the United States;
- contradict Congress' provision that there be distinct and separate programs for point and NPS pollution, and that silverculture and agriculture operations would be controlled under the non-regulatory NPS programs;
- will undermine 27 years of the USDA working cooperatively with EPA, States and communities in the development of effective NPS control program;
- ignore that federal courts have long recognized that Congress specifically drew a distinction between point sources and NPS pollution, and excluded the latter from control under TMDL and NPDES;
- propose a redefinition that would differentiate between "pollutant" and "pollution", which would be legally incorrect and is not in keeping with the intent of Congress;
- view "riparian habitat" as a pollutant or pollution, which USDA does not agree;
- create the expectation that land managers can provide certainty that water quality standards will be met by activities required by EPA or by a NPES permit, which is neither reasonable nor achievable;
- suggest cost analyses for the TMDL and NPDES proposed rules that are inadequate and incomplete, and costs for the private sector are not adequately recognized and accounted for. Furthermore, it is USDA's opinion that the EPA TMDL proposal does not conform to the Federal Unfunded Mandates Reform Act;
- propose regulations focusing NPDES permitting requirements on land use and not on activities that effect water quality;
- work to supercede NPS pollution control under the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), again bypassing Congress' intent;
- generally establish a top-down approach that usually alienates the very partners and cooperators with whom a working relationships should be fostered,
- propose a prescriptive approach with short, unrealistic deadlines.

We agree with USDA that by treating NPS pollution like point sources as EPA intends in its TMDL proposed rule, most normal agricultural activities, such as growing crops, grazing activities, animal husbandry, and silvicultural operations could become subject to future, unreasonable regulatory action.

Also attached are joint comments submitted to EPA on behalf of numerous agriculture, agribusiness and conservation groups. We ask that you review these important concerns closely, review EPA's authority in this area and act to stop EPA's TMDL rulemaking process until these critical issues can be debated and addressed in the next Clean Water

Act reauthorization. We look forward to working with Congress, USDA and EPA in addressing these and other important concerns regarding the TMDL rule and its impact on U.S. agricultural producers.

Sincerely,

AgriBank, FCB
Agricultural Retailers Association
American Crop Protection Association
American Farm Bureau Federation
American Feed Industry Association
American Forest & Paper Association
American Meat Institute
American Nursery & Landscape Association
American Soybean Association
Cenex Harvest States
CF Industries
CoBank
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National Livestock Producers Association
National Milk Producers Federation
National Pork Producers Council
National Potato Council
National Turkey Federation
Southern States Cooperative Inc.
Sugar Cane Growers Cooperative of Florida
The Fertilizer Institute

c: Senate Agriculture Committee Members

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

The Honorable Max Baucus
United States Senate
Washington, D.C.

Dear Senator Baucus:

Thank you for your recent letter to EPA Administrator Carol Browner expressing your interest in proposed regulations to restore the over 20,000 polluted water bodies around the country. You asked for a detailed assessment of issues relating to water pollution from forestry operations. The Administrator asked that I work with the Office of General Counsel to respond to your questions. We expect to have a detailed response available shortly.

I want to take this opportunity to assure you that EPA is *not* proposing that water pollution caused by diffuse runoff be regulated under the Clean Water Act or be required to have a permit under the Act. This type of pollution should be accounted for in the Total Maximum Daily Load (TMDL) program, but commitments to reduce it can be based on a "reasonable assurance" of implementation of control measures. A "reasonable assurance" of implementation can be established based on voluntary or incentive-based programs of proven effectiveness. Where States identify forestry operations as contributors of pollutants to polluted waters, States may choose to assign pollution reductions to these sources and may use effective, nonregulatory programs to reduce pollution.

In the case of point source *discharges* of storm water, EPA recognizes that these discharges are generally exempt from the Clean Water Act permit program under section 402(p)(1) of the Act. Permit issuing authorities (i.e. the State in 42 States and one Territory), however, have the *option* of requiring a specific *storm water discharge* to have a permit under section 402(p)(2)(E) of the Act, but only where the discharge *causes environmental harm* (e.g. nonattainment of a State water quality standard). EPA has proposed in the TMDL regulations to change existing regulations to allow this narrow designation authority to be used with respect to discharges from forest road building and harvesting, as well as the storm water discharges from other sources to which the authority now applies. EPA could use this designation authority only where EPA developed a TMDL for a State. As we will discuss more fully in our more detailed response to your letter, the authority to designate a storm water discharge as needing a permit is based on the Clean Water Act definition of a "discharge" and "point source" and recognizes that such sources are those that add pollutants from a discrete and discernable conveyance (see Sierra Club v. Abston Construction).

Finally, it is important to note that section 402(p)(2)(E) of the Clean Water Act and EPA implementing regulations provide that the permit issuing authority has the discretion, rather than the obligation, to designate a discharge of storm water as needing a permit. Discharges of storm water that cause the nonattainment of a water quality standard may be required to have a permit, or may be managed through other programs, at the discretion of the permit issuing authority. These discharges, even once identified by a State or EPA as causing environmental harm, would not become automatically subject to a citizen suit for failing to have a permit unless and until they were subsequently designated as needing a permit.

I look forward to working with you on this important problem.

Sincerely,

J. Charles Fox
Assistant Administrator for Water

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March 14, 2000

Honorable Richard Lugar
Chairman
Committee on Agriculture
United States Senate
Washington, D.C. 20510

Re: Implications for the Forestry Industry of the Environmental Protection Agency's Proposed Rule to Authorize the Designation of Forestry Activities as Point Sources Subject to Clean Water Act Permits.

Dear Mr. Chairman:

I would like to thank you, Mr. Chairman, and the committee for the opportunity to testify on February 23 on the Environmental Protection Agency's proposed rules on Total Maximum Daily Loads and the proposed regulation of silvicultural activities as point sources under the Clean Water Act.

I would like to clarify several points raised at the hearing about the authority of EPA to designate silvicultural practices as a point source and EPA's assertion that this authority can be narrowly drawn and will be applied only under limited circumstances. I would ask that my letter be added to the record of the hearing.

EPA proposes to allow itself and States to "designate" forestry activities on a case-by-case basis as "point sources" subject to permitting requirements under the Clean Water Act ("CWA"). *See* 64 Fed. Reg. 46,058-89 (Aug. 23, 1999). EPA officials have reassured legislators that the agency is not attempting to alter the concepts of "point source" and "nonpoint source" under the CWA, but is merely asserting authority over forestry activities that involve a "discernable conveyance" that can be considered a point source. EPA also asserts that this new point source designation authority is needed to address rare instances when so-called "bad actors" flagrantly disregard environmentally sound forestry practices. The agency insists that the authority is narrowly drawn and would have limited effects on the forestry industry.

While the forestry industry itself strongly supports State "bad actor" laws and similar efforts to target irresponsible operators, it disagrees that the proposed authority is consistent with traditional notions of point and nonpoint sources under the CWA. The

industry also disagrees that "designation" of forestry point sources can be limited as EPA suggests. Instead, this proposed use of the CWA has far broader implications and essentially opens the door to wide-scale federal permitting of forestry operations. As explained in detail below, EPA's proposal would, by its own terms and through its relationship to the "total maximum daily load" or "TMDL" program, create extreme pressure on both EPA and the States to require permitting for thousands of forestry operations. In addition, there is a significant likelihood that EPA's "selective" regulation of particular forestry operations may be invalidated by the courts, which would likely result in a categorical requirement for permitting of forestry activities nationwide. The basis for these views is set forth below.

EPA's proposal to "designate" forestry activities as point sources is an attempt to regulate activities that are intended to be "nonpoint" sources under the CWA.
EPA officials have assured members of Congress that the agency is not attempting to regulate "diffuse runoff" and that it would only assert so-called designation authority where EPA can identify some "discernable conveyance" that could be characterized as a "point source" at the forestry operation. This is completely beside the point, since forestry's characterization as a nonpoint source activity has *never* depended on the absence of any discernable conveyance. EPA itself acknowledged in 1976 that forestry operations were intended by Congress to be deemed nonpoint sources even if there were some channeling of runoff from the site. According to EPA then:

> Technically, a point source is defined as a "discernible, confined and discrete conveyance, including but not limited to any pipe, ditch [or] channel.... However, a *proper interpretation of the [CWA] as explained in the legislative history and supported by the court in NRDC v. Train* is that not every "ditch, water bar or culvert" is "mean[t] to be a point source under the Act" .... 41 Fed. Reg. at 6282 (Feb. 12, 1976) (emphasis added).

Congress has done nothing in the intervening years to signal a change in its intent. Instead, subsequent Congresses have consistently reaffirmed the intention that forestry activities should not be subjected to permitting and, instead, should be deemed nonpoint sources under the CWA.[1] Thus, EPA's current proposal does represent an unauthorized change in the law concerning the appropriate scope of "point" source and "nonpoint" source activities.

EPA has argued that the presence of a specific exception for "agricultural storm water discharges" in the definition of point source under CWA § 502(14) supports its sudden change in policy. In the preamble to the proposed regulations, EPA suggested that the

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[1] *See, e.g.*, S. Rep. No. 95-370, 95th Cong., 1st Sess., 76 (1977) ("permit issuance [under CWA § 404] for such activities would delay and interfere with timely construction of access for cultivation and harvesting of crops and trees with no countervailing environmental benefit"); S. Rep. 98-233, 98th Cong., 1st Sess., 25 (1983) and H.R. Rep. 99-50, 99th Cong., 1st Sess., 35 (1985) (1983 and 1985 reports leading to the 1987 CWA Amendments, discussing forestry activities as nonpoint sources addressed in the new § 319 nonpoint source program).

absence of a similar explicit exception for silvicultural activities gives license to the agency to transform those activities from nonpoint sources to point sources. *See* 64 Fed. Reg. at 46,077. This interpretation would constitute a breathtaking usurpation of authority from Congress. It says, in effect, that Congress's failure to nail down all nonpoint source activities in a statutory definition of nonpoint source accords EPA the authority to designate as a point source, whenever it chooses, *any and every nonpoint source activity except agricultural activities involving storm water runoff.* With a few short strokes of its regulatory pen EPA could, under this interpretation, shred the CWA § 319 program of everything but agricultural storm water discharges and irrigation return flows. We suspect Congress would be astounded to learn that this is the consequence of its addition of the agricultural storm water discharge exception to the CWA definition of point source.

Quite clearly, this was not Congress's intention. When Congress enacted the storm water provisions in 1987, the CWA definition already contained an exception for "return flows from irrigated agriculture," an exception Congress felt it needed to make explicit since such flows could otherwise be considered as point sources. The storm water language was added to this exception to ensure that EPA could not interpret that exception to render irrigation return flows to be the only agricultural nonpoint sources not subject to the new storm water program. Evidently, Congress sold EPA's imaginative rulemaking ability short; it is now apparent that Congress should have slammed the door tighter by including a laundry list of *all* nonpoint sources in the exception within the definition of point source. That EPA could interpret the CWA in a manner that would require such a prophylactic Congressional action is astounding.

Litigation Could Sweep Even Non-Designated Forestry Activities into the Permitting System.

There is a significant risk that future litigation will eliminate the option for EPA and States to selectively regulate sources on a "bad actor," case-by-case basis, potentially sweeping virtually all forestry activities into the federal permitting system. There are very strong arguments that EPA lacks the authority it claims to selectively designate particular sources for permitting. Courts have previously rejected EPA attempts to selectively regulate point sources. In *NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977), the clear ruling of both the U.S. Court of Appeals for the D.C. Circuit, and the district court that it upheld, was that EPA *was required to regulate all point sources, and could not exclude any such sources from regulation, under the NPDES program.* Following this court decision, EPA promulgated the very regulations that it now seeks to change, which identified four discrete forestry-related activities as "silvicultural point sources" subject to permitting and recognized that other forestry activities (*e.g.*, nurseries, site preparation, harvesting) were *nonpoint* sources that were not subject to permitting. Now EPA claims that these activities actually can be considered point sources, but only if EPA or the States "designate" them as such.

EPA appears to believe that the 1987 Amendments enacting CWA § 402(p) concerning "storm water discharges" authorized the sort of "case-by-case designation" that it

proposes for forestry activities. Thus, the agency explains that if it deletes the long-standing regulatory recognition of most forestry activities as nonpoint sources, it will be able to designate particular sources as it deems fit pursuant to CWA § 402(p)(2)(E) or, alternatively, § 402(p)(6). *See* 64 Fed. Reg. at 46,078 (stating case-by-case designation of forestry would be pursuant to CWA § 402(p)(2)(E) or 402(p)(6)).

First, it is abundantly clear that the 1987 Amendments and the storm water provisions of the CWA in no way authorized EPA to expand the universe of "point sources" beyond what it had previously been. Nor did the Amendments alter the long-standing congressional intent that forestry be recognized as a "nonpoint" source activity not subject to federal permitting requirements. What the storm water amendments did was establish a new two-tiered approach for the regulation of *point source* discharges composed primarily of storm water, which had always been covered by the CWA but which EPA had generally not subjected to permitting. *See* Cong. Rec. S16443 (daily ed. Oct. 16, 1986) (Senator Durenburger's explanation of the provisions, emphasizing that storm water discharges had always been subject to permitting, but that EPA had failed to require permits).

However, setting aside whether EPA can use the storm water discharge provisions of CWA § 402(p) as a basis for regulating previously unregulated nonpoint sources, the agency's authority to *selectively* designate particular sources case-by-case on an ongoing basis is extremely vulnerable to attack. (Indeed, it may face a court challenge in the near future, as EPA's "Phase II" storm water regulations, which expressly assert ongoing case-by-case designation authority, were recently finalized. *See* 64 Fed. Reg. 68,722, 68,781 (Dec. 8, 1999)).

Neither of the provisions cited by EPA supports its claim of permanent case-by-case designation authority. Although CWA § 402(p)(2)(E) did allow case-by-case designation of particular sources, it did so only on an *interim* basis – prior to October 1, 1994 – during "Phase I" of the storm water program. Under CWA § 402(p)(1) and (p)(2), *prior to October 1994*, storm water discharges were temporarily exempted from NPDES permitting, except that permits were required sooner for certain specified discharger categories, plus, at § 402(p)(2)(E), Congress gave EPA case-by-case permitting authority during Phase I for "a discharger for which [EPA] or a State, as the case may be, determines that the stormwater discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States." 33 U.S.C. § 1342(p)(1)-(p)(2). After October 1, 1994, the remaining storm water discharges would be subject to regulation through what has become known as "Phase II" of the storm water program. Simply put, after October 1994, the temporary permitting exemption (§ 402(p)(1)) and the several exceptions to that exemption (§ 402(p)(2)) – including the authority to identify individual sources that should not wait for Phase II – are no longer in effect. *See* Cong. Rec. S16443 (daily ed. Oct. 16, 1986) (Senator Durenberger explaining the desire to provide EPA with "flexibility, *in the first four years after enactment*, to order its permitting priorities around those sources which are believed to be the most significant") (emphasis added).

Second, CWA § 402(p)(6) – which governs "Phase II" of the storm water program – does not authorize case-by-case designation of individual discharges to be regulated. Toward the end of the interim exemption provided during Phase I (in October 1993), § 402(p)(6) required EPA to issue regulations in consultation with the States and on the basis of three required studies (the results of which had to be reported to Congress). 33 U.S.C. § 1342(p)(6). Those regulations (called the "Phase II" storm water regulations) must "*designate stormwater discharges*, [other than those already regulated in Phase I], to be regulated to protect water quality and ... *establish a comprehensive program* to regulate such designated sources." *Id.* (emphasis added). Thus, § 402(p)(6) subjects all remaining point source storm water discharges to potential regulation in the "Phase II" program. EPA is authorized to identify the discharges that will be regulated and to determine the manner in which to regulate them (within certain bounds), but it must do so in regulations that "designate" the discharges to be regulated and establish a "comprehensive program" to regulate those sources. This language strongly indicates that EPA's Phase II storm water program must *identify* in its regulations the sources that are covered in the storm water program.[2] It certainly contains no hint of an ongoing source-by-source, ad hoc regulatory authority such as was allowed the agency on an interim basis during Phase I.[3]

If EPA's proposed forestry designation rule goes forward, and if litigation disproves EPA's premise that it can "pick and choose" individual storm water discharges to regulate, the result would likely be comprehensive regulation and NPDES permit requirements for substantial segments of the forestry industry. EPA would have eliminated the long-standing recognition that forestry activities are nonpoint sources under the CWA. Having identified forestry activities as storm water discharges subject to regulation, EPA would be forced to determine whether or not to "designate" those activities categorically for regulation under the Phase II storm water program.

Based on EPA's decision in the recent Phase II rules to categorically regulate all construction activities disturbing a *total land area of at least one acre* (*see* 64 Fed. Reg., at 68,771), one might reasonably predict a similar decision in the future with regard to forestry. Indeed, explaining its decision to categorically require permits for smaller construction sites (1 to 5 acres), EPA said its action was justified "because the cumulative impact of many sources, and not just a single identified source, is typically the cause for

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[2] EPA claims in the preamble discussion of its Phase II storm water regulations that it can "designate" the category of "not yet identified" sources and thereby reserve for itself the authority to regulate discharges on a case-by-case basis indefinitely into the future. 64 Fed. Reg. 68,722, 68,781. There is no support for this position in the language of the statute or in the legislative history.

[3] The requirement of specific studies and reports to Congress prior to promulgation of the Phase II regulations also plainly indicates that Congress intended EPA to identify and report on the sources to be regulated. Significantly, EPA did not identify forestry in its Report to Congress as a type of source potentially to be addressed in the Phase II storm water program. *See Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program*, Report to Congress (EPA, March 1995).

water quality impairments, particularly for sediment-related water quality standards." 64 Fed. Reg. at 68,772. If this truism justifies categorical regulation of small construction sites, the concerns of the forestry industry are certainly well founded. The same rationale could be used to justify categorical regulation of timber harvesting, forest road construction, and various other forestry activities, as well as innumerable other land use activities associated with sediment runoff.

Mr. Chairman, I commend the committee for holding the hearing and look forward to working with you on this important issue.

Sincerely,

James A. Kraft
Vice President, General Counsel and Secretary

Society of American Foresters

March 1, 2000

The Honorable Richard G. Lugar
Chairman
Committee on Agriculture, Nutrition, and Forestry
United States Senate
Washington, D.C. 20510

Dear Chairman Lugar:

I would like to thank you for taking an active interest in the Environmental Protection Agency's proposed water quality regulations. I request that the Society of American Foresters' (SAF) comments be included as part of the official Committee record for the oversight hearing held on February 23, 2000.

The SAF is strongly opposed to the proposed regulations as they relate to silviculture. Again, thank you for your leadership and continued commitment to the forestry community.

Sincerely,

Michael T. Goergen, Jr.
Director, Forest Policy

Enclosure (1)

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Society of American Foresters

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January 11, 2000

Comment Clerk
Water Docket (W-99-04)
Environmental Protection Agency
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Subject: Comments from the Society of American Foresters on the Environmental Protection Agency's Total Maximum Daily Load Program and National Pollutant Discharge Elimination System proposed rule appearing in the *Federal Register* on Monday, August 23, 1999, Part II, pages 46012-46055 and Part III, pages 46056-46089.

Dear Comment Clerk:

The Society of American Foresters (SAF or The Society), like the Environmental Protection Agency (EPA), is interested in reducing nonpoint source pollution and achieving the goals of the Clean Water Act (CWA). However, the Society is opposed to the regulatory changes the EPA proposes for silvicultural operations. Our comments address in detail the following concerns:

- Nowhere in the EPA's analysis is there any acknowledgement of the benefits received from managed forests. Scientific evidence clearly links forests and their role in retaining high water quality.
- Forestry has a proven track record as a competent steward for the nation's land and water resources through nonpoint source pollution reduction programs.
- Considering the limited budget and time of both the Agency and the states, it seems illogical that the EPA would choose to use its limited resources to regulate silvicultural activities when according to the EPA's national 305(b) report (US EPA 1996), silviculture has consistently been found to be a minor source of water quality impairment and states have actively pursued nonpoint source pollution reduction programs.
- Concern over the potential of forest management to adversely affect water quality has resulted in hundreds of research projects investigating effects of particular forestry practices on water quality. The EPA should consider these findings and re-evaluate the necessity of the proposed regulations.

