MANAGEMENT OF PUBLIC LANDS AND NATIONAL FORESTS OF THE PACIFIC NORTHWEST

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON
NATIONAL PARKS, FORESTS AND PUBLIC LANDS

OF THE

COMMITTEE ON
NATURAL RESOURCES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

ON

REHABILITATION, REFORESTATION, AND REINVESTMENT ON PUBLIC LANDS AND NATIONAL FORESTS OF THE PACIFIC NORTHWEST

HEARING HELD IN WASHINGTON, DC
MARCH 30, 1993

Serial No. 103–14

Printed for the use of the Committee on Natural Resources

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MARCH 30, 1993

REHABILITATION, REFORESTATION AND REINVESTMENT ON PUBLIC LANDS AND NATIONAL FORESTS OF THE PACIFIC NORTHWEST

TUESDAY, MARCH 30, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON NATIONAL PARKS,
FORESTS AND PUBLIC LANDS,
COMMITTEE ON NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 1364, Rayburn House Office Building, Hon. Bruce F. Vento (chairman of the subcommittee), presiding.

Mr. VENTO. The subcommittee will come to order.

OPENING STATEMENT OF CHAIRMAN VENTO

The subcommittee is meeting today to conduct an oversight hearing on rehabilitation, reforestation and reinvestment in public lands and national forests of the Pacific Northwest. The debate has raged for several years on how much more timber should be cut in the Pacific Northwest. That is not necessarily the focus today. Instead, we will focus on Federal lands that have already been cut and the means and opportunities that are available to restore those lands to the healthy and biologically diverse forests they once were.

We are at the beginning of a new era for the national forests and public lands of the Pacific Northwest. The management of these lands in the future will be dramatically different from the management of the past. The courts, the Congress, the administration, and the American people have been sending a strong message to the Forest Service and to the Bureau of Land Management to change the emphasis from cutting and selling timber and to make the maintenance and restoration of biological diversity and complex ecosystems the management of the future. So significant is the need for this change that this week the President, the Vice President and two Cabinet Secretaries are in the Northwest to explore ways to make this change happen—to initiate that process.

During the old era of Federal forest management in the Northwest the timber program was king. The bulk of the funding and personnel for the Forest Service and Bureau of Land Management was focused on producing timber for commercial logging through the 1980s. The Forest Service sold, in the 1980s, between 4 and 5 billion board feet a year, I might say at the requirement of Congress, and in those days over 1 billion board feet all too often in

the O&C lands of Oregon. Those days are gone forever. Last year the Forest Service sold about 700 million board feet and the BLM only about 50 million board feet. This is a significant shift in forest management of the Forest Service today. It is such a significant shift that the Forest Service is planning on eliminating almost 900 positions from its Region VI work force.

The transition from one era to another is not likely to be easy, but as the land management agencies and the people of the Northwest work to adjust to this change, we must remind ourselves that the new era of forest management in the Northwest is full of opportunities and potential. For jobs that may be lost, both by the Federal agencies or in the private sector to declining timber harvests, there is potential for new employment opportunities in fisheries, wildlife habitat and watershed improvement, recreation and reforestation. As timber programs shrink, other programs could well grow. There is an incredible amount of work that needs to be done to maintain and restore forest ecosystems—enough work to employ thousands of people. The Forest Service and the Bureau of Land Management may focus, or refocus, and make wildlife, fish, recreation, wilderness and ecosystems, a primary emphasis.

Some refer to this potential as the three R's—reforestation, rehabilitation and reinvestment. The purpose of this hearing is to explore how to apply the three R's to the Federal forestlands of the Pacific Northwest. If we can successfully reforest, rehabilitate and reinvest in our national forests and public lands, this new era will result in the Forest Service and Bureau of Land Management being stronger than ever, and will produce a regional economy based on quality land management that is sustainable over time.

The gentleman from Oregon, Mr. Smith.

OPENING STATEMENT OF HON. ROBERT F. SMITH

Mr. SMITH. Thank you very much, Mr. Chairman. Last week Mr. DeFazio and I joined Secretary Babbitt in southwestern Oregon looking at some of the forests we will be discussing today. We were given a briefing, for instance, on the Applegate Partnership, which is a project to manage some 500,000 acres on the Applegate River watershed, in a manner that is ecologically and economically sound.

While it is not a perfect solution, the partnership at the very least recognizes that timber products will continue to play an important role in the Pacific Northwest and for this Nation as well as protecting the ecology of the land, which brings me to the point that the timber crisis in the Northwest is no longer a regional problem. I think most of us understand this in this committee. Half of the standing softwood timber in the United States is managed by the Federal Government and right now, as you pointed out, Mr. Chairman, we can hardly and barely cut a stick of it.

As a result, the Nation's economy and the recovery is in jeopardy because of soaring lumber prices caused by our forests being shut down for many reasons, including court injunctions. What we are doing is assessing about a $4,000 increase in cost to a house. I call it the spotted owl tax. We are inhibiting the American dream of people who want to build their own home, and even with low interest rates the spiraling cost of a home makes it totally out of reach

for most people. Housing demand is up, lumber prices are high, and the demand is going down.

And while I know that preservationists aren't really concerned about putting 40,000 people out of work in the Northwest, I am not sure they want to be associated with stifling the expansion of this economy. So it is in the national interest for our land management agencies to assure the long-term sustainability of our Federal landmass. By and large, they are doing a commendable job, and we will hear more about that today.

There are those who will try to discredit the professional on the ground. We saw an example last year when the majority issued a fatally flawed reforestation report that was a complete work of fiction. I thought the land management agencies' critique of this report poked so many holes in it that it isn't really worth discussing.

As we take a close look at our public lands today, I hope we keep one thing in mind. We are going to need the Federal lands in the Pacific Northwest to provide wood for this Nation. We cannot rely on private lands or Canada or Russia or anywhere else. So, if the President and this Congress are prepared to take half of the standing softwood in the United States out of production, the American people better be prepared to pay the price.

Thank you, Mr. Chairman.

Mr. VENTO. Mr. DeFazio.

OPENING STATEMENT OF HON. PETER A. DeFAZIO

Mr. DEFAZIO. Thank you, Mr. Chairman. I am a little disappointed. We have been having real door-busting turnouts here lately, and now when we get down to some, I believe, very important issues I am disappointed to see it doesn't seem to be quite as startling to the press or even some members of advocacy groups.

Since I first came to the Congress, my first hearing was with this committee examining the proposed budget of the then, as I remember, Mr. Burford's BLM and under the direction of the Reagan administration. At that time I raised questions about the backlog in precommercial thinning and other treatment activities that would yield future productivity and pointed to some disturbing numbers and trends. We see that to date some of those concerns have not been fully addressed.

Further, I went down to Appropriations and asked back then something that not many other Members were willing to do. I said, cut the road budget here that is being recommended. Take some of the money from the road budgets, particularly on Forest Service lands, and reinvest it in other values that will lessen the conflicts and lead to productivity.

Now, we had a lot of people who are willing to go down and testify to lessen the road budget in order to reduce timber harvesting, but there wasn't a lot of support for reallocating the funds. And I hope the turnout today, other than my colleague from Oregon and others, is not an indication that that situation is going to continue in the future. Because one of the key parts of resolving the ongoing crisis in the Northwest forests is going to be to increase investment in those lands which are deemed suitable for timber harvest, also in lands that are not suitable for timber harvest in terms of reforestation activities. We took testimony in this committee 2 weeks

ago from the Pacific Rivers Council and others and heard about a watershed restoration strategy.

There are other non-timber-commodity activities that could go on on these public lands that would provide some additional employment for rural communities who have few alternatives. We have seen some progress. There was a little bit of money in the President's stimulus package, about $15 million, to begin to engage in some of these activities. And the 4-year vision document of the administration, which we hope will soon be backed up by solid budget requests, included 1.5 billion over 4 years for BLM and Forest Service natural resource protection and environmental infrastructure initiative.

So I am very hopeful that the decade of disinvestment is over, and we are going to begin now to stop the acrimony of the past and begin to look toward the future and hear productive suggestions on how to go forward. I look forward to the testimony of my colleague from Oregon, who has a number of ideas in that area.

Thank you, Mr. Chairman.

Mr. VENTO. I thank the gentleman for his work initially and constantly in terms of this issue. I well remember the first set of questions that he raised and we wrote in our recommendations to the Appropriations and Budget Committee concerning these adequate funding levels for rehabilitation.