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- We are extremely concerned that the EPA has misunderstood and misrepresented the technical publications cited in the proposed regulations. These errors are critical to the EPA's rationale and support for the proposed regulations. We believe that it is vital to public decision making that scientific findings are used and referenced correctly.

- We believe that the Clean Water Act very clearly makes the distinction between point and nonpoint source pollution.

- Congress provided for distinct and separate programs for point and nonpoint source pollution and clearly intended that silvicultural operations were to be regulated under the nonpoint source program addressed by section 208.

- Not only is the intent of the Congress clear, the EPA's own regulations have consistently treated most silvicultural activities as nonpoint sources.

- Because of the unique characteristics of silvicultural operations, SAF believes the most effective means for controlling nonpoint source pollution from silvicultural activities is by designing and applying preventative and restorative watershed management practices.

- One of the strengths of the nonpoint source pollution control efforts under the CWA has been the utilization of existing state infrastructure to support silvicultural nonpoint source pollution reduction programs.

- Most states with significant commercial forestry operations routinely conduct assessments of how well their nonpoint source pollution programs are working.

- According to national surveys reported in the *National Association of State Foresters' 1996 Progress Report: State Nonpoint Source Pollution Control Programs for Silviculture* (Stuart 1996), education and funding are considered to be critical components of efforts to improve nonpoint source pollution reduction programs and achieve higher water quality standards.

- While requiring a permit to implement this change in regulation is proposed to be the exception rather than the rule, the long-term impact of this proposal may be more substantial.

- We believe the EPA's cost analysis for the TMDL and NPDES proposed rule is wholly inadequate and incomplete.

Foresters have designed and engaged in forest practices intended to minimize runoff from forestry operations and improve water quality. In many cases foresters have driven the science behind improving water quality on forested lands. Forestry schools, researchers, individual practitioners,

industry, state and federal foresters, consultants, and many others in the forestry community are committed to demonstrating that forestry is an asset to water quality in the United States.

Arguably, keeping land in a forested condition can help the nation achieve the goals of the CWA more than any other land use. Forestry is a unique land management practice because activities that might generate pollutants are conducted infrequently and oftentimes mimic natural regimes. Typically entry into a forest stand occurs less than once in a ten-year period, therefore if there are pollution discharges from forestry operations they are limited over a long period of time. We truly hope that the EPA understands the unique role forests have in enhancing water quality, and that the EPA will work with the Society of American Foresters to improve the quality and quantity of private forests in this nation.

Unfortunately, we believe the EPA's proposed regulations may act as a deterrent to maintaining private forestland. Landowners are often faced with difficult decisions in managing their nonindustrial private forest landowners. Sometimes they are forced to abandon their stewardship ethic because of tax policy, economic pressures, and costly regulations that make it financially difficult to own land. We find the proposal to classify silvicultural activities as point sources subject to National Pollutant Discharge Elimination System (NPDES) permits to be the kind of regulation that will force some forestland owners to sell their property due to the costs of implementation.

SAF has spent 100 years addressing this nation's forest management and improving forest watersheds and protecting water quality. SAF is fully aware of the many complexities in developing appropriate management systems to control nonpoint sources of pollution from silvicultural operations. We understand the challenge facing the EPA. Yet, SAF is concerned that the approach of EPA's proposed regulations is inefficient and potentially a counterproductive system. Our concerns are based on the complex nature of nonpoint sources of pollution from silvicultural activities, the legislative and regulatory history of the Clean Water Act, and the need to provide efficient and cost-effective controls if we are to achieve the goals of the CWA.

Difference between Point and Nonpoint Sources of Pollution

In the 1972 Federal Water Pollution Control Act Amendments, Congress made a distinction between point and nonpoint sources of pollution. This distinction has been widely accepted in subsequent legislation and regulation and by the scientific community. The 1998 SAF peer-reviewed *Dictionary of Forestry* defines nonpoint source pollution as "pollution that arises from an ill-defined and diffuse source, such as runoff from cultivated fields, agricultural lands, urban areas, or forests and wildlands." Some broad generalizations of the differences between point and nonpoint sources are:

- Point sources can include products of manufacturing while nonpoint sources are often natural materials such as sediment, heat, and nutrients. At some concentration or level, these materials and energy are essential to the health of stream systems.

- Point sources tend to produce pollution loads which are far in excess of what would occur naturally while pollution levels produced by nonpoint sources, especially from any single activity, are relatively low and usually within the historic range of variability.

- Point sources are usually more easily identified, less numerous, and stationary. Nonpoint sources are diffuse and difficult to identify, more numerous, have impacts which tend to diminish over time (not persistent), and move around the landscape.

> SAF concurs with the US Department of Agriculture (1992) that the Clean Water Act provides a reasonable and workable basis for protection of the nation's waters. The CWA provides for control of point source pollution through a permit program that is largely directed at "end of the pipe" discharges from municipal and manufacturing sites. The CWA also provides a nonpoint source program based on pollution mitigation through land management prescription that is nationally applicable to forestry (Binkley and Brown 1993; NCASI 1988). This two-pronged approach has proven effective in maintaining and restoring the quality of forest waters (Lynch and Corbett 1990). The point/nonpoint distinction is important and should be continued and strengthened by providing monitoring, education and research (SAF 1995).

Because of the unique characteristics of silvicultural operations, SAF believes the most effective means for controlling nonpoint source pollution from silvicultural activities is by designing and applying preventative and restorative watershed management practices. These practices are commonly referred to as Best Management Practices (BMPs). The success in applying these practices to control nonpoint pollution sources on forests and rangelands is well documented and demonstrated in scientific and historical literature and in anecdotal reports. Changing the designation of silvicultural practices to point sources is inconsistent with established management programs, with current science, and our collective management experience. The proposed regulations would place an unnecessary burden on the continuing progress forestry operations are making in reducing nonpoint sources of pollution to waters of the United States. That is not to say that every state BMP program is adequate, nor that every bad actor is addressed by BMPs. The EPA ought to work with states who's BMP programs fall short of addressing water quality from silvicultural activities, and should encourage states to identify mechanisms to address bad actors.

Legislative and Regulatory History

In the 1972 Clean Water Act regulations, the EPA chose to exclude certain activities, including all silvicultural activities, from the NPDES program. When this exclusion was challenged, the federal courts ruled against the EPA and ordered the Agency to identify those activities that were point

sources of pollution. The EPA responded with regulations in 1976 that identified four discrete activities associated with forestry operations as point sources. They concluded that other silvicultural activities are nonpoint sources of pollution. In fact, the EPA stated in the February 12, 1976, proposed regulations that "the [Clean Water Act] and its legislative history make clear that it was the intent of Congress that most water pollution from silvicultural activities be considered nonpoint in nature" and be addressed under section 208 of the statute 41 Fed. Reg. 6233, 6234.

SAF agrees that Congress intended silvicultural activities be considered nonpoint sources of pollution. Congress provided for distinct and separate programs for point and nonpoint source pollution and clearly intended that silvicultural operations were to be regulated under the nonpoint source program addressed by section 208. In addition to section 208, section 319 requires the identification of waters impaired by nonpoint sources and the development of best management practices to control those sources to the maximum extent practicable. To date, forty-seven states have developed and published silvicultural BMPs. Unfortunately, the EPA's August 1999, proposed rules disregard section 319 and undermine the work that was done cooperatively between agencies, states and communities to develop effective nonpoint source control programs.

Not only is the intent of the Congress clear, the EPA's own regulations have consistently treated most silvicultural activities as nonpoint sources. There is substantial federal case law recognizing the distinction between point source pollution and nonpoint source pollution, and the exclusion of nonpoint sources including silvicultural activity pollution from control under the TMDL and NPDES.

The Society believes that forestry activities are nonpoint sources of pollution. The 1972 CWA, as well as the 1977 and 1987 amendments, did not intend to regulate water pollution from most silvicultural activities through the section 402 or 404 programs. The exemption for silviculture in section 404 exempts activities conducted by farming, silviculture, and ranching "...such as plowing, seeding, cultivating, minor drainage, and harvesting..." (33 CFR 323.4 (1) (i)). It is inconsistent for EPA to define these activities as point source if they are silvicultural but nonpoint for the same activities conducted by agriculture and ranching. As mentioned previously, the 1987 amendments enacted the section 319 provision specifically to address nonpoint source pollution runoff, including silvicultural activities, through state-based BMP programs. Furthermore, in 1990 when the EPA promulgated stormwater regulations these same silvicultural activities currently being proposed for categorical inclusion as point source pollution were specifically excluded

Most states with significant commercial forestry operations routinely conduct assessments of how well their nonpoint source pollution programs are working. The overall national compliance rates for individual practices reported by the National Association of State Foresters (based on 29 state surveys) are 85 to 90 percent (Stuart 1996). States that have tracked the compliance of BMPs report a collective trend of improvement and increased implementation. Generally, small nonindustrial private forest landowners operating without guidance from a professional forester have the lowest level of BMP implementation. SAF, the National Association of State Foresters,

the American Forest and Paper Association, the Tree Farm System, the Association of Consulting Foresters, the Forest Stewardship Council, USAD, and many other organizations are working to ensure that timber harvesting operations are conducted by trained professionals. As we increase the amount of professional forestry expertise given to nonindustrial private forest landowners, we will also increase landowner compliance with BMPs. Forestry organizations are making commitments to improve landowner decision-making with continuing education programs, standard setting programs, and in SAF's case, the Certified Forester ® program which provides a forester with a credential recognizing their professional competence based on education, experience and a commitment to continuing education. We believe that if the EPA and other federal agencies were to make stronger commitments to assisting landowner and resource manager education, as a nation we would have better success in meeting the goals of the CWA in respect to silvicultural activities.

According to the EPA's biennial report to Congress, forestry is the smallest of the identified nonpoint pollution sources effecting the nation's water quality. In fact, forestry has the best record of implementing nonpoint source control programs. Instead of regulation, we strongly urge the EPA to advocate better evaluation, education, and research in the use of best management practices by forest management practitioners, and other nonpoint source pollution programs, including the devotion of resources to strengthen sections 208 and 319. We believe that the Clean Water Act very clearly makes the distinction between point and nonpoint source pollution. Silvicultural activities have historically been treated as nonpoint source pollution and should continue to be treated as such. Professional foresters are dedicated to sustaining high quality water that emanates from the nation's forestlands.

While requiring a permit to implement this change in regulation is proposed to be the exception rather than the rule, the long-term impact of this proposal may be more substantial. Currently, NPDES permits do not cover most silvicultural activities. Instead, the tens of thousands of individual silvicultural operations are covered by state BMP programs. Even though the EPA "expects that only in extremely rare circumstances" would it require a NPDES permit for discharges from silvicultural activities, it is anticipated that this action would occur repeatedly. An increasing proportion of this nation's watersheds are now or will be classified as either water quality limited under section 303(d), have endangered aquatic species, or are source areas significant to assessment under the Safe Drinking Water Act. It is likely that the EPA will eventually seek control through the NPDES permits for these "problem" watersheds. In many of these situations forestry is only transiently connected to the water quality concerns or is already protecting water segments. While it may be necessary to develop mechanisms to address bad actors, we believe a permit system is unnecessary.

Efficiency and Cost of Proposed Regulations

One of the strengths of the nonpoint source pollution control efforts under the CWA has been the utilization of existing state infrastructure to support silvicultural nonpoint source pollution

reduction programs. In some states, elaborate forest practices programs have been developed and are enforced by state agencies. In other states, non-regulatory programs have proven effective in achieving high levels of compliance with state BMPs, often with regulatory backups if recalcitrant operators are identified. This state-by-state approach is designed to achieve BMP implementation efficiently. Even the EPA's most recent summary of 305(b) reports show that the length of streams impacted by silvicultural activities is a small and diminishing fraction of impaired waters.

National surveys reported in the *National Association of State Foresters' 1996 Progress Report: State Nonpoint Source Pollution Control Programs for Silviculture* (Stuart 1996), from 1982-1996 allows for long-term comparisons of state nonpiont source pollution control programs. In 1982, forty states reported localized pollution problems from silviculture, 35 states were implementing nonpoint source pollution control programs, and 18 states were monitoring the use of BMPs. The 1996 survey indicated that 24 states reported silviculture nonpoint source pollution, 45 states have included silviculture in their nonpoint source pollution programs, 29 states monitored BMP use, and 15 states monitored BMP effectiveness. The inclusion of silvicultural activities into nonpoint source pollution programs and the increased attention to BMPs has yielded a decrease in the number of states identifying water impairments due to forestry activity.

According to this same survey, education and funding are considered to be critical components of efforts to improve nonpoint source pollution reduction programs and achieve higher water quality standards. BMP education and training, which includes how to implement control practices and their benefits, are a vital component of many state nonpoint source pollution reduction programs. In 1982, 25 states conducted training and 10 had BMP demonstration projects. In 1996, 38 conducted training, 32 have held tours, and 22 have demonstrations. A total of 21,801 individuals including loggers, landowners, industry personnel, consultants, and state and federal agency staff have received training. States frequently cited funding and staffing as constraints to state program effectiveness. While the EPA provides the majority of the funding for nonpoint sources pollution reduction programs, states and landowners bear the costs of implementation. In addition to funding and staffing, states also identified increased pre-harvest assistance and increased landowner awareness of nonpoint source pollution as keys to further progress. Again, funding for section 319 and other nonpoint source pollution programs may help alleviate some of these shortcomings and further improve BMP compliance and implementation ultimately improving water quality impairments associated with silviculture.

We believe the EPA's cost analysis for the TMDL and NPDES proposed rule is wholly inadequate and incomplete. The EPA states that there are no costs for federal agencies affected by the rule. We disagree. The EPA should consider the costs federal agencies will incur in association with watershed assessments, prioritization, developing land treatment plans, monitoring and evaluating progress, adapting needed changes in management, and the collaboration between land managing agencies, land owners and other stakeholders within a watershed. The EPA has not adequately accounted for the costs of implementing this proposal on private or state lands. The EPA has not accounted for or even recognized the costs for nonindustrial private forest landowners and

operators. The EPA must revisit their estimates, as we believe there will be costs to the federal government and to state and county government in addition to the effects nonindustrial private forest landowners. The analysis for the Small Business Regulatory Enforcement Fairness Act of 1996 does not reflect the increased assistance that nonindustrial forest land owners will need to implement the requirements or additional operating costs that may be incurred. The EPA's analysis is unacceptable, and fails to meet the statutory and executive branch public disclosure requirements.

The proposed regulations focus on the permitting of land use and not on the permitting of activities that effect water quality. This concerns us and we urge the EPA to evaluate this in light of state and local communities' traditional primacy over land use. There are nine million nonindustrial private forest landowners that own 58% of the productive forest lands in the United States. Most of the contractors working with these landowners are small independent businesses. The USDA estimates that at least 85% of timber purchasers, and roadbuilding contractors on forestlands meet the definition for small businesses. The EPA's proposed regulations directly affect both landowners and contractors. Small business owners often do not have the capacity to work with complicated regulatory actions. They can learn, and practice forestry consistent with the best available knowledge, but regulatory activities can hamper small business owners from learning new and more environmentally sensitive management techniques.

We also question the EPA's priorities. Considering the limited budget and time of both the Agency and the states, it seems illogical that the EPA would choose to use its limited resources to regulate silvicultural activities when according to the EPA's national 305(b) report (US EPA 1996), silviculture has consistently been found to be a minor source of water quality impairment and states have actively pursued nonpoint source pollution reduction programs.

- The EPA report identified agriculture as the largest source of water quality impairment for rivers, streams, lakes, and reservoirs. Agriculture was reported to cause 25 percent of the impaired river miles and was five times greater than the next five largest sources (municipal point sources, hydromodification, habitat modification, resource extraction, and urban runoff). Agriculture was responsible for 19 percent of the impaired lake acreage and was more than double the next largest source.

- The largest source of impairment to estuaries was industrial discharges (56% of the total), followed by urban runoff, municipal point sources, upstream sources, and agriculture.

- The largest source of impairment to ocean shorelines was urban runoff (55%), followed by septic systems, municipal sewer discharge, industrial point sources, and land disposal of wastes.

- Residential development and urban growth were cited as the largest cause of recent wetlands losses, followed by agriculture, road construction, hydrology modification, and industrial development.

- The leading cause of ground waster contamination was from underground storage tanks, followed by landfills, septic systems, hazardous waste sites, and surface impoundments.

We would suggest that if the focus is water quality then the EPA has chosen to spend a great deal of time and money on a program that will achieve very little. Forestry has a proven track record as a competent steward for the nation's land and water resources through nonpoint source pollution reduction programs. State BMPs and other programs have made, and continue to make progress. States have consistently affirmed that what they need to be more effective in their already successful nonpoint pollution control programs is additional funding and staff. Funding for incentive programs that could make a difference is abysmal. Congress authorized several programs that emphasize the role of forests in enhancing water quality and wetlands protection: the Wetlands Reserve Program, the Swampbuster Program, the Forestry Incentives Program, the Forest Stewardship Program, and the Stewardship Incentives Programs. Unfortunately, these programs lack funding levels that allow them to be as effective as they can be.

Scientific Evidence on Forests and their Role in Retaining High Water Quality

The EPA defined water pollution (US EPA 1976) as hazards to water quality (i.e., limitations on its usefulness) and nonpoint source pollution as "sources of water pollution that do not meet the legal definition of point source" (US EPA 1992). Insofar as it pertains to forestry (US EPA 1991), guidelines on the award and management of nonpoint source implementation grant provide some clarification by defining nonpoint source pollution as:

... [pollution] caused by rainfall or snowmelt moving over and through the ground and carrying natural and manmade pollutants into lakes, rivers, streams, wetlands, estuaries, other coastal waters, and groundwater. ...such pollution results in the human-made or human-caused alteration of the chemical, physical, biological, and radiological integrity of water.

The 1991 definition correctly defines nonpoint source pollution in receiving forest waters as a weather-related function of precipitation drainage from diffuse origins (implied), through the mineral soil, and (or) across the forest floor. It is especially useful because it specifies "natural and manmade pollutants" of nonpoint source origins, both of which can limit water usefulness. It is important to emphasize that the predominate hydraulic pathway on most undisturbed forested land is subsurface drainage through mineral soil (Miller 1977, Stone 1973). Relatively little overland flow of water occurs across the forest floor (Waring and Schlesinger 1985). The subsurface pathway applies as well to cutover forestland, so long as the organic forest floor is not severely disturbed by logging activities (Hornbeck and Ursic 1979). Thus, precipitation usually infiltrates completely, with little conveyance of polluting substances across the forest floor to streams or other receiving waters. Consequently, most dissolved substances in forest waters are acquired during their passage through the forest floor and soil. Most suspended substances originate as particles scoured from channels by water flowing within stream banks (Wenger 1984).

Concern over the potential of forest management to adversely affect water quality has resulted in hundreds of research projects investigating effects of particular forestry practices on water quality. A summary of this large body of literature has been reviewed by Abell 1989; Bisson et al. 1992; Bosch and Hewlett 1982; Brown 1983; Hartman 1982; Howard and Allen 1988; Kuskee 1991; NCASI 1980,1981, 1982,1983,1984,1986,1987; Gibbons and Salo 1973; and Salo and Cundy 1987. Research shows that properly designed and maintained forest roads, located sufficiently distant from streams, minimizes sediment and other nonpoint pollution sources of silvicultural origins.

Throughout this century [the 20 century] opinions regarding forests and their role in safeguarding soil and water have been strongly held. Zon's (1927) review of the literature stated, "Of all vegetable covers, forests are most efficient in preventing steep slopes from eroding and the beds of streams from filling in silt." Glenn (1911) ascribed severe erosion and changes in regimen of mountain streams to denudation of forested slopes. Such reports implanted the conventional wisdom that only dense stands of large, mature trees fully protect soil and water. Subsequent research and practical professional experience not only validated the protective role but added much knowledge of forest management effects frequently unfamiliar to the public. Thus, a majority of the American people equate harvest of wood products with denudation, presuming long-alleged ill consequences on forest soil and water.

Even earlier, Chittendon (1909) had defined tree cutting effects on soil and water, effects consistent with current professional knowledge:

Soil erosion does not result from forest cutting in itself, but from cultivation, using that term in a broad sense. The question of preventing such erosion or soil wash is altogether one of dispensing with cultivation or properly controlling it. The natural regrowth that follows the destruction of a forest is fully as effective in preventing erosion, and even in retaining runoff as the natural forest.

Half a century earlier, Huffel (1862) had found that runoff (i.e., overland flow) did not occur in forests with leaf litter, even on steepest slopes and during torrential rains. It occurred instead from areas deprived of tree litter cover, namely from roads- in Chittendon's terms, areas of cultivation. Frothingham (1931) recognized little danger of serious erosion caused by tree cutting in unburned forest, pointing instead to deeply-worn skid roads as the greater threat. Thereafter, Kraebel (1936) and many others developed erosion control measures for mountain roads in forests of western and eastern United States, measures subject to continuing refinement ever since (e.g., Swift 1987). A survey by Packer (1967) concluded that timber cutting does not adversely affect water quality but that inadequately drained roads too close to streams are major sediment sources. That effect (table one) was clearly shown by the first-of-its-kind experiment in West Virginia's Fernow Experimental Forest (Reinhart and Eschner 1962).

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Nationwide, literally hundreds of studies have confirmed and built upon the preceding study, all of them demonstrating a single, unifying hydrologic truth. Infiltration rate, entry of water into the soil surface, almost always exceeds rates of rainfall and/or snowmelt. As long as infiltration into forest soil is that rapid, there can be no overland flow, hence no mechanism to detach particles from the forest floor or to convey them down hillsides to streams. For that reason, most sediment in undisturbed forest streams originates in their channels. Despite this wealth of knowledge and practical experience, the popular notion persists that cutting forests, especially heavy cutting, necessarily bares much soil and causes intolerable erosion. Stone's (1973) scholarly review of the literature addressed the actual effects:

Cutting of trees, even clearcutting, does not immediately change the water-handling capacity of a forest soil. Unless otherwise disturbed, the forest floor is still physically intact during the first few years; water entry rates remain very high; and no overland flow occurs. Any increase in stream turbidity is minimal. Even on heavily cut areas, regrowth of trees or other vegetation normally occupies the soil long before the stabilizing influences of the former forest have disappeared.

Any geology book will devote considerable text to erosion by streams, a major land-shaping process through eons of time. Down-wearing of the terrestrial surface by that process is generally accepted at the rate of about 1-foot per 10,000 years, converting to 0.02 ton per acre per year. This "normal" or geologic erosion affects all forested land, at rates realistically averaging about 0.01 to 0.10 ton per acre per year. Bennett and Lowdermilk (1938) equated geologic erosion with the rate of new soil formation, a normal and presumably beneficial process. It cannot be prevented. Many human uses of the forest somewhat accelerate geologic rates; timber harvest, for example, may temporarily increase them four- to five-fold. Even on highly erosive soils of the southern Piedmont, however, accelerated rates seldom persist for longer than two or three years (Ursic 1986).

During those years, erosion at geologic and accelerated rates will occur simultaneously but sediment produced by either process cannot be distinguished from that produce by the other. Given timber harvest at 25- to 50-year intervals, erosion at accelerated rates is likely to occur at perhaps 5 % to 10% of the time, with geologic erosion always an ongoing process.

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Table 1. Frequency distribution of turbidity [1] samples during logging [2] on watersheds roaded under increasingly stringent erosion control measures.

Frequency distribution of turbidity (JTU) stream samples

Number of samples

Experimental erosion control measure [3]	0-10	11-99	100-999	1,000 +	Maximum turbidity JTU
Channel skidding permitted. NO control over road location, grades up to 40%, no water bars. 7.3% of watershed roaded.	123	40	24	13	56,000
Channel skidding permitted. No control over road location, grades up to 30%, water bars at about 35 foot intervals. 6.2% of watershed roaded.	171	17	8	7	5,200
No channel skidding. No control over road location grades up to 20%. Water bars as needed. 5.8% of watershed roaded.	195	8	0	0	210
No channel skidding or wet weather logging. Roads located about 40 feet from stream, water barred, and seeded to grass after logging. Road grades up to 20%. 1.9% of watershed roaded.	201	2	0	0	25
Permanently forested	202	1	0	0	15

[1] Turbidity expressed as Jackson turbidity units (JTU) was assumed to approximate parts per million of sediment.

[2] Turbidity returned close to levels in the permanently forested watershed two years after logging ceased.

[3] Except for skidroads, the forest floor on all watersheds was minimally disturbed, infiltration remained high, and overland flow was minimal.

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Passage of the Clean Water Act and subsequent emphasis on nonpoint source pollution focused professional forester's attention on this lore of hydrologic behavior. From it were derived best management practices, now systematized to minimize sedimentation in streams of every state having significant forest resources. The following excerpts from unpublished studies in mountainous regions demonstrates BMP efficacy:

From Tennessee Technical University, Cookeville, TN (Curtis et al. 1990).

> Traditional silvicultural practices were utilized in Compartment 9 at Pickett State Forest. Best management practices (BMP) were used in the logging procedure to protect water quality of adjacent streams. BMPs were strictly adhered to and monitored as described by the Tennessee Division of Forestry (p. 15). In Rock Creek, total suspended solids (TSS) concentrations ranged from the detection limits of 0.1 mg/L to 18.4 mg/L prior to timber harvest. Once timber harvest commenced, TSS levels ranged from 0.1 mg/L to 14.0 mg/L. Average TSS concentration in Rock Creek immediately upstream and downstream from Stand 22 were 3.0 mg/L and 5 mg/L prior to harvest and 2.1 mg/L and 2.3 mg/L after harvest activities began, respectively. Therefore, the transport of suspended solids within the watershed was not affected by the timber harvest (p.65).

From the University of Kentucky, Lexington, KY (Colthrap, undated).

> Clearcut harvesting was conducted on two of the watersheds, starting in August 1983 and ending in May 1984. BMP constraints were employed during and after logging one watershed, while a 'logger's choice' operation was conducted on the other. The third watershed remained undisturbed and served as a control. Suspended sediment production was greatest from the 'logger's choice' watershed, next from the BMP area, and the smallest from the control area. Mean post-treatment values were 0.66, 0.16, and 0.29 ton/acre/year for the control, BMP, and logger's choice' watersheds, respectively.

Binkley and Brown (1993) have reviewed nationwide experience with best management practices, concluding that:

- In most cases, forest and rangeland management activities are relatively minor contributors to water quality degradation.

- Suspended sediment is the major water quality concern. Best management practices generally minimize suspended sediment concentrations.

Many years ago, Dr. Cecil Wadleigh (then Chief, Agricultural Research Service) published a nationwide estimate (source unknown) of sediment production by broad categories of land use. According to him, the nation produces about four billion tons annually, with about 55% from farmlands, 30% from badlands, and 15 % from urban, highway, range, and forestlands.

About 310 million acres of United States are farmland (MacCleery 1992); calculated from the above data, sediment production from farmland average 7.1 tons per acre per year (t/ac/yr). Assuming that a quarter of Wadleigh's last category concerns the nation's 737 million acres of forested land (MacCleery 1992), then average sediment production from that source is 0.22 t/ac/yr. Some rough checks on those quantities are possible. The Alabama, Delaware, Potomac, and Sabine Rivers drain predominately forested watersheds in the eastern United States, discharging 0.15, 0.23, 0.27 and 0.24 t/ac/yr, respectively (Holeman 1968). All of those watersheds, however, contain nonforested land, usually the sources of sediment produced at rates higher than produced on entirely forested land. In fact, regression analysis by Lull and Reinhart (1972) showed that a 5-fold decrease in forest cover caused an 18-fold increase in sediment production.

Forest Cover (%)	Sediment Yield (t/ac/yr)
100	0.03
80	0.06
60	0.14
40	0.61
20	0.64

Patric et al. (1984) statistically analyzed 812 studies of sediment yield on forested land, data from all across the nation. About one-third of those studies denoted yields not exceeding 0.02 t/ac/yr, three-quarters did not exceed 0.25 t/ac/yr, with only a handful of the remainder exceeding 1.0 t/ac/yr. Average sediment yield from all completely forested areas, for both eastern and western United States, was 0.07 t/ac/yr, about 1% of that from farmland as calculated above.

In light of the foregoing sediment production data, that summation by Rice et al. (1972) of timber harvesting effects on soil erosion makes a great deal of sense. Their conclusions, evaluated by no less an authority than Dr. Earl L Stone (Comerford and Neary 1985) as a thorough-going summary, are abbreviated as follows:

- Erosion in an undisturbed forest represents a minimum for the site, and most of man's activities will increase the erosion rate to some extent.
- The cutting of tress, by itself, does not significantly increase erosion.
- Erosion rarely occurs uniformly on a forested watershed.
- The road system installed to facilitate timber harvest far overshadows logging or fire as a source of accelerated erosion.

- Because of the diversity of species within a natural forest ecosystem, bared areas are quickly invaded by pioneer species and initially high rates of sediment production decline rapidly.

Two overview comments by perhaps the nation's foremost silviculturist (Smith 1973) lend credence to the preceding synopsis of forest erosion and sediment production studies:

- Of all the land resources that man uses, the forest comes closest to being the one that can be used in perpetuity with lease harmful effect on the total environment. ... Like all other living resources, the forest is a renewable resource, perhaps the most perfectly renewable of all.

- The Most important way to reduce any impact on timber harvest demonstrably harmful to the physical environment is to regulate the construction and maintenance of logging roads. These cause vastly more damage to soil and waters than drastic cutting or fire.

Finally, a few pertinent comments by the chairman (Seaton 1973) of the President's Advisory Panel and Timber and Environment:

- Many citizens conscious of the demands modern society places on our environment, criticize operations and management objectives on the national forests.... The Panel has made a thorough inquiry into these and related matter. Erosion and plant nutrient losses from well-managed forests are inconsequential compared with those that occur on comparably well-managed and long cultivated agricultural lands (SAF1995).

Literature Cited does not Support the EPA's Proposal

We are extremely concerned that the EPA has misunderstood and misrepresented three technical publications cited in the proposed regulations. The first publication is by Dr. R. Scott Beasley's 1979 article, "Intensive Site Preparation and Sediment Losses on Steep Watersheds in the Gulf Coastal Plain," *Soil Science Society of America Journal,* 43(3):412-416. As Dr. Beasley has stated in the attached letter, "it is obvious to me that the person(s) who cited my paper ... either did not read or chose to ignore the context in which the findings were reported." We strongly encourage the EPA to look for further research that is representative of the regions, conditions, silvicultural operations described in the proposed rule, and are based on statistically valid, replicated watersheds studies.
Additionally, it has been brought to our attention that another piece of scientific literature used by the EPA to justify the necessity of federal regulation of forestry activities was apparently misrepresented and cited incorrectly (D.G. Neary and J.L. Michael, 1989). The proposed revisions to the NPDES regulation reference this literature as stating that "silviculture contributes approximate 3 to 9 percent of the nonpoint source pollution to the Nation's waters." This statement

is not contained in the paper to which it is attributed. We believe that it is vital to public decision making that scientific findings are used and referenced correctly. This is no small oversight.

And lastly, the EPA's use of a study by Anderson and Potts (1987) to explain the impacts of roads and harvesting on suspended sediment yields as a rational for proposing the case-by-case designation authority is incorrect. 64 Fed. Reg. at 46,078. Anderson and Potts state "[a]lthough ... sediment concentrations and sediment yields were all consistently higher following logging and road construction, none of these differences were statistically significant (alpha = 0.05)."

This same study goes on to make clear that the sediment yields at issue were likely derived from road construction rather than other forestry activities. It is significant to note that the road construction study took place in 1983 - six years before Montana implemented BMPs and eight years before streamline protection regulations were enacted.

These errors are critical to the EPA's rationale and support for the proposed regulations. In light of the lack of current scientific evidence to justify the EPA's proposal, perhaps the subset of proposed regulations pertaining to silviculture should be withdrawn from the larger set of proposed regulations and the EPA should reconsider whether silvicultural activities need to be addressed.

Conclusion

The Society is opposed to the regulatory changes the EPA proposes for silvicultural operations. The EPA is proposing the removal of the point source exemption from only three activities: animal feeding operations; aquatic animal production facilities; and silvicultural activities. While the first two activities proposed rarely make beneficial contributions to water quality, forested lands and appropriate silvicultural activities on those lands regularly improve water quality. For example, silviculture is the preferred management activity in the Catskill watershed, the source of New York City's drinking water. Nowhere in the EPA's analysis is there any acknowledgement of the benefits received from managed forests. The health of our streams, lakes and watersheds are clearly linked to the presence of trees. Scientists have shown that forests are the most beneficial land use for clean water. Forests, acting as a natural buffer, increase watersheds' ability to deal with disturbances, leading to better water quality. Healthy watershed forests have numerous positive effects. They stabilize soil through a vast root system. Trees (and more importantly the forest floor and soil conditions they create) regulate streamflow and stormwater by absorbing runoff and trapping pollutants. Acting as a living filters, forests reduce the amount of nitrogen and phosphorous that flow into our waterbodies. In addition to clean air and water, forests provide recreational opportunities, offer habitat and food for fish and wildlife and supply fuel, lumber, and paper that we use everyday. Maintaining these benefits is best achieved through providing incentives to landowners to retain healthy forests covered by trees. The EPA's proposed regulations remove incentives to retain forestlands, as they will make it more expensive to do so.

Comment Clerk
EPA—Water Docket (W-99-04)
January 11, 2000

We want to re-emphasize that SAF shares the EPA's desire to reach the goals of the Clean Water Act and to control nonpoint source pollution from silvicultural activities. SAF and its members have 100 years of experience managing for water quality from forestlands. We will continue to offer our expertise and support to the EPA to protect the water quality emanating from our nation's forests. However, we find the proposal to reclassify many silvicultural activities as point sources of pollution to be counterproductive to meeting the goals of the Clean Water Act.

Sincerely,

William H. Banzhaf, CAE
Executive Vice President

WHB/AB/cas

cc: The Honorable Richard G. Lugar
The Honorable Patrick J. Leahy
The Honorable Tom Harkin
The Honorable Larry E. Craig
The Honorable Kent Conrad
The Honorable Bob Smith
The Honorable Max Baucus
The Honorable Frank Murkowski
The Honorable Larry Combest
The Honorable Charles W. Stenholm
The Honorable Bob Good Latte
The Honorable Eva M. Clayton
The Honorable Don Young
The Honorable George Miller
The Honorable Helen Chenoweth-Hage
The Honorable Adam Smith
The Honorable Daniel R. Glickman
The Honorable George T. Framtpton, Jr.

Comment Clerk
EPA—Water Docket (W-99-04)
January 11, 2000

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US Environmental Protection Agency. 1996. The Quality of Our Nation's Water: 1996 (EPA 841-S-97-001) and the Report to Congress (EPA 841-R- 97-008)

Comment Clerk
EPA—Water Docket (W-99-04)
January 11, 2000

Enclosures:

(1) Stuart, Gordon W., 1996. The National Association of State Foresters 1996 Progress Report, State Nonpoint Source Pollution Control Programs for Silviculture.

(2) Reauthorization of the Clean Water Act: Forestry Effects on Water Quality. February 1995

(3) Letter From R. Scott Beasley, Ph.D., Dean, College of Forestry, October, 25, 1999

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January 19, 2000

Comment Clerk for the NPDES/WQS Rule
Water Docket (W-99-04)
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Dear Sir or Madam:

The National Pork Producers Council (NPPC), on behalf of its members and affiliates, respectively submits these comments for consideration to the Environmental Protection Agency ("EPA") regarding the proposed regulations to revise the National Pollutant Discharge System ("NPDES") permit program. These comments also include NPPC concerns regarding the establishment of a federal antidegradation policy under the Clean Water Act ("CWA") as referenced in 64 Fed. Reg. 46,058-89 (Aug. 23, 1999).

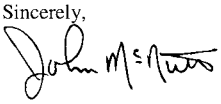
The NPPC represents approximately 85,000 pork producers across the United States. The economic impact of the pork industry on rural America is significant. Farm receipts from hogs place the industry in 4th among all farm commodities. Furthermore, annual farm sales exceed $10 billion, while the retail value of pork sold to consumers exceeds $30 billion.

As a result, pork production continues to create jobs and economic opportunity for thousands of rural communities across the United States. The pork industry is responsible for over $64 billion in total domestic economic activity based on a 1995 study by researchers at Iowa State University. Through direct and indirect ways, the pork industry supports 600,201 jobs and adds over $27 billion of value to production inputs. Due to these facts, the pork industry continues to be a major contributor to local, state and national economies and governments.

In addition, the global market offers tremendous growth potential for U.S. pork producers. Pork is the world's "meat of choice," with approximately 43 percent share of the world's meat protein market. The U.S. pork industry is steadily increasing its market share of this vast world market, exporting over 6.5 percent of its production in 1998 after becoming a net exporter in 1995 for the first time since 1952. The National Pork Producers Council is the only national membership organization representing pork producers exclusively. The NPPC "Pork. The Other White Meat®" promotion is well known. Funded by the national pork checkoff and paid for by producers, it is credited with having a major impact in improving pork's consumer image and helping improve pork demand. The checkoff also funds important research and educational projects to improve pork's nutritional value, environmental profile, overall quality, and price.

In conclusion, After careful review of EPA's proposed regulations and current law, the NPPC has serious concerns that the NPDES/WQS requirements have the potential of negatively impacting the pork industry. Therefore, these comments are intended to provide the USEPA with additional insight on these concerns and there effect on the industry. I thank you for your time and consideration.

Sincerely,



John McNutt
President
National Pork Producers Council

NPPC COMMENTS ON PROPOSED CLEAN WATER ACT REGULATIONS GOVERNING THE NATIONAL POLLUTANT DISCHARGE SYSTEMS PERMIT PROGRAM (NPDES) AND FEDERAL ANTIDEGRADATION POLICY

January 19, 2000

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1.0 . Executive Summary

This is the second in a two-part rulemaking proposed by EPA on August 23, 1999. In the initial rulemaking, EPA proposed revising the Total Maximum Daily Load (TMDL) regulations. As a result the Agency would extend the NPDES regulations (and accompanying economic restrictions) to many pork producers and other livestock producers located in watersheds threatened or impaired by nonpoint source pollutants such as excess nutrients. NPPC filed comments on that rulemaking, and identified numerous valid instances where the proposed rule, as written, would impact the pork producer. Pork Producers continue to demonstrate environmentally ethical operational practices. To make this point, almost 1,000 producers have participated in the America's Clean Water Foundation/ NPPC's On-Farm Assessment and Environmental Review program. NPPC's goal is to have 12,000 producers assessed, representing 80% of United States hogs, by 2005. Furthermore, the TMDL proposal would penalize producers even if they were not the source of the pollution; for instance when air deposition of nutrients from off-site pollution sources impair the same watershed.

Under EPA's NPDES proposal, the second in the series, new pork production operations or expanding operations would face the challenge of finding permit offsets among other (competing) producers, neighboring communities or industries often discharging the same pollutants. Again, this requirement remains valid even if the pollutants are originating from an off-site source. In addition, this rulemaking would strengthen EPA's authority to designate many animal feeding operations (AFOs) and silviculture operations as point sources, even in States with delegated CWA authority. Lastly the proposal would strengthen EPA's argument that antidegradation is required to be part of State water quality standards. The following comments are intended to address several concerns NPPC has regarding these regulations in addition to offering feasible suggestions for the Agency to consider.