I am pleased to welcome and recognize the gentleman from Idaho, Mr. LaRocco, who has attempted to draft major proposals dealing with forest health, and we are pleased to have him as a member of the committee and present this morning.

Mr. LaRocco.

OPENING STATEMENT OF HON. LARRY LaROCCO

Mr. LAROCCO. Thank you, Mr. Chairman, and thank you for holding this hearing. I will just take a couple of minutes. I appreciate your reference to H.R. 229, the bill that I have drafted, on forest health. We made a run at it last year, and I am happy to see on the witness list today some people whose counsel I sought, Mr. Aplet and Mr. Sampson. They were very helpful to me as we moved that bill along and actually got it through the full Ag Committee. There is a lot of work that needs to be done on that bill yet and that is why I am here today.

I want to say that I fully recognize where Region VI is. It is not in Idaho, but there are implications for the State of Idaho. I was talking to a ranger the other day in the Payette National Forest. We were talking about a timber sale. It was called the Republican Flats timber sale. It caught my attention right away.

And I said, "Who would bid on that sale?"

And she said, "Well, there is some interest from Oregon and Washington in that sale." It is on the Salmon River breaks of the main Salmon. So there is tremendous pressure put on the forests of my district, and also many logging crews are moving over to Idaho because of the lack of work. So we have to look for resolution to this issue. That is why I introduced the bill, and I just hope that we can keep that process moving along.

In addition to that, today I am announcing the introduction of a bill, a wilderness bill for the State of Idaho that encompasses the

five national forests of my district. I have jobs creation, watershed restoration and timber stand improvement projects in that bill, and as I went through every forest I was amazed at the list that came forward.

The list was very broad. Work needs to be done in the roaded fronts of every forest, just so that the timber sale programs can move ahead.

And so your hearing today is very, very critical as we investigate and look into this problem. I intend on spending a lot of time on this particular issue. I look forward to hearing what our very capable witnesses have to say about this, and I appreciate your particular interest in this issue.

Thank you, Mr. Chairman.

Mr. VENTO. I thank the gentleman for his work, and we look forward to reviewing his latest proposal, the wilderness solution for his district.

We are pleased to welcome our colleague Ron Wyden, who has appeared before the committee from time to time on resource issues, the dean of the Oregon delegation for the House side.

STATEMENT OF HON. RON WYDEN, A U.S. REPRESENTATIVE FROM THE STATE OF OREGON

Mr. WYDEN. I thank the chairman very much, and let me say right at the outset you have got a long hearing today. I think it would be cruel and unusual punishment, Mr. Chairman, to give you a filibuster. And, if I might put my prepared remarks in the record and maybe just highlight some of my principal concerns?

Mr. VENTO. Yes. Without objection.

Mr. WYDEN. First, Mr. Chairman, we want to thank you for all the time you have spent on these important issues over the years. You have spent an awful lot of time trekking around the forests of the Northwest as Peter, Bob and I did this last weekend. And years ago you were saying there had to be a change in the way natural resource policy was set, and I personally think we should have heeded a lot of the wisdom that you called for then and we very much appreciate it.

With respect to the issues we are talking about, I think we know that our colleague Peter DeFazio has been tireless in pursuing these issues over the years. And Congressman Bob Smith and I have had a chance to team up often on many of these issues. Certainly there is nothing partisan about the job we have got in front of us with respect to reforestation. I am also pleased our friend Larry LaRocco is here, and even though, as he mentions, probably there isn't a whole lot of BLM land in Idaho, we are going to call on him and involve him in these efforts as well.

Mr. Chairman, I would say that a good reforestation program, a program that is well integrated with other priorities such as the repair of great damage that has been done to our forests, streams and rivers, can do an enormous amount of good for creating both jobs and a sound forest environment that we can leave to our children and our grandchildren.

Yesterday, Mike Kopetski, Wally Herger and I introduced H.R. 1502, legislation to expand, improve and reform reforestation and stand enhancement activity on public lands in Oregon, Washing-

ton, and northern California, the areas most likely to feel the economic brunt of the northern spotted owl habitat designations. We focused on second growth forests, lands likely to remain in the timber base, because we have seen years of lost opportunities on these lands.

Before I explain the legislation let me just make three points as to why this legislation is needed. First, the Interior Department Inspector General informed the Natural Resources Committee 2 months ago that shortfalls and backlogs in reforestation activity in western Oregon have already cost the taxpayer an astounding $2 million in potential timber harvests. Second, by its own admission, BLM for 2 years in a row has budgeted no money for pre-commercial thinning. We all know this is going to lead to even greater decreases in potential harvest levels. Third, it seems to me that we are missing the biological window, the moment of opportunity to complete this work for maximum future harvests. It is a question of either doing it now, or in my view, simply not being able to do it at all.

I think we also have to recognize that taxpayers everywhere are asking for greater Federal spending accountability. When taxpayers read in the papers that the BLM doesn't have the money to accomplish needed reforestation projects, taxpayers are more than a little upset when the Inspector General says, and I quote: "The Bureau's 3-tiered field organizational structure is highly inefficient and embedded with redundancy." It goes on to say, "Staffing resources costing as much as $49 million could be converted from administrative support and program oversight to program operations."

Mr. Chairman and colleagues, $49 million could plant an awful lot of trees, and I would add that the Inspector General's comments concerning BLM's overpopulated management structure came in testimony that was delivered just 2 months ago before the Natural Resources Committee.

I think part of my argument, Mr. Chairman, and then I want to explain the bill, is that a few dollars wisely invested will mean a return many times over in eventual timber sales receipts, jobs and healthier forests. In a bit, you are going to hear from a friend of all Northwest residents, Jack Desmond of the Northwest Reforestation Contractors Association, who has estimated that doing the reforestation work that we need in order to preserve forest jobs and make forests more productive could mean an additional 7,000 jobs almost immediately.

I would also add that Dr. Russ Gordy, a timber economist with the Congressional Research Service, who has testified before my subcommittee and has worked with us in our investigations over 4 years, has indicated that this kind of investment could mean hundreds of millions, even billions, of board feet in additional timber harvest.

Now, with respect to the legislation that I and our colleagues introduced yesterday, it really has four features. First, it would direct the Secretaries of Agriculture and the Interior to prepare an extensive yield report on second-growth lands in the Northwest. This is important because the last such survey was done in the early seventies.

Second, the legislation amends the Knudsen-Vandenberg Act to include BLM timberlands. For the first time, reforestation of BLM lands would be funded through a certain and sure sales receipt funded trust.

Third, we would amend the Act to limit K–V funds to reforestation and stand enhancement activities, which, in my view, is what the law was originally intended to be.

Finally, additional monies would be made available in Oregon, Washington and Northern California, for enhancement of second-growth forestry on private woodlands under the Forest Assistance Act. The legislation has been endorsed by a variety of groups, environmental groups such as The Wilderness Society, industry groups such as the Oregon Forest Industries Council, and the Northwest Reforestation Contractors as well.

So, Mr. Chairman, let me break my speechifying off right at this point. You have been kind, as always, to give me the opportunity to come. As I say, we have appreciated all you have done for us, such as your being willing to hold hearings and examine the question of coming up with a new, more balanced approach for the future, and I appreciate the chance to work with you and our friends from the Northwest.

Mr. VENTO. Well, I thank the gentleman for his comments. Obviously, do for you or do to you, I guess, depends upon who is looking at what the chairman or others might be contemplating.

But, without objection, your entire statement will be made a part of the record, as will the entire opening statements of members and the witnesses. Without objection, so ordered.

[Prepared statement of Representative Wyden follows:]

OPENING STATEMENT REPRESENTATIVE RON WYDEN

Mr. Chairman, I know that you and members of this subcommittee are working very hard to help solve the horrendously difficult question of how to best manage the Pacific Northwest's old growth forests. But outside of that very tough question, I can think of no more pressing public timberland issue than the need to reform reforestation efforts in the great public forests of the West.

Last week, I toured Oregon forests and wood product manufacturing plants with Secretary Babbitt. He said more than once that we can have a sound forest environment and jobs, too.

I believe him.

I also believe that a good reforestation program, well-integrated with other priorities such as the repair of great damage done to forest streams and rivers, is one way to get both jobs and a sound forest environment we can leave to our children.

I congratulate you for having this hearing, today. Your committee is in an ideal position to begin that reform effort. And I look forward to working closely with my Oregon colleagues, Peter DeFazio and Bob Smith, to address these issues.