2.0 Specific Comments

2.1 Proposed Authority to Designate Point Sources Subject to NPDES Permits

Currently, only the State Director may designate an animal feeding operation (AFO) as a concentrated animal feeding operation (CAFO) following an on-site determination that the facility is a significant contributor of pollution to the waters of the United States [1]. However, EPA proposes to revise the regulations to grant itself regulatory authority, even in States with delegated NPDES permit programs, to designate animal feeding operations (AFOs) as sources subject to NPDES permit requirements[2]. EPA's stated the purpose for expanding authority is to "ensure more effective implementation of TMDLs" in waterbodies "after the establishment of a TMDL"[3].

We believe the threat of federal case-by-case intervention in authorized States is intimidation designed to extract from States more rigorous, *i.e.* enforceable, "reasonable assurances" that nonpoint source load allocations will be met[4]. This is perceived as a threat from EPA that if the agency finds inadequate "reasonable assurances" in the state's TMDL implementation plan it may reject the TMDL and establish one federally. As written this includes a federally established implementation plan and federally enforceable "reasonable assurances."

EPA cannot assume regulatory authority that properly belongs to delegated States simply because it will make it easier for EPA to control nonpoint sources. This infringes on the prerogatives of the States that have been delegated NPDES permit authority and there is no basis in the CWA for that position. EPA has made no demonstration that federal intervention in authorized States is necessitated by any failure of States to

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[1] EPA 1995 *Guide Manual on NPDES Regulations for Concentrated Animal Feeding Operations* ("1995 CAFO Guidance"), page 2.6

[2] 64 Fed. Reg. 46074-78

3 64 Fed. Reg. at 46,059

[4] 64 Fed. Reg. at 46,076

appropriately identify concentrated animal feeding operations ("CAFOs") subject to NPDES permitting.

The proposed rule provides that EPA will only use its "point source designation" authority in case-by-case situations where EPA must take action to establish a TMDL and not use it to make categorical designations of a type of agricultural activity or of activities along a particular waterbody[5]. But NPPC is concerned that in its preamble, EPA states that "[d]esignation can also be made by category"[6]. NPPC hypothetically could see such categorical designations as "*All feedlots, regardless of size, located within an impaired watershed*". EPA should add specific regulatory text affirming current regulations (40 CFR 122.23(c)(v)(3)) and making clear that designation of agricultural activities as point sources may only occur on a source-by-source basis and not by categorical designation following an on-site inspection.

2.2 Restrictions on State Extension of Expired NPDES Permits

The proposed rule would expand existing regulations found at 40 CFR 122.44 that requires point source dischargers, where necessary, to receive effluent limitations that derive from and comply with water quality standards. EPA is concerned that States may delay the implementation of more stringent effluent limitations by not reissuing NPDES permits as they expire, instead simply administratively extending the permits for another period.

To prevent this practice, the proposed regulation would explicitly authorize an EPA Regional Administrator to review and object to State issued NPDES permits that have been administratively continued for more than 90 days. Prior to the establishment of a TMDL, EPA would be allowed to ensure that more stringent effluent limitations are immediately implemented by the point source. Upon establishing a TMDL, this again would authorize EPA to ensure that existing dischargers receive permit limitations consistent with wasteload allocations in the TMDL.

[5] Proposed 40 CFR 122.23(c)(4), 122.24(c)(3), 122.26(a)(1)(v)(E)

NPPC is convinced that, as States struggle to develop TMDLs for thousands of water bodies, there will be situations where administrative extension of expired NPDES permits is both justified and appropriate. Furthermore, EPA has provided no reason why the States cannot be trusted to exercise proper judgment in making those decisions. Finally, the proposed restrictions would violate the basic concepts of the CWA, which provides that once a State has been delegated NPDES permit authority. The State is the regulatory authority, and EPA cannot intervene unless it decides to withdraw the delegation and reclaim the NPDES program.

2.3 Addition of Antidegradation Provisions to Water Quality Standards

EPA states in its preamble discussion that the current federal "antidegradation policy ... *requires* that existing uses and the water quality necessary to protect them be maintained and protected."[7]. EPA also states that its proposed revision to the "federal antidegradation policy" will "*require* a new [or expanding] discharger ... to achieve reasonable further progress toward attaining water quality standards." *Id.* (emphasis added). These statements are both false, based on a plain reading of the regulatory language. The federal antidegradation regulation (even under EPA's proposed amendment) directly governs States, not dischargers or other pollution sources, and requires only State *policies* that are *consistent with* certain enumerated goals.

Current regulations require that each State "*develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to [subpart B concerning water quality standards]*." [8] These State antidegradation *policies* and the identified implementation methods (*i.e.* water quality standards) must be *consistent with* certain enumerated goals. This includes the protection of existing uses for all waters. The protection of water quality in waters that already exceeds the fishable/swimmable goals of the CWA (unless a lower water quality is necessary for

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[6] 64 Fed. Reg. 46,060-061

[7] 64 Fed. Reg. at 46,063 (emphasis added)

[8] 40 C.F.R. § 131.12(a).

important economic or social development). This also includes the protection of high water quality in "outstanding natural resource" waters. Nowhere does the current federal regulation *require* that States maintain all existing uses, or meet other antidegradation goals. Lastly, it does not require state regulations or other mandatory restrictions on dischargers or other pollution sources.

EPA states that it intends to enforce its proposed requirement that States adopt "antidegradation policies" containing the new offset requirements by federally promulgating "water quality standards" that include the new antidegradation provisions[9]. This federal take-over of antidegradation "policies" is without statutory authority. The CWA authorizes EPA to approve or disapprove (and take over if necessary) the promulgation of State water quality standards. The Act also clearly specifies that water quality standards "*shall consist of the designated uses* of the navigable waters involved *and the water quality criteria* for such waters based upon such uses"[10]. The CWA water quality standards therefore do not include antidegradation requirements. EPA has recognized as much in its own definition of water quality standards at 40 C.F.R. § 131.3(i).

The failure of States to properly designate uses or establish criteria to protect those designated uses, EPA may then follow the appropriate procedures set forth at CWA § 303(c)(3). This includes the designation of appropriate uses and the establishment of water quality criteria. However, EPA *may not* promulgate State "antidegradation policies" (*i.e.*, antidegradation requirements) by calling them "water quality standards." For the same reasons, EPA's proposed revision to 40 C.F.R. § 122.44(d)(1), adding the reference to "State antidegradation provisions" as water quality standards established under CWA § 303(c) is inappropriate[11].

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[9] 64 Fed. Reg. 46,069

[10] CWA § 303(c)(2)(A) (emphasis added); CWA § 303(c)(3)

[11] *See* 64 Fed. Reg. at 46,073-74; Proposed § 122.44(d)(1)

2.4 Proposed Offset Requirements for Certain Dischargers to Impaired Waters

Current regulations at 40 CFR 122.44 require that no permit be issued to a new source or a new discharger if the discharge will cause or contribute to a violation of water quality standards. As described in the previous section of these comments, the proposed revisions to 40 CFR 122.44 would add a new antidegradation requirement that States be required to apply to any proposed new loads to an impaired waterbody in the absence of a TMDL. This revision requires all large new and existing dischargers undergoing "significant expansion" that are proposing to discharge the pollutant(s) of concern into an impaired waterbody, to offset that new or increased discharge at a rate of 1.5:1, with very limited exceptions. EPA states that it intends to enforce its proposed requirements that States adopt "antidegradation policies" containing the new offset requirements by federally promulgating "water quality standards" that include the new antidegradation provisions[12]. NPPC is convinced that this federal take-over of antidegradation "policies" is without statutory authority.

The degree of stringency of NPDES limitations is purely a matter of State law, that EPA has no authority to override, short of withdrawing the delegation and taking the NPDES program back. It is imperative that EPA allow States the flexibility to implement the CWA's statutory requirements in a variety of different ways, depending on their specific situations. As long as States are making progress towards attaining standards, they should have the flexibility to fashion programs that coincide with that states own unique geographic situations.

Notwithstanding our firm belief that EPA lacks authority to require offsets, we offer the following comments with respect to specific aspects of the proposal:

- **Designated CAFOs Are Not Subject to Offset Requirements**

EPA intends these new requirements to apply only to those dischargers who are proposing to add new loads of pollutants to an impaired water body. To protect recently

[12] 64 Fed. Reg. 46,069

designated point sources from being subjected to the proposed requirements at 40 CFR122.4(j) and 131.12(a)(1)(ii), EPA is proposing to modify the existing definitions of both a new discharger and an existing source[13]. NPPC interprets this to mean that "designated sources" would be excluded from the proposed "new source" offset requirements. Thus, existing AFOs designated, as CAFOs would be subjected to NPDES permitting but not to the offset requirement to ensure "reasonable further progress" prior to commencing expanded operations.

- **Magnitude of the Offsets**

In the proposal, EPA states that it will object to any NPDES permit issued by a State to a source required to obtain an offset if it would not result in reasonable further progress toward attainment of water quality standards. EPA has proposed states require at least a 1.5:1 offset, but that it could vary depending on the type of pollutant, the source on the same water body from which the discharger is proposing to obtain and maintain the offsetting load reductions, and the discharger itself [14]. In the event a point source discharger enters into an offset agreement with a nonpoint source. It will be difficult to determine exactly how much reduction will be achieved and whether the reduction is maintained over time, due to the uncertainties regarding the climate, effectiveness of nonpoint source runoff management practices, and annual crop rotation practices.

EPA states that the amount of the offset could be varied from 1:1 up to 2:1 at the discretion of EPA, which takes into account such factors as where the sources of the offsetting pollutant are located (e.g., at the margins of the impaired water body). Not to mention, the number of other available source pollutants causing the impairment or the cost to control the discharge. EPA also proposes that the agency have the discretion to not require an offset, if it is determined that any offset would result in further degradation of water quality[15]. NPPC agrees that such flexibility must be

[13] 64 Fed. Reg. 46,060-061

[14] 64 Fed. Reg. 46,065

[15] 64 Fed. Reg. 46,066

available, but are convinced that it should be the State's prerogative to set any offset. The degree of stringency of NPDES limitations is purely a matter of State law, which EPA has no authority to override, short of withdrawing the delegation and reclaiming the NPDES program.

- **Proximity of Sources to Offsets**

One question that would need clarification is how close the two discharges would need to be located physically to be an eligible offset. In the case of nutrients or pesticides, where the primary concern is total concentrations or loadings rather than site-specific concentrations, it would make sense to allow trading across a broad geographic area on a given waterbody, even at the margins of the impaired water body. Thus, sources providing pollutant load reductions for offsets should not just be selected from those sources located upstream of the new or significantly expanding source, as asked by EPA in the Preamble.

Another question that would need clarification is why there must be a direct hydrologic connection between the outfall of the existing point source where the reductions are realized and the outfall of the proposed discharge. This is particularly important since EPA proposes to require TMDLs and implementation plans for waters impaired by nonpoint source pollutants originating from air deposition. An offsetting source in one watershed should be valid for a new or significantly expanding source in another water body providing both water bodies are impaired by the same pollutant and the reduction would benefit either waterbody. Furthermore, States should allow new or significantly expanding dischargers to obtain offsets from air pollution sources if the pollutants are the same and it has been established that part of the impairment of the water body in question is due to air deposition.

- **When the Reductions Must to be Obtained**

Proposed 40 CFR 122.4(j)(2)(iv) would require the discharger to achieve the pollutant load reductions on or before the date the new or significantly expanding discharger begins to discharge. Offsets that cannot be achieved by the date of the new/expanded

discharge must be achieved as soon a possible and must be at a ratio of at least 2 to 1[16]. EPA states that this would necessitate that offsetting pollutant control measures are fully installed and the discharger demonstrate with monitoring or other measures that requisite amounts of pollutant load reductions are and will continue to be realized. Such a requirement would make it difficult for point sources to gain offsets from nonpoint sources, for measurable water quality improvements may not occur for years after the pollutant control measures (BMPs) are installed for pollutant reduction. Instead, an offset should be considered valid once the BMPs are installed and functional, offsetting the new loading as it becomes established. Additionally, EPA should clarify that pound-for-pound offsets need not be accomplished simultaneously with the new/expanded discharge. For example, where the new discharge causes high loading of a short duration, offsetting load reductions should be allowed that achieve less dramatic load reductions elsewhere but over a longer period of time, so long as the required degree of offset is ultimately achieved.

- **Definition of "Significant Expansion":**

In the proposal, EPA would subject "significant expansions" to the offset requirements, and suggests that "significant expansion" could be defined as a 20% increase in loadings, or as a 50% increase in loadings above a discharger's current permit limit[17]. From a monitoring perspective, a change of 20% may not be statistically significant. A 50% increase in loadings may seem sizeable, but since water quality criteria and standards are moving ever lower, a 50% increase is the minimum EPA should consider for a threshold for designation as significant.

Should this provision become law, it would apply only to significantly increased "loadings," not to increased animal or manure production, *per se*. Where an existing producer undergoes a "significant expansion," regardless of the definition of "significant," only any new loadings associated with the expanded portion would be subject to the offset requirements under 40 CFR 131.12(a)(1)(ii). Loadings are

[16] Proposed § 122.4(j)(2)(iv)(B)

[17] 64 Fed. Reg. 46,062-063

"discharges" to waters of the U.S, whereas our members' animal production operations do not include regulated "loadings" to nearby water bodies. For feedlots subject to NPDES permits, we believe their production increases should qualify for a *de minimis* exemption. Furthermore, simply filling unused capacity and increasing the number of hogs to the facility's design capacity regardless of ultimate size, should not trigger a "significant expansion" designation.

3.0 Conclusion

NPPC's strong commitment to water quality and sustainable development stands; however, we cannot support many of the proposed changes to the NPDES and Water Quality Standard rules for the reasons given above. Attached you will find our January 6, 2000 letter regarding the proposed TMDL regulations, we strongly urge EPA to modify the proposed rules to incorporate our comments.

NATIONAL ASSOCIATION OF STATE FORESTERS
444 North Capitol Street, NW Suite 540 Washington, D.C. 20001 202/624-5415

Testimony submitted for the record by the
National Association of State Foresters

Before the Senate Agriculture Committee -
Oversight Hearing on EPA's Proposed Water Quality Regulations (8/23/99)

February 23, 2000

The National Association of State Foresters appreciates the opportunity to submit testimony on the U.S. Environmental Protection Agency's (EPA) proposed revisions to the National Pollution Discharge Elimination System (NPDES) Program and Federal Antidegradation Policy in Support of Proposed Revisions to the Water Quality Planning and Management Regulation (NPDES rule). The proposed changes in the Total Maximum Daily Load and NPDES rules have significant potential to disrupt silviculture and forest management on the nation's 337 million acres of non-industrial private forest (NIPF) land. The proposal represents a fundamental change in the approach EPA has historically taken to reducing threats to water quality from nonpoint sources. We feel this fundamental change in approach is not justified either by statutory authority or the scope of water quality impairments caused by silviculture.

The State Foresters are strongly opposed to the proposed rules on three major grounds:

1. The proposal is a major departure from the historical interpretation and implementation of the Clean Water Act, and is not supported by statutory authority.
2. The proposal ignores the relatively minor contribution made by forest management to water quality problems nationwide, and threatens to disrupt the effective approach taken by the State Foresters and our Federal partners to achieve these results.

3. The proposal will be extraordinarily difficult to implement in practice and will result in drastically higher costs for both States that must develop TMDL's and landowners and operators who might become subject to NPDES permitting requirements.

The National Association of State Foresters represents the directors of the State Forestry agencies from all 50 States, seven U.S. territories, and the District of Columbia. We believe that forest management is vital to the protection of the nation's water resources, and are committed to the goals of the Clean Water Act and to preventing water quality impairments of all kinds. We believe that forests, and the active management of forests, contribute much more to water quality improvement than to water quality impairments. Forestry is part of the solution and, in most cases, is not a source of the problem.

The original Water Pollution Control Act (Federal Clean Water Act) and subsequent amendments have consistently recognized and preserved the "primary responsibilities and rights of the States in controlling water pollution." The redefinition of silvicultural activities as point sources of pollution and the removal of the silvicultural regulatory exemption under the proposed NPDES rule, thus allowing silviculture to be permitted under the NPDES, are open and unjustified attempts on the part of the EPA to usurp control from the States. Further, and without good reason, the proposed change suggests that silvicultural activities represent a substantial nationwide NPS problem. EPA's own figures tell a much different story.

The State Foresters are opposed to EPA's proposal to remove the categorical exclusion of silvicultural activities from the definition of point source pollution. EPA's attempts to regulate silviculture activities under the NPDES permitting are scientifically unjustified, highly disproportionate with regard to other land uses, and a radical departure from the historical interpretation and implementation of the Federal Clean Water Act. In short, State Foresters recommend a retraction of EPA's proposed rule.

Shift From Historical Interpretation

The re-designation of all silvicultural activities as point sources of pollution, making all forestry practices potentially subject to NPDES permitting, is a drastic departure from twenty-seven years of statutory interpretation, case law, and regulatory implementation.

EPA's claim of authority to regulate silviculture in the proposed rule does not withstand the scrutiny of historical interpretation. Congress specifically created the provisions under Section 319, through the 1987 amendments to the Clean Water Act, to address nonpoint source water quality concerns. State Foresters believe that Section 319 contains the proper and intended authority granted to EPA for NPS controls, not the thin rationale EPA is claiming under the stormwater provisions (40 CFR 122.26(b) (14) (x). Programs and assistance available under Section 319 enable the States to proactively address NPS problems in a flexible framework and timely manner that a permitting process would not allow.

We want to stress that efforts to fully fund the Section 319 program have only recently been stepped up and that precious little Section 319 money has been made available for control of silvicultural NPS pollution. We strongly support EPA's proposed increases in funding for Section 319, and we would hope that a concerted effort would be made by EPA to work more proactively with the State Foresters and the Forest Service to ensure that prevention of silvicultural NPS pollution is emphasized in that program. We also urge the committee to review our proposal for a Watershed Forestry Initiative within the USDA Forest Service to accelerate the progress being made on forestry NPS control (attached).

Benefits of Forest Management

Forestry can contribute more to water pollution prevention and clean up, than to water pollution problems. Besides helping to mitigate and reduce NPS water quality impairment from other land use practices, active forest management actually encourages beneficial land uses and activities that can improve water quality such as reforestation and afforestation. Simply stated, getting more trees into the ground will be better for water quality. Getting landowners to reforest and/or aforest their land should be a primary mechanism in improving water quality. The proposed NPDES rule acts as a disincentive for landowners to get involved in forest management. It increases the likelihood that the landowner will choose another land use activity with increased water pollution characteristics such as agriculture or development. Positive incentives need to be provided for landowners to reforest and/or aforest their lands, not create regulations and programs that push the landowner away from planting trees.

Energies should be put into programs and services that are voluntary and incentive based, the kinds that State Foresters have been delivering to the more than nine million non-industrial

private forest landowners for over 80 years with proven success. This is reflected in the National Water Quality Inventory reports [Clean Water Act 305(b) lists] that are delivered to Congress every two years. They show a diminishing role for silviculture in impairments of rivers and streams over the past decade. Silviculture does not even appear on the list of seven contributors to river and stream impairments in the EPA's latest release of the biennial report (1996).

Best Management Practices: State Foresters are, and have been for many years, involved in the development of nonpoint source (NPS) water pollution controls and plans. We have led by taking a preventive and proactive, rather than a restorative or reactive, role to water quality impairments from silviculture activities. This involvement has led to developing practices and procedures for both preventing and reducing NPS risks, commonly referred to as Best Management Practices (BMPs). All states with significant forest operations have silvicultural NPS control programs that rely on BMPs for results.

Forestry BMPs are continually being refined in many ways to help make them more effective and enforceable. Refinements include making BMPs directly enforceable in connection with required plans and permits; utilizing "bad actor" designations; making compliance with BMPs a defense to a regulatory violation; making BMPs the basis for an exemption from a regulatory program; and making BMPs a defense to nuisance or liability actions. Continual refinements include logger licensing and certification programs which train field operators about BMP implementation. The crux is that States are already working to make existing laws and standards more consistent and comprehensive (Stuart, 1996).

These types of creative BMP revisions have helped to improve implementation to levels of 85-95% and above (Ice/Shepard, 1999). Implementation rates should only improve as time passes. This is particularly true as more and more logger/landowner monitoring, education, and training sessions come online, and forest certification and performance standard systems such as those set up by the Forest Stewardship Council and the American Forest & Paper Association (Sustainable Forestry Initiative) become more accepted and mainstream. State Foresters believe that BMP implementation accomplished by an informed and willing audience is the key to successful reduction of silvicultural NPS water pollution. We are already seeing evidence of this.

Proof lies in the 305(b) reports. Report trends show that silviculture is contributing to a diminishing fraction of polluted miles along rivers and streams. In fact, silviculture did not even show up on the list of water pollutant contributors in the latest version of the 305(b) reports (EPA, 1996). With forests covering 737 million acres of the United States (National Research Council, 1998), it is important to note that forest management is reported in the 305(b) reports to contribute to only a small fraction of the impaired rivers and streams. The logical conclusion is that the use of BMPs in forestry operations is having a positive impact on water quality. Our own studies bear this out. Whereas forty States reported localized pollution problems from silviculture in 1982, only twenty-four reported the same in 1996 (Stuart, 1996).

Implementation: More costly and cumbersome than EPA thinks

The EPA claims that they are seeking a regulatory "backstop" through the NPDES rule, so that bad actors in impaired watersheds will come under a regulatory framework. However, as written, the proposed rules lead us to believe that it would lead, in many cases, to a patchwork regulatory framework, where EPA field offices would have discretion to set up regulatory programs in some watersheds, while States would retain authority over voluntary programs in others. We believe that most States have adequate bad actor provisions and enforcement mechanisms, and we are reviewing our own State programs to confirm this. However, it is interesting to note that the States with the highest number of impaired stream miles (Washington, Oregon, and California) due to silviculture, forest practices are already regulated through State forest practices acts. We have serious reservations about what the proposed rule will mean in States such as these and in other States where the legislatures have acted to mitigate the impact of silviculture on water quality. Will EPA demand more than is currently required under State law?

This sends the message that the EPA does not believe that States are doing a good job, or they will not be able to do a good job to reduce silvicultural related NPS pollution in the future. As a result, the "backstop" undermines State good faith efforts. There is good reason to believe that this EPA action might divert resources that will limit State capability and potentially refocus State efforts into activities with unproven results. A "top-down" approach, like the one being proposed by the EPA, will only alienate the partners needed to achieve this continued success.

Below is the summary table taken from the EPA's cost analysis related to implementation of the silvicultural provisions of the proposed NPDES rule (Environomics, 1999).

Proposed Provision	Annualized Cost ($ Million)	# Entities Affected Annually
Designating Silvicultural Operations Under NPDES		
Cost for the silviculture industry	3.45 - 12.93	
Administrative costs to Federal and State governments	0.27 - 0.28	
Subtotal	**3.72 - 13.22**	**613 - 1,225**
Annualized compliance costs for small logging firms	0.36% to 0.67% of their annual revenues	368 - 735
Annualized compliance costs for small entity timber owners	0.27-0.50% of their timber revenues	< 18,000

State Foresters believe the above estimates are far too low and the proposed NPDES rule will affect a far greater number of entities than the EPA has envisioned.

First and foremost, the authors of the cost analysis admit the final reported costs are vague, misleading and uncertain. In their proposal, EPA states: "This paper presents some *rather uncertain estimates* of how often the proposed designation authority might be invoked, and, if so, the costs that will likely ensue" (p. 52, Environomics, 1999, emphasis added). This analysis must then be assumed to represent a low end-cost estimate. We believe it would be more appropriate to include a high-end estimate to better prepare potentially affected entities. We believe such a high-end estimate is justified by the fact that EPA will likely be pressured, through additional litigation, to expand their use of regulatory authority under NPDES if the

proposed rules are implemented. The final result will be significantly greater costs than anticipated by the Environomics report.

Reinforcing our belief that EPA cost estimates are far too low, the authors utilize ownership and business data that is seriously out-of-date. The 1978 data source quoted by the authors indicate only 7.8 million ownership units holding 333.1 million acres of private forest land in the U.S. That same survey was updated in 1994. The 1978 data source underestimates the number of private forest landowners by 2.1 million, and the number of acres owned by these landowners by 60 million acres (National Research Council, 1998). Furthermore, the estimated number of affected logging entities is underestimated nearly three-fold. While the authors report only 14,278 logging entities nationwide, that number is closer to 37,000 according to the Forest Resources Association (formerly the American Pulpwood Association). These numbers will substantially raise the estimated costs of the proposed NPDES rule.

Even if we assume, however, that the Environomics report is accurate, we would be forced to question the need for the rule if the number of effected landowners and forest management operations that would be impacted is so small. Their cumulative impact on water quality would be nearly immeasurable.

Again, we believe the EPA's cost estimates for the proposed NPDES rule are far too low and the true cost impacts will greatly outweigh any potential benefits, especially when considering the small amount of sediment pollution silviculture contributes to the NPS water pollution problem. The proposed NPDES rule is simply another disincentive for landowners to actively engage in forest management. We believe that the higher costs associated with these rules raises the question of an unfunded mandate which would be well above the $100 million threshold. This question should be revisited.

Conclusion

On October 22, 1999, USDA Undersecretary for Natural Resources and Environment sent a letter addressed to EPA Administrator Carol Browner on the proposed revisions to the Total Maximum Daily Load and NPDES systems. This commentary provides a very telling and accurate story of the affects the proposed rules would have. From the letter, "In general, we (USDA) feel that if the proposed rules are implemented they will likely cause disruption to

existing NPS control programs that have proven to be effective and will unnecessary divert scarce resources to a top-down, process oriented approach that may not work for NPS pollution control." We could not agree more.

The fact is forest management is dispersed in both space and time. State Foresters believe that (1) nonpoint source pollution from forestry activities are usually a result of extreme weather or operational malfeasance; (2) pollution can best be controlled through prevention; and (3) forest management has the least impact of land-use alternatives. Therefore, the EPA should retain its current NPS treatment of silvicultural practices. The idea that a tracking, permitting and monitoring system for nonpoint sources, let alone forestry, could be established to pinpoint offenders in a timely manner is simply illusory. If anything, we feel that other land uses should be brought up to the level of protection evident on forest lands, particularly when taking into account their relative contributions to the NPS pollution problem.

For these reasons, NASF recommends that the EPA retract the proposed NPDES and TMDL rules. We would encourage the agency to seriously revisit the NPS pollution issue to determine what is needed to further improve the quality of water coming off of our forested landscapes; already considered to be the source of the cleanest waters in the United States (USDA Forest Service, 2000). If the EPA is simply looking for reasonable assurances that silviculture does not significantly contribute to water pollution, the answer does not lie in Federal regulation. We suggest the answer lies in stronger commitments to BMP implementation at all levels of government within a voluntary and incentive based context that prevent water quality problems before they happen. The Federal government has a vested interest in this public good which justifies boosting Federal resources and investments that will be needed to see such commitments through.

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Ice, George, and Shepard, Jim, 1999. Silviculture and Water Quality: A Quarter Century of Clean Water Act Progress. National Center for Air & Stream Improvement (NCASI).

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Attachment:

NASF Watershed Forestry Initiative

Watershed Forestry Initiative

USDA Forest Service ~ State & Private Forestry ~ Cooperative Forestry

Background

Forests are essential to clean water – our most precious resource. Well managed forests absorb rainfall, filter pollutants from air and water, and recharge underground water supplies. They protect streams and wetlands and reduce flooding - keeping our environment healthy. Forests provide critical habitat for fish, wildlife and rare plants. Many communities rely on their forests to support the local economy and improve the quality of their everyday lives. Clearly an investment in trees and forests is an investment in clean water, clean air, and clean communities.

Issues Facing Our Watershed Forests

Non-point pollution on private forestlands has been addressed primarily through State Forestry Agencies in cooperation with the USDA Forest Service. Nationwide, nearly 70% of our forestlands are privately-owned. In the Eastern US, that figure rises to over 90%. These forests produce 2/3 of the clean water we need for recreation and support of fish and wildlife habitats as well as the drinking water supply for millions of Americans. In addition to environmental benefits, these private forestlands also produce over 50% of the nation's wood and paper products.

Forests are increasingly being removed and fragmented by land-use changes, placing stress on forests and their watersheds. These losses of forest affect more than our quality of life. In the Baltimore-Washington region alone, tree loss over the last 25 years has increased runoff nearly 20%, causing flooding and eroding streams and costing local governments over $1 billion in treatment costs. Increasingly, the conservation, restoration and stewardship of private forestlands is viewed as crucial to securing watershed health and sustaining it in the future.

A Watershed Forestry Initiative

Recent national actions such as the Clean Water Action Plan and the USDA Forest Service Natural Resource Agenda have brought new focus on the need to work at the watershed level, create opportunities for partnerships and encourage greater community participation in solving water and natural resource problems.

Historic funding levels for water related work through Cooperative Forestry programs have not met this challenge. This initiative expands stewardship activities to prevent and address water quality and watershed issues in forested watersheds. Although $20 million is needed for full implementation of water quality and watershed restoration programs on private forestlands, a dedicated watershed challenge cost share program would be an effective first step. The Initiative would implement activities in three areas:

Program Components

Watershed Foresters – A focal point for integrating forestry programs across mixed ownerships and building federal and state capacity to deliver existing cooperative programs on a priority watershed basis.

- build new partnerships at the State and local level
- provide technical guidance for water quality protection and restoration
- develop collaborative watershed projects which can address critical conservation, restoration or stewardship needs in priority areas

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POSITION STATEMENT

WRITTEN STATEMENT
of the

NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE

submitted to the

SENATE AGRICULTURE, NUTRITION AND FORESTRY COMMITTEE

on

Environmental Protection Agency's (EPA) Proposed Regulations For Total Maximum Daily Loads (TMDLs)

February 23, 2000

WRITTEN STATEMENT
of the
NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE
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Environmental Protection Agency's (EPA) Proposed Regulations For Total Maximum Daily Loads (TMDLs)

February 23, 2000

The National Association of State Departments of Agriculture (NASDA) is pleased to submit the following written testimony regarding the Environmental Protection Agency's (EPA) proposed regulations on Total Maximum Daily Loads (TMDLs) and water quality management.

NASDA, representing the commissioners, secretaries, directors of the state departments of agriculture in the fifty states and four territories, supports the protection of the environment and the wise use of our natural resources. American agriculture is dependent upon continued access to clean water, air, and fertile land for its viability.

The proposed TMDL rulemaking will have a significant impact on agricultural activities and individual farm and ranch operations nationwide. Our specific concerns are outlined below. In addition, we would like to clearly state our support for the positions expressed in USDA's letter and comments to the Environmental Protection Agency (EPA), and forwarded to Administrator Carol Browner on October 22, 1999, by Under Secretary for Natural Resources and Environment Jim Lyons.

The state departments of agriculture have numerous concerns with the proposed TMDL rulemaking. Following is a description of major issues that we hope the Committee will fully explore:

- **The TMDL rule greatly exceeds EPA's statutory authority under the Clean Water Act (CWA) to regulate nonpoint source pollution without an expressed congressional mandate to do so.**

- **The TMDL rule jeopardizes successful state and federal voluntary, incentive-based nonpoint source management programs.**

- **The TMDL rule significantly expands "command and control" regulatory mandates and does not give states flexibility to implement alternative, or "functionally equivalent" strategies.**

- **The TMDL rule fails to recognize the substantial state resources needed to address nonpoint source pollution including financial and technical assistance, scientific data, monitoring, and research.**

Authority to Regulate Nonpoint Sources

One of the most troubling aspects of the proposed TMDL rule is the dramatic expansion of EPA's authority over state decision-making in the water quality standards process. The state departments of agriculture strongly disagree with EPA's statement that Section 303(d) of the Clean Water Act (CWA) provides "ample authority" to regulate nonpoint sources of pollution and establish TMDLs for waterbodies impaired by nonpoint sources of pollution. In fact, neither the phrase "nonpoint source discharge" nor the phrase "discharge from a nonpoint source" appears in the CWA. Furthermore, Section 303 of the CWA contains no reference to runoff or to nonpoint sources. Legislative history shows that Congress made a conscious decision to treat point and nonpoint sources differently and separately in the CWA. Point sources are directly regulated by EPA through effluent limitations and the National Pollutant Discharge Elimination System (NPDES) permitting program. By contrast, Congress established the Section 319 program as the means to address and manage nonpoint source stormwater runoff from agriculture, silviculture, and other activities. This provision requires states to develop nonpoint source management plans, and identify those waters that are not expected to attain or maintain applicable water quality standards. To date, all states have approved Section 319 assessments and management programs. We believe the intent of the CWA is clear — nonpoint sources of pollution are not subject to mandatory regulations under the CWA, but are to be addressed through voluntary, outcome-based programs. It is imperative that the TMDL program not require states to operate in any different manner.

Disruption of Successful Nonpoint Source Programs

NASDA is extremely concerned that the proposed TMDL rules will disrupt and undermine existing state and federal nonpoint source programs and greatly diminish pollution reduction opportunities in the agricultural sector. The Clean Water Act (CWA) contains valuable provisions for nonpoint source management under Section 319 and Section 208. However, the CWA does not stand alone in protecting America's water from nonpoint source pollution. Farmers and ranchers have provided tremendous water quality gains through their participation in programs established under the 1985, 1990 and 1996 Farm Bills. These programs include the Environmental Quality Incentive Program (EQIP), the Conservation Reserve Program (CRP), and the Wetlands Reserve Program (WRP). Most states have developed — and are implementing — aggressive nonpoint source programs to protect water quality, including nutrient management and permitting programs. Agricultural producers and other landowners have integrated complex systems of best management practices (BMPs) into their planning and operations. Today, millions of farmland acres are protected by conservation buffers, grassed waterways, contour strips planting, conservation tillage, and other BMPs. The benefits are being seen in cleaner water, improved wildlife habitat, and the protection of land from soil and wind erosion.

EPA's proposed rule fails to allow states the flexibility to build on this progress. Instead, EPA's TMDL proposals substantially rewrite implementation of the Clean Water Act with prescriptive requirements, short deadlines, new and additional layers of planning, implementation, and oversight. This is counterproductive. Revisions in the TMDL program should allow for its use where it can be most effective in solving water quality problems. It should not simply replace or inappropriately conflict with other long-standing CWA and nonpoint source programs. TMDLs are only one of many useful planning tools for states to evaluate environmental risks on agricultural lands and develop and implement plans to address those risks. For example, states could effectively use TMDLs as the initial basis to direct increased monitoring and reallocation of resources, so that we know which management practices and investments should be supported through financial, technical, educational, or research assistance. This will help us produce more environmental benefits. Instead, it appears that EPA is attempting to leverage a potentially good planning tool into a comprehensive and rigid regulatory program without providing the

data and science to make it work. It makes no sense for federal programs to duplicate the state's efforts or require us to change course now and dismantle existing structures that are successfully working.

Need for Flexibility and Incentives

States must have the flexibility to implement their own existing or new "functionally equivalent" strategies that achieve national environmental objectives. As we noted above, almost all states are utilizing existing laws, regulations, strategies, and programs to address water quality concerns associated with agricultural production. States are aggressively pursuing and expanding resource conservation efforts to minimize agricultural nonpoint source pollution. Significant environmental improvements have been achieved. In many cases, this has occurred without legislation or regulation at the federal level. We strongly believe that alternative or functionally equivalent state strategies may yield more environmental progress and a greater commitment to implementation of nonpoint management programs.

EPA's approach under the TMDL proposal only expands a "command and control" regime of new regulations and requirements. Providing states with the ability of using a menu of options will allow us to build on existing programs, authorities, and strategies that deal effectively with agricultural runoff. It does not make sense or sound public policy for the federal government to promote economic environmental partnerships with farmers on one level, then saddle them with increased regulatory requirements and burdens. For example, instead of calling for regulation if an initial round of BMPs do not reach water quality goals within a specified timeframe, a second round of upgraded land management practices that are most likely to be adopted by landowners on a voluntary basis, given adequate technical and financial assistance, should follow. Many farmers and ranchers actively seek opportunities to manage their land to support environmental objectives. Many more would do so if provided with the right incentives and support. The proposed TMDL rule wrongly attempts to micro-manage state conservation planning, and does nothing to encourage farmer participation or create opportunities for improving water quality protection.

Improvements in water quality in watersheds that are impaired by agricultural activities will also require the full cooperation of agricultural communities. Proceeding with a strategy that is based on heavy-handed mandates will not foster cooperation. Rather, we fear it will result in litigation, and only delay further water quality improvements. Our experience has shown that successful environmental efforts have been obtained where the activities are voluntary, use partnerships in a team approach, and meet the specific needs of each area. Agricultural producers are willing to do their part in promoting and adopting good management practices that will protect water quality. Any revisions to the TMDL program should emphasize cooperative — rather than regulatory— approaches to nonpoint source pollution reduction, and be led by conservation districts and watershed partnerships. This will allow states to move forward in addressing agricultural nonpoint source pollution priorities.

Need for Financial Resources and Improved Water Quality Data

The state departments of agriculture want to emphasize the importance of financial resources and technical assistance. We have often stressed the need for consistent and increased federal funding for nonpoint source programs. Over the past two decades, federal agencies have seriously under-invested in efforts to control and abate nonpoint pollution problems. Although nonpoint source programs have historically received only about one or two percent as much federal funding as point source control programs, they have nonetheless resulted in significant reductions in soil erosion and runoff of agricultural stormwater. Further progress in achieving water quality goals will require a much greater federal commitment to adequate funding. We are particularly concerned that EPA's economic analysis provided in the proposed TMDL rule is inaccurate and inadequate. The state water control administrators

have estimated that $5 billion in new costs will be needed, not including costs to the private sector, for states to comply with the proposed TMDL requirements. Clearly, EPA should complete a comprehensive cost analysis before proceeding with the proposed rule.

NASDA welcomes the administration's recent announcement to seek $1.3 billion in the FY2001 budget for conservation programs to help family farmers take steps to protect water quality and the environment. This new budget initiative is the correct approach to solving water quality problems because it recognizes the importance of flexible, incentive-based, and site-specific programs. It provides a tremendous opportunity to accelerate agricultural conservation practices, and establish working partnerships with key agricultural stakeholders. This is especially true since unlike some businesses, utilities, or government, farmers and ranchers cannot raise the value of their products to offset the costs of best management practices or regulatory requirements. It is unrealistic to expect them to participate without adequate financial and technical assistance. These new conservation initiatives should be fully funded, implemented, and evaluated before additional "command and control" strategies, such as the federal TMDL regulations, are promulgated.

An effective and cost-efficient response to water quality problems also requires accurate and reliable information on the source, extent, and impact of nonpoint source pollution, as well as the effectiveness, utility, and economic feasibility of conservation measures and best management practices. We are greatly concerned that current information and statistics on water quality are lacking in completeness and/or are so dated that they can no longer be considered accurate. The General Accounting Office's (GAO) preliminary report on water quality data gaps underscores the current situation. GAO states that "developing TMDLs for pollution problems caused by nonpoint sources often requires additional data collection and analysis. Only three states reported having a majority of the data they need to develop TMDLs for these types of problems." Certainly, EPA's TMDL rulemaking should not proceed until these critical data gaps can be addressed.

State departments of agriculture represent a tremendous asset that can be of considerable assistance to the country's effort to create a successful working partnership between agriculture and the environment. NASDA appreciates your leadership in holding oversight hearings on the TMDL rulemaking and the impact it will have on farm and ranch operations. We stand ready to work with Congress, EPA, and USDA to develop strategies and policies that will focus on environmental results to achieve our mutual water quality goals.

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February 29, 2000

The Honorable Richard G. Lugar, Chairman
Senate Agriculture Committee
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman,

Please find attached copies of three letters from the LSU Ag Center, the Glenn-Colusa Irrigation District and the Northern California Water Association. These letters were submitted by those organizations as comments on the proposed revisions to Water Quality Planning and Management Regulations concerning TMDL's. USA Rice Federation, with the approval of these three organizations, requests that these three letters be entered into the record of the hearings on the EPA and the Clean Water Act held last Wednesday, February 23, 2000, by the Senate Agriculture Committee.

Thank you very much.

Sincerely,

Cleveland H. Marsh
Vice President, Domestic Policy
USA Rice Federation

US Rice Producers' Group
Charter Member

Rice Millers' Association
Charter Member

USA Rice Council
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January 17, 2000

Comment Clerk
Water Docket (W-98-31 / W-99-04)
Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

E-mail: OW-Docket@epa.gov

RE: Comments on TMDL and NPDES /WQS Proposed Rule

Dear Comment Clerk:

Through this letter the Louisiana State University Agricultural Center (LSUAC) hereby submits comments on EPA's TMDL and NPDES / WQS proposed rules. The LSUAC takes issue with several very important aspects of these rules, mainly (1) EPA's decision to abandon the highly effective voluntary, incentive-based approach to water quality management for agriculture and forestry, (2) EPA's unwillingness to allow individual states to develop water quality policy that best fits the economic and technological ability of producers, (3) EPA's inability to accurately determine the significance of ambient nonpoint source pollution contributions within watersheds and (4) EPA's inaccurate estimate of the actual producer costs (and social benefits) associated with the implementation of the proposed rules.

Specific comments on the proposed TMDL regulations are outlined below:

- **EPA does not have the congressional authority to require specific actions in State TMDL implementation plans as a condition of final approval.** Section 303(d) of the Clean Water Act (CWA) does not provide EPA with any implementation authority. EPA has the responsibility to approve the numeric TMDL and states have the responsibility to develop and implement measures to achieve state established water quality standards.

- **Non-point source activities (agriculture and forestry) are not required to have TMDLs.** EPA is proposing to require states to list and prepare TMDLs for waters that are impaired from only non-point source activities under Section 303(d). The CWA does not give EPA that authority. Waters impaired solely by non-point sources should only be listed in a state's Section 319 non-point assessment report.

- **Waters currently meeting water quality standards as "threatened waters" should not be required to be listed by states.** EPA is proposing to define "threatened waters" as waters

where water quality standards are currently being met, but there is an expectation that the standard will not be met in the next monitoring cycle. There is no legal basis in Section 303(d) for listing waters now achieving water quality standards.

- **Section 303(d) listing for impaired waters should be based on accurate pollution monitoring data.** EPA is proposing to define impaired waters as any water that does not attain water quality standards due to an individual pollutant, multiple pollutants or pollution from an unknown cause of impairment. Low water flow or degraded habitat could be classified as pollution. A decision to determine impairment could be based on visual observations or monitoring data. An accurate determination of water quality impairment in Louisiana cannot possibly occur where there is a lack of sufficient data, outdated assessments, incomplete assessments, or no data at all. Use of these inaccurate measurements has resulted in a doubling of Louisiana's 1998 impairment list to approximately 345 waterbodies covering most state watersheds. Only accurately collected monitored data for discrete, defined pollutants should be used to determine impairment. Visually observed degraded habitat, turbidity, or low stream flow should not be classified as pollution.

- **The process for listing and de-listing impaired waters should have the same criteria.** The standards for listing and de-listing a watershed under Section 303(d) should be the same. A system that requires less documentation and review for a listing than for a de-listing is scientifically and technically flawed.

- **In waters where both point and non-point source activities may be causing a 303(d) listing, EPA is proposing that both sources share the responsibility of achieving water quality standards.** EPA is proposing that both point and non-point sources be subjected to an allocation of a daily pollutant limitation through a TMDL. This, however, is not legally required, scientifically quantifiable/verifiable, or cost-effective. Nonpoint source pollution would be best addressed through the implementation of research-based Best Management Practices (BMPs) while point source pollutants are managed through the existing NPDES program and state developed TMDLs. The implementation of BMPs through voluntary, incentive-based mechanisms should be ruled as the functional equivalent of TMDLs for non-point pollution sources.

- **States will be burdened with large unfunded mandates if they are forced to implement EPA's proposed TMDL regulations.** EPA has not accurately determined the financial burden placed upon states and agricultural/forestry producers to develop and implement TMDLs as proposed. Additionally, EPA has not been able to accurately estimate the real benefits of meeting potentially un-achievable standards. Some economists are predicting that development and implementation costs (to states and producers) could realistically be in the billions of dollars.

Comment Clerk
January 17, 2000

- **Many agricultural dominated waterways in Louisiana have been significantly modified to directly meet the needs of crop production (i.e., irrigation, drainage, etc.) – in these cases crop production should be the primary use.** It may be prudent to develop a specific agriculture use designation that allows for continued, historic economic activity within such watersheds with reduced emphasis on other uses (swimming, fishing, etc.).

Specific comments on the proposed NPDES/WQS rule are outlined below:

- **Animal feeding operations, aquatic animal production facilities, and certain silviculture management activities (all historically classified as non-point sources) should not be subjected to the NPDES permitting program.** The proposed reclassification of these historically exempt activities as point sources (and thus requiring NPDES permits) reverses a 27 year determination under the CWA that these activities are "non-point" sources. There is no legal or statutory authority for EPA to develop these regulations. Congress clearly intended for these land uses to not be regulated through the NPDES program. EPA's authority to arbitrarily designate certain animal feeding operations (aquatic and terrestrial) as point sources (requiring NPDES permits) regardless of the number of animal units being produced is technically unsound and economically unreasonable. States have and should maintain the authority and responsibility to identify and address nonpoint sources of pollution under other sections of the Clean Water Act.

- **Restrictive NPDES permit conditions may lead to economic disaster in rural communities.** NPDES permit conditions will require offsets (reductions) of up to 1.5 times the proposed discharge from any new or expanding point source activity in an impaired watershed where a TMDL has been established. If the 1.5 point source offset cannot be achieved, business expansion within a watershed may not be allowed, virtually stopping all new economic development. States must be given the authority and flexibility to consider offsets on a case-by-case basis considering technical and economic feasibility and environmental and human health benefit.

In conclusion, it is our opinion that these proposed rules be suspended until an independent, in-depth cost/benefit analysis can be conducted, and a clear justification is delineated for increased regulation covering agriculture, ranching, aquaculture and forestry activities in Louisiana. Additionally, we feel that much more research-based data should be collected regarding the contributions of pollutants from undisturbed areas and the ability of a watershed to meet specific water quality standards with current economic activity in place. A very serious farm financial crisis has burdened agricultural producers over the past 2-3 years. The increased burden of un-warranted environmental regulation will no doubt result in financial ruin for many Louisiana farmers and ranchers. This will spin-off into accelerated economic decline in many rural Louisiana communities with little potential for economic diversification at this time.

January 17, 2000

It would be advisable for EPA to enhance education and outreach activities, and encourage voluntary, incentive-based water quality policy in Louisiana covering agriculture and forestry activities. BMP development and voluntary adoption has been very successful in Louisiana, and the continuation of this effective approach is highly encouraged in lieu of new regulations.

Sincerely,

William B. Richardson
and Chaikley Family Endowed Chair

WBR/twm

c: The Honorable Mike Foster, Governor of Louisiana
Commissioner Bob Odom, LDAF
Senator John Breaux
Senator Mary Landrieu
Congressman John Cooksey
Congressman Jim McCrery
Congressman Chris John
Congressman Richard Baker
Congressman David Vitter
Congressman Bill Jefferson
Congressman Billy Tauzin
Senator John Hainkel, President of the Senate
Rep. Charles DeWitt, Speaker of the House
Rep. Francis Thompson, Chairman of the House Ag Committee
Senator Mike Smith, Chairman of the Senate Ag Committee
Mr. Dale Givens, DEQ Secretary
Dr. Larry Rogers, Vice-Chancellor & Director, LAES
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GENERAL MANAGER

January 19, 2000

VIA FEDERAL EXPRESS

Comment Clerk for the
TMDL Program Rule,
Water Docket (W-98-31)
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Proposed Revisions to Water Quality Planning and Management Regulations; Proposed Rule — TMDL's

Dear Sir or Madam:

The Glenn-Colusa Irrigation District ("GCID") hereby provides its comments to the Environmental Protection Agency's ("EPA") proposed revisions to the Water Quality Planning and Management Regulations, 40 C.F.R. Part 130, regarding Total Maximum Daily Loads ("TMDL") published in the Federal Register on August 23, 1999. In this regard, GCID joins in other comments provided to EPA in opposition to the proposed rule, including, in particular, those of the United States Department of Agriculture, relevant excerpts of which are attached hereto and hereby fully incorporated herein by reference.

Introductory Statement

Initially, it is important to understand the historic and practical context in which the draft regulations are being proposed. Congress has specifically and without qualification determined that nonpoint sources of pollution should not be regulated in the same manner as point sources of pollution, including a determination that the establishment of discharge standards, whether pursuant to the National Pollutant Discharge Elimination System ("NPDES") or otherwise, could not be imposed on nonpoint sources of pollution. Instead, Congress established (and EPA has administered over time) other programs that specifically deal with nonpoint source pollution control.

Post Office Box 150 ■ 344 East Laurel Street ■ Willows, California 95988 ■ Telephone: 530/934-8881 ■ Fax: 530/934-3207

Proceeding as is proposed in the draft rules is not only impermissible under the existing statutory structure, it is also inconsistent with congressional policy with respect to nonpoint sources of pollution. Proceeding as is proposed in the draft rules ignores the practical reality which gave rise, at least in part, to congressional policy with respect to nonpoint source pollution. Simply stated, nonpoint sources of pollution are more difficult to deal with than point source pollution; and the *de facto* permitting envisioned in the proposed TMDL regulations does not, at all, address the costs associated with the program that is envisioned. Without the type of congressional funding commitment that accompanied the regulation of point sources, the proposed rules, if adopted, will merely inject a great deal of chaos into the process of dealing with nonpoint sources of pollution and, in the end, lead to a situation where EPA will dictate agricultural land use through TMDL crisis management. Proceeding in this manner will not only greatly disrupt agricultural endeavors, but also disrupt the existing nonpoint source pollution control programs. Thus, not only will agriculture be harmed, but effective control of nonpoint sources of pollution will not be advanced.

EPA should abandon its attempt to expand its regulation of nonpoint sources of pollution beyond the bounds established by Congress and instead explore means within the existing Section 208 and 319 programs to better meet the goals that Congress did, in fact, establish in this area. To do otherwise is to ignore the clear differences between point and nonpoint sources of pollution created by Congress.

Specific Comments with Respect to Proposed Rule

1. Section 130: Any implication that all that is intended with respect to the proposed rule's application to nonpoint source discharges is an extension of BMPs is simply disingenuous. The preamble provides clear evidence of EPA's intent to use TMDLs "to implement allocations that will result in the attainment of water quality standards." See, e.g., 64 Fed.Reg. 46030. As noted above and in Attachment 1, proceeding in this manner is inconsistent with Congress' intent with respect to the regulation of nonpoint sources of pollution.

2. The assertion within the preamble that the language of Section 303(d) was intended to extend to nonpoint sources of pollution is inconsistent with the entire statutory structure of the Clean Water Act ("CWA"). The syntactical gymnastics utilized at pages 46020-46021, among other places, is merely an inappropriate attempt to "bootstrap" an intent, with respect to the regulation of nonpoint sources of pollution, that cannot be imputed to Congress or to the CWA. The CWA clearly draws a line between and distinguishes point source from nonpoint source pollution. The CWA further provides for distinct means by which the two are to be addressed. The proposed rule, as a practical matter, ignores this distinction and treats nonpoint source pollution as if it were point source pollution. This is simply not permissible.

3. Section 130.2 Definitions: One cannot distinguish between "pollution" and "pollutants" as is attempted in the proposed rule. Pollution must be "man-made" or caused by man's intervention in order to be regulated. One cannot here regulate such things as "natural background sources." In this regard, it is simply inappropriate to add "atmospheric deposition" or "natural background sources" to the definition of "load allocation" to be allocated to nonpoint sources.

There is no justification for dealing with the purely theoretical concept of a "threatened water body." The CWA neither deals with nor permits this type of expansive regulatory addition. There are simply too many variables involved in a determination of this theoretical "threatened water body" to provide the regulated community with any rational guidance or upon which to develop reasonable expectations.

As noted elsewhere, the concept of BMPs associated with the application of this rule to nonpoint sources is simply disingenuous. There is no way, in this regard, that "reasonable assurance" can be provided for nonpoint sources short of a prohibited *de facto* permitting process.

4. Impaired and Threatened Water Bodies; Sections 130.20–130.30: As noted above and within Attachment 1, the proposed rule inappropriately deals with "threatened water bodies" as if they were functionally the same as "impaired water bodies." These types of water bodies are not the same and should not be treated as if they were. Moreover, by integrating into this process the antidegradation policy, as is proposed, other inappropriate issues such as those associated with "low flow" not induced by man and "aquatic habitat" and "riparian habitat" are injected into the process. These issues or concerns have no place in a TMDL process.

6. Establishment and EPA Review of TMDLs; Section 130.32–130.36. The allocation of load to nonpoint source pollution presents significant scientific problems with which, at this point, the regulated community and EPA are not competent to deal. The least of these is the imprecision associated with any means to allocate load. Among other reasons, this justifies Congress' decision not to regulate nonpoint sources of pollution in the same manner as point sources of pollution are regulated.

7. Section 130.151(c)(4). This proposal suffers from all of the problems associated with any attempt to allocate load to nonpoint sources.

Conclusion

In addition to its legal deficiencies, a major problem with the proposed rule is that, as a practical matter, the regulated community cannot comply with it. There

are reasons why nonpoint sources of pollution were excluded from the permitting system established for point sources. First, just how to impose a permitting or "standard permitting requirement" on nonpoint sources of pollution was uncertain. EPA provides no guidance on how this is to occur or even upon whom the permitting requirement will fall. Second, even if there were an obvious target for permitting, the cost of compliance is clearly outside of the means of the regulated community. Only an expansive funding commitment by Congress, exceeding even that which was expended to tackle point sources of pollution, could ever conceivably begin to provide the means to do what EPA wants to mandate. In this light, proceeding with the proposed rule can only have significant and adverse effects upon the agricultural community. EPA should reject this approach and return to its authorized means to deal with nonpoint sources of pollution.

Very truly yours,

GLENN-COLUSA IRRIGATION DISTRICT

By _____
Stuart L. Somach
General Counsel

SLS:sb

Encl.

Attachment 1

Excerpts of Relevant USDA Comments

. . . We continue to believe that programs based on land management decisions, planned with consideration toward water quality criteria are most successful when dealing with nonpoint source (NPS) pollution control. We believe this approach avoids costly analyses that yield information of insufficient precision and accuracy for establishing meaningful NPS pollution control, and it may avoid unnecessary litigation. In developing our water quality programs, we rely on extensive analytical and field tested methods that have been developed over many years using the best science. We offer these comments and emphasize that we wish to work constructively toward a comprehensive water quality program that is efficient, uses best scientific information, reduces litigation, and most importantly, results in improved water quality.

In general, we feel that if the proposed rules are implemented they will likely cause disruption to existing NPS control programs that have proven to be effective and will unnecessarily divert scarce resources to a top-down, process-oriented approach that may not work for NPS pollution control- We realize that implementation of NPS pollution program has been varied throughout the nation over the past two decades. We believe this situation is primarily due to a lack of funding and the same commitment that was made for point sources. . . . [The following are alternatives to the EPA regulatory approach which we could enclose.]

1. Strengthen activities of Sections 208 and 319 so that these become the primary tools for addressing NPS pollution including agricultural and silvicultural operations. As you know, the magnitude of NPS problems is more daunting and complex than with point sources; yet EPA appears intent to manage NPS in the same manner as point sources, but accelerated. It has taken 27 years of hard work on point sources – and billions of dollars – to obtain the water quality improvements we have today. To control NPS, we need a broader timeframe and greater commitment to adequate funding, enhanced partnerships, local decision making, and use of proven land Management techniques, including voluntary incentive-based programs.

2. Use the existing EPA Water Quality Handbook (i.e., "SAM32") as: guidance for States and encourage them, through increased funding and flexibility, to develop effective programs to control . . . agricultural NPS pollution. Consistent with Sections 209 and 319. . . .

* * *

Our specific comments on the proposed rules are enclosed. They are organized by background, legal, limitations of science, costs, redefining nonpoint source, scope, relation to Coastal Zone Management Act, threatened waters, episodic events, reasonable progress, and top-down approach.

* * *

INTRODUCTION

* * *

. . . [T]he most effective means for controlling the generation of nonpoint source (NPS) pollution, such as those activities cited in the proposed EPA rules, is by designing and applying preventative and restorative watershed management practices. The success in applying these practices to control NPS pollution on agricultural land . . . is well documented and demonstrated in scientific and historical literature, as well as in anecdotal reports. Consequently, the potential impact of the proposed regulations is problematic because they would alter the manner in which effective NPS control programs have been managed. . . . Although we agree there is a need for greater efforts to control NPS pollution, the proposed regulations will place an added and unnecessary burden on the continuing progress for effectively controlling NPS pollution in waters of the United States.

* * *

BACKGROUND

We believe that Congress provided for distinct and separate programs for point and NPS pollution and intended that . . . agricultural operations would be controlled under the NPS program.
* Section 208 requires the control of agricultural . . . sources, to the "extent feasible", under a NPS program.
* Section 319 requires the identification of waters limited by NPS pollution and the development of Best Management Practices (BMPs) to control those sources to the "maximum extent practicable".
* Section 319 recognizes that any regulatory program to control NPS pollution is at the State, not at the Federal level.

It is unfortunate that EPA has continually given less emphasis to Section 319, perhaps because it is not a required Federal regulatory program. EPA has never published regulations for its implementation, except for the underfunded grant program provided for under that section; rather, EPA has directed its efforts toward incorporation of NPS into point source programs, i.e., Section 303 TMDL, and Section 402 NPDES permit program. However, Section 319 does provide for development of a permit program for NPS pollution control, at a States discretion.

* * *

LEGAL

We have numerous legal concerns with the proposed regulations. We are concerned with the applicability of CWA Sections 303 and 402 to . . . agriculture; the distinction between point versus NPS pollution; the consistency of the proposed regulations

with Executive Order (EO) 31332 on Federalism, issued August 5, 1999, and with the proposed definitions of "pollution" and "pollutant."

Federal courts have long recognized that Congress specifically drew a distinction between point sources and NPS pollution, and excluded the latter from control under TMDL and NPDES. Please refer to *Oregon Natural Resources Council v. U.S. Forest Service*, 834 F.2d 842 (9th Cir. 1987); *Natural Resources Defense Council v. EPA*, 915 F.2d 1314 (9th Cir. 1990); *Oregon Natural Desert Association v. Dombeck*, 172 F.3d 1092 (9th Cir. 1998); and *Idaho Conservation League v. Caswell*, 1996 U.S. Dist. LEXIS 21980 (Idaho 1996). These court decisions found that silvicultural activities, including road building, were examples of NPS pollution excluded by Congress from NPDES; see *Oregon Natural Resources Council*, and *Idaho Conservation League supra*; see also *Trustees for Alaska v. EPA*, 749 F.2d 549 (9th Cir. 1984). We believe Congress did not think it necessary to expressly exclude . . . agriculture from coverage under 303 or 402 because pollution from those sources was already addressed in Sections 208 and 319.

The control of NPS under Section 319 mirrors the control of point sources under Section 303, but specifically leaves the development of control programs, including the consideration regulatory approach, with the States (Section 319(b)(2)(b)). Therefore, Congress recognized that additional processes such as Federal permits to control NPS pollution were duplicative and not needed to comply with Section 101. Since the States have either voluntary or regulatory approaches to NPS pollution control, and all States with voluntary approaches have "Bad Actor" laws, the draft proposed NPDES regulations appear to ignore the Congressional intent of Sections 101(b) and 319 of the CWA for the control of silviculture and agriculture related pollution. Moreover, the proposed regulation appears to be in conflict with EO 31332, Section 4(a), which states that a Federal statute can only preempt State law where the statute contains an express preemption provision or there is some other clear evidence that the Congress intended preemption of State law. Section 319(b)(2)(B) specifically gives the responsibility for development of NPS controls to the States including the determination of the need for a regulatory enforcement program.

We disagree with the proposed redefinition that would differentiate between "pollutant" and "pollution". The proposal is legally incorrect, is not in keeping with the intent of Congress, and it complicates a rather simple issue. The CWA currently defines "pollutant" (paragraph 502(6)) with an exhaustive list of chemical, physical, biological, and radiological water quality constituents that, when evident in water, constitute pollution. The CWA currently defines "pollution" (paragraph 502(19)) as that "caused by man-made or man-induced alteration of water quality." Congress simply defined what a pollutant is and then said for the pollutant to become pollution; it had to be caused by human intervention, thereby excluding natural background levels of water quality constituents. We believe it inappropriate for EPA to use an artificial distinction between "pollutant" and "pollution" to exceed

the CWA authorities related to "low flow", "degraded aquatic habitat" and "riparian habitat."

Based on science, we know of the relationship of water quality to water flow, aquatic habitat, and riparian areas. However, the CWA (paragraph 101(g)) authorized States to control water flows and allocate water quantities within its jurisdiction. A low flow, even caused by human intervention, cannot be regarded as pollution unless a CWA-defined pollutant is present. Additionally, we agree with the EPA view that aquatic habitat is essential in reflecting the assurance of the "biological integrity of the nation's water[.]" However, we do not agree that "degraded aquatic habitat" is either a "pollutant" or "pollution" in accordance with the CWA. The condition or health of aquatic habitat is the result of consequence of water quality, not the cause of pollution.

We are equally troubled by the EPA view of riparian habitat. We recognize the important role of riparian areas in providing for and protecting water quality. We also know of the importance of riparian habitat for its aquatic and terrestrial fauna and flora. We do not agree that 'riparian habitat' is a pollutant or pollution; like aquatic habitat, riparian habitat is a product of its associated water quality and other environmental and anthropogenic factors.

LIMITATIONS OF SCIENCE

A weakness of trying to apply the TMDL process and NPDES permits to NPS water quality compliance, load determination, and load allocation is the current technical and scientific barriers to connecting water quality standards to specific NPS and BMPs. We are concerned with the lack of appropriate recognition of these weaknesses in the subject regulations.

We are also concerned that the full breadth of scientific knowledge may not be used appropriately by EPA when dealing with NPS. . . .

. . . Due to natural background and variability of water quality, it is very difficult to relate [water quality standards] WQS to the effectiveness of individual BMPs and measured water quality values in the water column. An expectation that land managers can provide certainty that WQS will be met under all circumstances before activities take place as may be required by National Environmental Protection Act and/or by a NPDES permit, is neither reasonable nor achievable. Available time and funding for applying science and current models of the NPS pollutants do not allow sufficient precision and reliability to:
* relate the effect of NPS pollution to WQS;
* allocate water column or in-channel parameters by individual BMP or land user, and
* allocate effects/loads by individual BMP or land user.

This lack of precision and reliability significantly limits the validity of the TMDL and NPDES permitting process in establishing load allocations for specific management practices or for individual landowners in agricultural, forest, and rangeland environments. It is expected that More sophisticated models will be too expensive for project-level monitoring due to high data demands and cost of operation[.]- For these reasons, BMPs are currently based on technology and not based on current WQS (existing 40 CFR 130, and the EPA's "Nonpoint Source Controls and Water Quality Standards["]). USDA has and will continue to work with others to improve:

* science and technology to control NPS pollution;
* estimates of the magnitude and sources of NPS pollution;
* relationships between NPS pollution and WQS; and,
* relationships between land management practices and water quality.

The variability of agricultural . . . environments and the limited time and funds available to measure actual concentrations of pollutants for each watershed, lead to the alternative of using properly verified and calibrated models for estimating pollutant loads for TMDL and permitting purposes. However, the development and use of models may also tie up scarce funds and time that could be used for effective field surveys to identify pollution sources and design and apply BMPs to protect and improve water quality. Therefore, developing and using models should be done very judiciously. Confidence and reliability for most modeled estimates of pollutants of concern in agricultural, forested or range environments are expected to be less than what current science can provide with sufficient time and funding. Based on available science, USDA would expect that a modeled estimate for sediment in forested environments for instance, to have a precision and reliability less than plus or minus 100 percent, at the 95 percent confidence interval. This level of precision and reliability is the best that can be expected when requiring TMDLs and NPDES permits for some agricultural and silvicultural practices. It seems this level of precision and reliability would be inadequate when placing a performance requirement on a permittee or anyone to meet specified pollutant loads for these NPS situations.

Due to the lack of precision and reliability of modeling results, pollution trading between point source and NPS should only be considered with the understanding that the certainty, associated with estimates and control of point sources is generally greater than the certainty associated with estimates and control of NPS. When addressing pollution trading, the regulations should recognize limits imposed by our scientific understanding.

COSTS

The cost analyses for the TMDL and NPDES proposed rules are inadequate and incomplete. . . . Despite the requirements of EO 12866, the proposed rule ignores . . . the direct impact [costs] on farmers . . . .

The following are our specific comments for each proposed rule:

TMDL

The Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act, generally requires Federal agencies to conduct an initial regulatory flexibility analysis describing the impact of the regulatory action on small entities. The EPA Administrator certified that this proposed rule would not have a "significant economic impact on a substantial number of small entities[.]" Based on many years of planning and implementing watershed protection projects with State and local government entities, we do not believe this to be an accurate statement. The calculated costs of implementing TMDLs set out in the rule appear to be limited to the impact on State water quality agencies only. This ignores the impact on cooperating Federal agencies Tribes, or other State agencies such as departments of agriculture, natural resources and forestry, soil and water conservation districts, and others which will be involved. Additionally, the costs of implementing the TMDL management strategies will be very significant and will, very likely, be borne by small entities such as agricultural producers, forest landowners, and rural communities. Unlike many point source polluters, most of these small entities will not be able to pass on the cost of implementing these pollution controls to their customers because food, fiber, and timber producers control the purchase price of their products.

Under the Federal Unfunded Mandates Reform Act, the EPA must prepare a written statement, including cost-benefit analyses, for proposed rules with "Federal Mandates" that may result in State, local and Tribal governments' costs in the aggregate, or costs to the private sector, of $100 million or more in any one year. Planning and implementing BMPs and pollutant management strategies will cost more than $100 million annually based on past similar experiences in USDA. If the cost of the proposed rule imposes costs in the hundreds of millions of dollars, and potentially billions of dollars, then it is essential that Federal agencies, States, and the public have a greater awareness of these costs and alternative means of achieving the desired end.

* * *

TMDL

Many of the proposed TMDL rule changes are based on EPA's new interpretations of the existing law and redefinition of terms that appear to reinforce the position that EPA has the authority to include NPS pollution under Sections 301 and 303. By treating NPS pollution like point sources, most normal agricultural activities, such as growing crops, grazing activities, animal husbandry, . . . could become subject to future, unreasonable regulatory action. This position causes concern within USDA.

The effluent limitations that are required by Section 301 and 303 of the CWA apply to point sources only. In the existing regulation for TMDLs, the EPA established a new term, "load allocation." This term does not appear in the CWA. The basic concept in the existing regulation is that for water quality-limited waters, TMDLs are to be established that include "wasteload allocations" for point sources, "load allocations" for NPS, and "natural background loads.["] A calculated TMDL is the sum of all three, elements. It was commonly understood that NPS and natural background loads were to be estimated for the purpose of setting appropriate waste load allocations, not for establishing NPS load limitations. The proposed regulation could be perceived as a move toward future regulatory controls for NPS based on load allocations.

Relative to this issue, we are concerned that the EPA confuses the CWA and existing EPA regulation. In the TMDL preamble, background item 1, second paragraph, it states that "Section 303(d) of the CWA requires States, Territories and authorized Tribes to identify and establish a priority ranking for water for which existing pollution controls are not stringent enough to attain and maintain . . . water quality standards" (emphasis added). Section 303(d) actually refers to "effluent limitations" not "existing pollution controls." Following the language of Section 303(d) a reasonable person would conclude that TMDLs are to be focused on controlling point sources. One would need to ignore the Act's actual wording to bring control of NPS under the TMDL process.

The EPA's rationale for the blurring of Section 303(d)'s original intent is explained in the TMDL preamble, item 4(b). The proposed direction will probably prevent the EPA from effectively addressing NPS in their existing programs. Congress drew a distinction between point sources and NPS in the CWA that is not adequately recognized in the proposed regulations. Section 319 outlines a NPS program for this purpose that is parallel to the Section 303(d) process for point sources. The proposed regulations will eliminate the effectiveness of Section 319. If Congress had meant for all pollution sources to be covered under Section 303, there would have been no need for the 1987 amendments that added Section 319. This new direction may unnecessarily trigger significant public controversy and break-up partnerships that have been forged to address water quality. . . .

SCOPE

. . . Therefore, the proposed rule is redundant to regulations under Section 303, and to Sections 209 and 319 of the CWA. This redundancy is contrary to Section 101(f) of the CWA.

* * *

SECTION 303(d) LIST OF IMPAIRED OR THREATENED WATERS

There is a very close relationship between Section 303(d) lists of impaired or threatened waters and the Section 305(b) Water Quality Assessment Reports submitted by States. There is also a very high likelihood that States will identify the same waterbodies on each. This is problematic, due to the questionable value of Section 305(b) reports. Numerous concerns have been raised by various groups and organizations about the credibility of Section 305(b) reports. For instance the United States Geologic Survey (USGS) wrote in its 'Water Supply Paper 2400', published in 1993, that "two major difficulties preclude the analysis of use-support data for determining national water-quality conditions and trends. First State-to-State differences in the standards and criteria, used to determine use support make it difficult to interpret regional patterns in water quality; and second, methodological changes over the history of the 305(b) program preclude any analysis of trends." In light of 'USGS' position, USDA wonders whether the 305(b) reports, will be helpful to accurately portray the conditions for waterbodies that cross State borders. It has also been reported by others that them [sic] have been problems with the accuracy of "measured" miles of rivers and streams in the 305(b) reports along with the number of miles assessed" or "surveyed" rivers or streams. If the simple matter of measuring miles of a river or stream are not accurately portrayed in 305(b) reports, how credible will the identification of impaired or threatened waters be when the information is transformed to a 303(d) list?

Threatened water are water bodies that presently meet WQS but, because of trends in water quality data, may not meet standards in the future. The Federal Advisory Committee Act (FACA) Committee, which the EPA established, recommended that those waters be put on a special list. The EPA has chosen not to implement the recommendation and will require threatened waters be included on the impaired water list. Since there is a difference between threatened and impaired waters, and each may receive different management and incentive approaches EPA should accept the FACA Committee recommendation and not co-mingle these categories of waters on the same list.

The definition of Part 4 waterbodies as proposed at 130.27 may cause the development of a TMDL when effective controls are already in place. Part 4 waterbodies must become Part 1 waterbodies if WQS are not met at the next listing cycle (two years). In fact, appropriate land management controls may be in place and water quality may be improving, but WQS may not yet be attained. This may be because it takes longer than two years for a given watershed to respond to treatment, and not because the treatment is incorrect. The recovery process often takes more than two years. Establishment of an improving trend in water quality for a waterbody should be sufficient to maintain Part 4 waterbody status.

Regarding the data and information used to determine which waterbodies to include or remove from the Section 303(d) list at paragraph 130.23(e) of the TMDL proposed regulation indicates that the methodology used must "specify exactly what conditions must exist before the waterbody is removed from the list of impaired and threatened waterbodies." Identifying conditions that could remove a

waterbody from the list of impaired and threatened waterbodies, in many instances, is difficult at best. There are many conditions, both individually and cumulatively, that can impact water quality. To "specify exactly what conditions must exist" excludes the States' ability to utilize adaptive management techniques. The removal of the word "exactly" from the subject paragraph would provide more leeway for states to better adapt to new science and technology that address water quality issues. The methodology should also provide alternatives to allow new information/technology to become incorporated into assessment protocols.

NATURAL BACKGROUND, EPISODIC EVENTS, AND WATER QUALITY STANDARDS

The TMDL and NPDES rules assume that all NPS pollutant loads can be controlled all the time, regardless of seasonal variation or frequency of occurrence of large storm events. It appears the proposed rules ignore the fact that large storms and significant snowmelt events may contribute large loadings that cannot be controlled in a practical and economical manner. Rather, BMPs are usually designed to control the runoff from 10- to 25-year frequency storm events as a maximum. Some of the larger storms will have runoff that carry loads that are greater than the total average annual loading and cannot be reasonably controlled by BMPs. A permitting process will not overcome the basic physical and natural phenomenon, either. The proposed rules need to reflect these natural and extreme variations.

Moreover, many episodic violations of WQS are caused by poor land use and practices that were applied more than 50 to 100 years ago which produce sediments that are still in the stream channel or by the "natural" variability of water quality. Where State WQS provide that these episodic events do not exceed the criteria, there is no violation of WQS. Where State WQS do not allow criteria to be exceeded by these episodic events, WQS will be violated regardless of the activity, or lack of activity. However, where the beneficial uses of the water are not impaired by the criteria being exceeded, or the violations are caused by the "natural" variability of water quality, the State should be encouraged to amend its WQS in the interest of effectively controlling NPS.

REASONABLE PROGRESS

The Antidegradation Policy proposed at Section 131.12 of the NPDES Regulation states that a new discharger into a water body that does not attain WQS must show reasonable progress toward attaining the standard. While it may be possible to prevent further impairment from a land disturbing activity, it will be difficult or impossible to show improvement from such an activity. This requirement, coupled with the large number of waterbodies identified as limited, may preclude land management activities on a large number of watersheds.

TOP-DOWN APPROACH

Although EPA provides States much of the authority to implement TMDLs and NPDES permits, the proposed regulations generally establish a top-down approach. Such an approach usually alienates the very partners and cooperators with a [sic] whom working relationships should be fostered. It can also serve to stifle creativity and the development of cost-effective implementation approaches at the State level. Although the proposed rule seems to envision extended public involvement and calls for multi-party agreements and action, EPA is proposing a prescriptive approach with short, unrealistic deadlines. . . .

January 20, 2000

Comment Clerk for the
TMDL Program Rule
Water Docket (W-98-31)
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Proposed Revisions to Water Quality Planning and Management Regulations; Proposed Rule, Concerning TMDL's

Dear Sir or Madame:

Northern California Water Association ("NCWA") is pleased to have the opportunity to comment on the U.S. Environmental Protection Agency's ("EPA's") proposed revisions to the Water Quality Planning and Management Regulation, 40 C.F.R. Part 130, issued on August 23, 1999. 64 Fed. Reg. 46012-46055. NCWA represents sixty-eight private and public agricultural water suppliers, farmers and other individual water rights holders with senior rights and entitlements to the surface waters of the Sacramento Valley.

NCWA's members – and their customers – rely upon the waters of the Sacramento, Feather, and Yuba Rivers, smaller tributaries and groundwater to irrigate over 850,000 acres of farm land in Northern California, extending from the northern reaches of Tehama County to Sacramento County and from the Coastal Range to the Sierra Nevada Mountains. Many of our members also supply water to State and Federal wildlife refuges, and much of this land serves as important seasonal wetlands for migrating waterfowl, shorebirds and other wildlife. NCWA's members have a critical interest in the protection and enhancement of water quality and in the regulatory frameworks that affect water quality and agriculture in California.

INTRODUCTION

EPA's undertaking to revise the TMDL regulations presented an opportunity to improve the listing and TMDL process by encouraging the use of consistent and scientifically sound methodologies for listing impaired waters, deciding what pollutants are suitable for calculation of TMDL's, and developing appropriate TMDL's. Many of these concepts are discussed by EPA in

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the Preamble, and we applaud EPA's recognition of their importance. Unfortunately, however, the regulations themselves do not address these issues, and, in fact, create entirely new levels of confusion, expense and technically infeasible restrictions.

NCWA is gravely concerned by EPA's unauthorized expansion of the TMDL Program and its failure to account for the costs it will truly impose on nonpoint sources and the States.[1] EPA's proposal will likely place the burden of a *defacto* federally-mandated permitting program on nonpoint sources, including many NCWA members in Northern California.

Section 303(d) of the Clean Water Act calls for States to develop a total maximum load for waterways impaired by point source pollution, for pollutants EPA determines to be suitable for TMDL calculation. TMDL's are mass-based allocations to be referred to in the process of setting water quality-based effluent limitations for point sources.

In Sections 208 and 309 of the Clean Water Act, Congress enacted an entirely separate regulatory program to address nonpoint sources of pollutants, recognizing fundamental differences in the variability of water quality dynamics and the types of activities associated with nonpoint sources. Congress delegated directly to the States the design of voluntary and regulatory programs based on the development of Best Management Practices for certain categories of nonpoint sources. The specific reporting and planning requirements of Sections 208, 309 and 303(e) address nonpoint source issues in a manner tailored to the nature of these sources, and the appropriate allocation of resources in addressing them.

EPA's current proposal has ignored the framework mandated by these provisions, and would create instead a back-door process for requiring States to regulate individual nonpoint sources. EPA describes this as merely "using existing Federal, State and local authorities and voluntary action to implement the allocations contained in the TMDL's." EPA cannot "use another authority" to impose a new form of regulation found nowhere within that authority, and deliberately avoided in creating that authority. Simply put, implementing TMDL's is a concept not found in the Clean Water Act and is merely shorthand for requiring direct regulation of individual nonpoint sources. In addition to exceeding EPA's authority, this will impose substantial unnecessary and additional costs and regulatory burdens on agriculture and regulatory programs within the States, and the proposed regulations will provide little improvement to water quality in Northern California.

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[1]Use of the term "States" or "State" in these comments refers to States, Territories and authorized Tribes.

I. THE PROPOSED REGULATIONS SHOULD BE REVISED TO BE CONSISTENT WITH THE CLEAN WATER ACT'S NONPOINT SOURCE REGULATORY SCHEME, AND TO ENCOURAGE COORDINATION AND REGULATORY EFFICIENCY WITHIN NONPOINT SOURCE REGULATORY PROGRAMS.

A. The regulations should not require the listing of waterways in which impairment is caused solely by nonpoint sources, or where it results from unknown causes.

The regulations should not require the listing of waterways impaired solely by sources not regulated as point sources under the Clean Water Act. Section 303(d)(1)(A) requires listing of waters for which effluent limitations are not stringent enough to implement an applicable water quality standard, focusing on and setting the stage for TMDL's designed to address problems caused by discharges of pollutants from point sources. It does not authorize EPA to require listing of waters in which impairment is caused solely by nonpoint sources or by "pollution."

In addition to exceeding the mandate of Section 303(d), requiring that impairment caused solely by nonpoint sources be included on Section 303(d) lists is inconsistent with the separate reporting requirements of Section 319(a)(1)(A). The latter provision requires that the States identify waters for which attainment or maintenance of water quality standards or the goals of the Act cannot reasonably be expected to occur without additional controls on nonpoint sources of pollution. Enacted years after Section 303(d), Section 319 details parallel but distinctly different procedures for identifying and controlling nonpoint source pollution that may prevent attainment of water quality standards. It was obviously enacted with full awareness of Section 303 and with the intention to create a separate approach for identifying and addressing waterways impaired by nonpoint sources.

Any ambiguity in the language of Section 303 should be resolved by reading Sections 303(d) and 319 together and recognizing that more specific requirements of Section 319 should govern listings and reports regarding impairment caused by nonpoint sources. To do otherwise ignores the structure and intent of the statute and creates inefficient, duplicative requirements.

A different problem is posed by the requirement to include in Part 1 of the list waterways in which impairment is the result of unknown causes. EPA's proposal would require that if the cause of an impairment or threat is unknown, it must be included on Part 1 of the list, which is the part of the listing for which TMDL's must be developed. §§130.27; 130.32. "To the extent possible," the class of pollutants involved must be identified.

Because all waterways on Part 1 must have TMDL's developed for each listed pollutant, the TMDL process would therefore have to proceed for pollutants and sources that have not been properly the identified. Proposed Section 130.27(a)(1) requires identification of the pollutants causing the impairment "as the first step in establishing the TMDL." There is no procedure noted for terminating the TMDL development process if it is determined that the impairment is not caused by identifiable pollutants, though the concept is briefly mentioned in the Preamble for

situations where the cause is specifically found to be "pollution" rather than pollutants. 64 Fed. Reg. 46024.

Even beginning the process of TMDL development for such waters is inconsistent with EPA's own statements that it only has authority to require TMDL's for pollutants. 64 Fed. Reg. 46022. It is also inconsistent with the requirement to schedule TMDL development based on established priority rankings, when these rankings are set only for pollutant and waterbody combinations. Obviously, no priority could be set unless a pollutant was identified during the listing process. The requirement to "guess" the pollutants involved by identifying a category of pollutants "to the extent possible" also may trigger confusion or inappropriate restrictions during the planning and permitting process. Among other things, it raises the question whether the offset requirement which would be imposed by EPA's proposed anti-degradation regulations will be triggered by the listing. The inevitable confusion and litigation that the proposal will foster should be avoided by not including the segment on the Part 1 listing, and not requiring a TMDL be developed, until it can be determined that one or more specific, properly identified pollutants from point sources is a cause of the non-attainment.

B. The proposed TMDL development process requires more specificity in developing nonpoint source load allocations than necessary or appropriate.

The proposed regulations require that the TMDL include wasteload allocations for point sources of pollutants and include load allocations for nonpoint sources and background sources. The proposed regulations provide that a state developing a TMDL must identify load allocations for specific nonpoint sources except where it is "not possible," in which case they may allocate loads to categories of sources.[2] §§130.33(b)(6).

The process of attempting to quantify, by season, loads from each nonpoint source will be extremely difficult and expensive, where it is not infeasible. Current methods available to relate water quality standards to measured constituents in the water column and the effectiveness of nonpoint source control measures are still lacking in precision and reliability. As noted by USDA in its comments on these regulations dated October 22, 1999, this will result in either less than valid allocations or the development of expensive, verifiable and calibrated new models, which may tie up scarce funds and time that could be used for field surveys to identify pollution sources and for development and implementation of appropriate BMPs.

Creating specific load allocations to nonpoint sources is also not necessary to fulfill the requirements of Section 303(d) We realize that it is necessary for a state to describe the load attributable to nonpoint sources and background in a technically credible manner, in order to ensure that the aggregate allocation divided among point sources is properly calculated. The States should be given flexibility in the manner in which they demonstrate the credibility of their

[2]States are permitted to include in background loads those loads attributable to non-point sources which do not require reduction to implement water quality standards.

allocation to sources other than point sources, rather than being required to break their calculation down into allocations for specific nonpoint sources.

In addition, the proposal is inconsistent with parallel requirements found in Section 319. That section provides for the states to submit lists of navigable waters which cannot reasonably be expected to attain applicable water quality standards without additional action to control nonpoint sources of pollution. Together with the list, the States are to submit an identification of

> "those categories and subcategories of nonpoint sources or, where appropriate, particular nonpoint sources, which had significant pollution to each portion of the navigable waters identified ... in amounts which contribute to such portion not meeting such water quality standards...."

In this provision specifically designed to address nonpoint sources, the State is given the flexibility to choose to identify categories of sources, subcategories of sources, or particular sources, as appropriate under the circumstances.

Instead of requiring the extensive efforts and the risk of technical inaccuracies inherent in allocating loads to specific nonpoint sources, it would be appropriate for EPA to allow the States to refer to the reports already developed under Section 319, or to provide other legitimate analysis, to explain the basis for their calculation of loads attributable to nonpoint sources.

It is possible that EPA's decision to require allocation in such specificity is driven not by its desire for a reasonably accurate TMDL, but by its desire to allocate loads to specific sources for purposes of requiring specific source controls in the TMDL implementation plans. To the extent that the requirement for specific load allocations is driven by the requirement for specific nonpoint source pollution controls in TMDL implementation plans, we obviously object to it on those grounds, as well. In short, the Clean Water Act does not impose any requirement to allocate loads to specific nonpoint sources. Moreover, to do so in these regulation is beyond EPA's authority as well as an excessive restriction on the authority of the States and burden on regulatory resources and the community.

C. <u>The proposed requirement for TMDL implementation plans exceeds EPA's authority and fails to recognize parallel efforts and requirements in other programs.</u>

The proposed regulations would require that an implementation plan be established for each TMDL which provides "reasonable assurances" that load allocations for nonpoint sources "will be implemented." EPA defines "reasonable assurances" in Section 130.2, which provides that,

> "[F]or nonpoint sources you must demonstrate reasonable assurance by specific procedures and mechanisms that ***ensure load allocations for nonpoint sources will be implemented*** for that waterbody. ***Specific procedures and mechanisms for nonpoint sources must apply to the pollutant for which the TMDL is being established, must be implemented expeditiously and must be supported by adequate funding.*** Examples of

> specific procedures or mechanisms which may provide reasonable assurance for nonpoint sources include... regulations, local ordinances, performance bonds, contracts, cost share agreements, memorandums of understanding, site-specific or watershed-specific voluntary actions, and compliance audits of best management practices." (Emphasis supplied.)

The language of this definition is clearly intended to require states to implement specific mechanisms to control nonpoint source pollution. This represents a new layer of federal nonpoint source regulation. By EPA's own admission, this is not legally authorized. In the preamble to the proposed regulations, EPA states that

> "Section 303(d) does not provide any additional Clean Water Act authorities to implement nonpoint source controls, therefore, the implementation plan will provide a program to deal with nonpoint source contributions to impaired waterbody's using existing Federal, State and local authorities and voluntary action to implement the allocations contained in the TMDLs." 64 Fed.Reg. 46033.

The phrasing of the definition of "reasonable assurances" does not merely refer to existing authorities, however. Instead, it requires that specific procedures and mechanisms be demonstrated, funded, and implemented expeditiously. Thus, what is couched as a "demonstration of reasonable assurances" is actually a mandatory requirement to control nonpoint sources in a specific way. If a state fails to put in place procedures and mechanisms to ensure implementation of load allocations for nonpoint sources, it would violate these proposed regulations.

As noted earlier, we can understand requiring that load allocations be based on reality, and therefore that the reasonable, credible basis for their estimation be supplied by the States in the TMDL. This can be done without requiring a prescriptive implementation plan. A State can support the basis for its estimate or allocation of load to these sources without necessarily citing expeditious, adequately funded, implementation of procedures and mechanisms applying to the pollutant for which the TMDL is being established.

Reasonable support for the TMDL may consist in part on projections of changed circumstances that are reasonably expected to occur based on known trends. Certainly, reductions mandated by actions required under federal, state or local law or an agency agreement should be considered reliably assured regardless of whether funding has been allocated for implementing those requirements or agreements. Because implementation of the TMDL will occur over a designated schedule, any necessary funding may not yet be allocated or obtained, even for controls in reductions which are mandated by regulation and law, and this should not take away from their credibility as support for the TMDL. Finally, the term "expeditiously" must be eliminated, because the state is permitted the flexibility of describing an appropriate schedule elsewhere in the regulations.

As discussed above, in Section 319 of the Clean Water Act Congress established a separate framework for identifying and managing navigable waters which cannot reasonably attain applicable water quality standards without additional action to control nonpoint sources of pollution. The vehicle for describing more specific management programs is already established in Section 319 (b), which requires the submission to EPA for approval a management program. This program must include best management practices and measures which we undertaken to reduce pollutant loadings from the nonpoint sources designated in the report and an identification of programs to achieve implementation of these best management practices, including nonregulatory or regulatory programs, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects. A schedule must be included containing milestones for implementation of the programs and best management practices "at the earliest practicable date." Congress therefore defined in detail the regulatory approach describing the schedule for implementation of a broad and flexible range of programs. The management program is not comprised of "mechanisms and procedures" which must assure specific, quantifiable reductions of specific pollutants from specific nonpoint sources; there is no requirement to demonstrate that funding has been secured.

In short, Section 303(d) only justifies reasonable assurances that the load from sources other than point sources has been calculated reasonably; it does not require or authorize requiring an implementation plan mandating "procedures and mechanisms" in the manner described in the proposed regulations. In lieu of the current proposal, we suggest that it is appropriate for EPA to require states to take into account existing 303(d) listing information and TMDL's in making their reports under Section 319 (a), and for states to consider information developed under Section 319 in formulating realistic loads attributable to nonpoint sources generally in a particular waterbody. This would leave existing regulatory programs and initiatives mandated by Congress and developed over the years by the State in place, and allow them to appropriately be cited in the development of TMDL's and to be coordinated with the TMDL's, without creating an unauthorized and confusing new framework which will misdirect the focus of resources available to reduce the impacts of nonpoint source pollution.

II. OTHER COMMENTS CONCERNING THE LISTING PROCESS AND TMDL DEVELOPMENT

A. Delisting procedures are needed in the context of the transition to the new, required listing methodologies, and between listing cycles if EPA decides to lengthen the listing cycle beyond two years.

To avoid confusion, the regulations should specify the consequences of applying the new listing methodology to waterways previously listed by a State. To be consistent with the laudable objectives of developing improved methodologies for listing, clearly, the State should be required to remove listings that are not consistent with their new methodologies, when they first apply them. Proposed Section 130.29 should be clarified to allow delisting "if new data or information, or application of the methodology submitted pursuant to Section 130.24, indicates that the water body has attained water quality standards." While this may be obvious, it bears

express mention due to the importance of the list. In addition, the delisting provisions should refer to waterbody pollutant combinations to allow each to be separately evaluated and a listing changed for one or more combinations where appropriate.

Finally, there is the issue of changes warranted between listing cycles. EPA has indicated that it is considering lengthening the time between required listings to as long as five years. Particularly if listing cycles are extended beyond the current two year period, it is important that the removal of waterbody (or waterbody pollutant combinations) from the listing, or addition of waterways to the list, be allowed if information and conditions warrant such a change.

B. The regulations should not mandate high priority in the two newly prescribed conditions – the presence of threatened or endangered species, or "exceedance of an MCL."

New proposed Section 130.28 would require the States to provide more detailed analysis supporting the priority ranking of waterbody and pollutant combinations in Part 1 of the 303(d) list. Paragraph 130.28(a) mirrors the statutory mandate, which is that a State must assign a high, medium or low priority ranking "taking into account the severity of the impairment or threatened impairment and the designated uses of the waterbody." The requirement for the States to explain their ranking of priorities is helpful and we support it. However, EPA goes further in this regulation to mandate that high priority must be assigned in two specific circumstances, overriding the state's discretion in this regard. This is inconsistent with the clear delegation of this task to the State. The specific requirements are also inconsistent with the broad criteria which the statute requires to be applied, as well as technically impractical and inappropriate.

Perhaps most importantly, the categories chosen by EPA for mandatory high priority will not result in an environmentally appropriate or useful ranking. One category requires a high priority ranking where species listed as threatened or endangered are present, unless the State shows that the impairment does not affect the species. §§130.28(b)(2). This provision would divert resources to focus first on a waterbody that may be have relatively limited beneficial uses, where a small number of a threatened species may be affected to a minor degree – or where information is inadequate to show whether there is any effect on them at all. The ranking requirement does not consider the severity of the impairment or all of the relevant beneficial uses of the waterbody as required by the statute. It also would result in the mandatory assignment of high priority to nearly all waterbodies listed in our State, which would defeat the purpose of the ranking system.

The provision concerning drinking water supplies not only arbitrarily omits to consider severity of the impairment and mandates priority for a single beneficial use, but it is also confusing. It would require a high ranking where the waterbody is designated and used as a source of drinking water and "the pollutant for which the waterbody is listed as impaired is *contributing to a violation of an MCL.*" The concept of violation of an MCL is out of place, because a pollutant cannot "violate an MCL" in receiving water – MCL's are standards applicable to water at the tap.

If EPA is referring to an exceedance of the MCL in drinking water after treatment by a municipal supplier, it should so state; this would be imprudent, however, due to the other variables which

may contribute to that type of violation. It is more likely that EPA refers to "a violation" within the waterbody itself.[3] This is not appropriate. The listing and TMDL process is based on a waterbody's status as failing to meet an established water quality standard, not an MCL.

We endorse the regulation's requirement that the States explain the basis for priority rankings in keeping with the criteria set forth in the statute, but request that the mandatory priority provisions be deleted.

CONCLUSION

NCWA is concerned that EPA has not adequately considered the impacts of EPA's proposal effects on agricultural water and land use in California's Sacramento Valley. The proposal would require costly new investments beyond the reach of the agricultural community, and threaten the ability to maintain important existing agricultural areas. However, it is likely that these stringent regulations will stifle the significant improvements that are being made in the Sacramento Valley to improve water quality. A zeal to make up for delays and confusion in the TMDL program and NPDES permitting should not spawn new chaos, and crisis in agriculture. EPA should instead examine how its legitimate goals can be accomplished within the existing nonpoint source planning and management mandates in the Clean Water Act.

Respectfully submitted,

NORTHERN CALIFORNIA WATER ASSOCIATION

David J. Guy
Executive Director

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[3]EPA seems to wish to force the use of MCL's as water quality standards through the backdoor in the application of these regulations. This also reflected in the puzzling addition of reference to MCL's in the definition of "pollutant," which is unnecessary and inappropriate. It is also reflected in EPA's statement in the Preamble that where there is no water quality criterion for a pollutant, a State should use as a starting point for its TMDL a reference point sufficiently below the MCL to prevent excursions above the MCL at the source water intake. Once again, this is an impermissibly substitutes standards from a different regulatory scheme for criteria properly established through the water quality standard-setting process.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 8 2000

OFFICE OF
WATER

The Honorable Robert Smith
Chairman
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20520

Dear Mr. Chairman:

Thank you for your letter of June 8 expressing concern for the revisions to the Total Maximum Daily Load (TMDL) program regulations that EPA proposed in August of last year.

A strong and effective TMDL program to identify polluted waters throughout the country and restore the health of these waters is an essential step toward restoring polluted waters and delivering on the promise of the original Clean Water Act. Over 20,000 waters around the country do not meet clean water goals and many additional polluted waters may yet be identified. EPA is committed to finalizing regulations to strengthen the TMDL program early this summer.

As you know, EPA has listened to the extensive comments on the changes to the regulations proposed in August of last year and will make substantial improvements to the regulations that are finalized this summer. The hearings that Members of the Environment and Public Works Committee have held over the past several months have been very helpful in guiding our thinking on the elements of the final regulation. I described some of the improvements in a letter to you dated April 5th. For example, the final regulations will give States additional time to develop lists of polluted waters, give States more flexibility in setting priorities, will not address the subject of offsets, will not include a petition process, and will not require that States list "threatened waters."

My letter to you in April indicated that I agreed with your concern that our initial proposals for addressing water pollution problems caused by forestry operations needed to be substantially revised. In response to this concern, EPA worked closely with the Department of Agriculture (USDA) to develop an alternative approach to reducing water pollution from forest operations. I agree with the USDA and many in the forest industry that careful forest management can have diverse benefits to water quality in a watershed. The revised approach described in a Joint Statement of the USDA and the EPA gives States the lead role in forest water quality and encourages the development of strong State forest water quality programs.

Although the revised approach developed jointly by the EPA and the USDA is a significant improvement over the August proposal, I am convinced that there is a need to describe this approach to the wide range of interested parties, to discuss how this approach would work, and to get ideas for improvements. For example, many observers have questioned the provision of the proposal that would exempt lands managed by the Forest Service. In response to the interest in additional discussion of forest water quality issues, EPA will not include forestry provisions in the TMDL regulations to be finalized this summer. Instead, I expect that the Agency will repropose provisions of the August proposal related to forestry later this fall along the lines described in the USDA/EPA Joint Statement. We intend to engage stakeholders extensively in reviewing the forestry provisions prior to the reproposal this fall. Based on the comments received on this reproposed rule, the Agency will decide sometime next year how best to proceed to address this important issue.

I greatly appreciate your work on this important problem and look forward to working with you to develop the best possible program for restoring the nations polluted waters.

Sincerely,

J. Charles Fox
Assistant Administrator

cc: Senator Max Baucus; Ranking Minority Member

QUESTIONS AND ANSWERS SUBMITTED FOR THE RECORD

FEBRUARY 23, 2000

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JB
BW
DJ
TN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 26 2000

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OFFICE OF WATER

The Honorable Richard G. Lugar
Committee on Agriculture, Nutrition, and Forestry
United States Senate
Washington, DC 20510-2035

Dear Mr. Chairman:

Enclosed are answers for the record of questions submitted to Administrator Browner from the February 23, 2000, hearing of the Senate Committee on Agriculture, Nutrition, and Forestry. As you may know, EPA has listened to the extensive comments on the changes to the regulations proposed in August of last year and will make substantial improvements to the regulations that are finalized this summer. The hearings that Members of the Committee on Agriculture, Nutrition, and Forestry and Environment and Public Works Committee have held over the past several months have been very helpful in guiding our thinking on the elements of the final regulation. I described some of the improvements in a letter to you dated April 5th. For example, the final regulations will give States additional time to develop lists of polluted waters, give States more flexibility in setting priorities, will not address the subject of offsets, will not include a petition process, and will not require that States list "threatened waters."

In response to the interest in additional discussion of forest water quality issues, EPA will not include forestry provisions in the TMDL regulations to be finalized this summer. Instead, I expect that the Agency will repropose provisions of the August proposal related to forestry later this fall along the lines described in the USDA/EPA Joint Statement. We intend to engage stakeholders extensively in reviewing the forestry provisions prior to the reproposal this fall. Based on the comments received on this reproposed rule, the Agency will decide sometime next year how best to proceed to address this important issue. I am enclosing, for your information, a copy of a recent letter sent to Senator Smith describing the changes to the proposed TMDL rule relating to forestry.

I greatly appreciate your work on this important problem and look forward to working with you to develop the best possible program for restoring the Nation's polluted waters.

Sincerely,

J. Charles Fox
Assistant Administrator

Enclosures

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WATER QUALITY

Mr. Coverdell: Does EPA have information on which watersheds are impaired due to forest management activities? Have you provided this information to federal, state and local officials in Georgia?

Ms. Browner: EPA derives its knowledge of watershed conditions from States' CWA Section 303(d) and 305(b) assessments. Georgia did not report any waters impacted by silviculture as a source of pollution, or is source information a required reporting element. Georgia's 303(d) report identified sources broadly as "nonpoint source" instead of specific categories such as silviculture.

Mr. Coverdell: Do you know how much these proposed regulations will impact the approximately 177,000 people directly and indirectly employed by the forest products industry in Georgia? What is the estimated costs for these proposed regulations on Georgia's economy?

Ms. Browner: We estimated our costs for the proposed regulations on a national basis and have not broken down our estimated costs on a state-by-state basis. Therefore, we do not have an estimate of the specific effect on Georgia's economy.

Mr. Coverdell: It is my understanding that waters are included on some States' impaired waters lists based on poor quality data, or for that matter, no hard data. Yet there is no explicit provision in the proposed rule to "delist" waters in between listing cycles, even if more recent, quality data shows that the listing was in error. It is EPA's position that those waters should stay on the list for what could be another five years, even if data shows the waters are meeting standards and no TMDL is necessary?

Ms. Browner: We have received many comments on the proposal encouraging us to specifically provide a mechanism for States to remove waters from their current Section 303(d) list between the formal listing cycles. We are considering how to provide for such delisting between cycles in a way that both recognizes the importance of public participation and allows for reasonable State workload and scheduling.

○