Thank you for the opportunity to add my two cents worth.

Yesterday, Mike Kopetski, Wally Herger and I introduced legislation to expand, improve and reform reforestation and stand enhancement activity on public lands in Oregon, Washington and Northern California—the areas most likely to feel the economic brunt of Northern Spotted Owl habitat designations. We are focused on second growth forests, lands likely to remain in the timber base. We see years of lost opportunities on these lands. This bill is needed because over the last decade there has been a failure to adequately fund and manage reforestation and stand enhancement in the Northwest.

Because of that neglect, my constituents in the Oregon wood products industry may lose jobs which otherwise would have been preserved.

Before I explain our legislation, I'd first like to say a few words about why I think it's desperately needed.

First, as the Interior Department inspector general informed the Natural Resources Committee two months ago, shortfalls and backlogs in reforestation activity

in western Oregon already have cost the taxpayer some $2 billion in potential timber harvest.

Second, by its own admission BLM for two years in a row has budgeted no money for pre-commercial thinning. As we all know, this will lead to even greater decreases in potential harvest levels.

Third, we are missing the biological window—the moment of opportunity—to complete this work for maximum future harvests. It's a question of either doing it now, or not being able to do it at all.

Mr. Chairman, people from my part of the country have a special connection to these forests. Aside from the fact that many of them depend on the good management of these public timberlands for their jobs, my constituents also want to feel confident that the woods will be managed well for their children and grandchildren.

Beyond that, taxpayers everywhere are asking for greater federal spending accountability.

When they read that the BLM doesn't have the money to accomplish needed reforestation projects, they are more than a little upset when the inspector general says that ". . . the bureau's three-tiered field organizational structure [is] highly inefficient and embedded with redundancy," and further that ". . . staffing resources costing as much as $49 million could be converted from administrative support and program oversight to program operations."

Mr. Chairman, $49 million could plant a lot of trees. The IG's remarks concerning BLM's over-populated management structure came in testimony before the Natural Resources Committee two months ago.

Finally, our state is looking at the loss of many timber jobs as we try to regain an environmental balance in the forest. We need this reforestation work because it means jobs . . . jobs now, not just in the future. My friend, Jack Desmond of the Northwest Reforestation Contractors Association, has estimated that doing all of the reforestation work we need to do in order to preserve forest health and make forests more productive could mean an additional 7,000 jobs, almost immediately.

In a nutshell, a few dollars wisely invested, today, will mean a return many times over in eventual timber sale receipts, jobs and healthier forests. Last summer, Dr. Ross Gorte, a timber economist with the Congressional Research Service, testified before my small business subcommittee that this kind of investment could mean hundreds of millions, even billions of board feet in additional timber harvest.

That brings us to the legislation, which I will briefly detail.

The Timber Management Improvement Act of 1993, has these key elements:

It would direct the secretaries of Agriculture and the Interior to prepare an extensive yield report on second-growth lands in the Northwest. This would be the first such survey since the early 1970s.

It amends the Knutson-Vandenberg Act to include BLM timberlands. For the first time, reforestation of BLM lands would be funded through a certain and sure, sales-receipt-funded trust.

The Act also would be amended to limit K–V funds to reforestation and stand enhancement activities . . . what we believe to be the law's original intent.

Finally, additional monies would be made available in Oregon, Washington and Northern California for enhancement of second-growth forestry on private woodlands under the Forest Assistance Act.

This approach has been endorsed by a broad spectrum of forest users, including the Northwest Reforestation Contractors, the Oregon Forest Industries Council, and the Wilderness Society. I also have a detailed report from the Congressional Research Service which supports many of the assumptions and directions taken in this legislation. I'd be happy to share that with the committee.

Mr. Chairman, I again want to thank you for holding this very timely hearing.

Mr. VENTO. We will examine the suggestions you have made carefully as we turn to legislation or improvements, especially with the K–V fund. I understand, not from your oral remarks but from discussion with staff, that you intend to provide a BLM fund similar to the K–V fund to provide certainty and predictability. It sounds like you are trying to refine or define better the utilization of the K–V fund in these areas.

The irony of this is that it is driven by timber receipts, and as timber receipts drop, the funding driven by timber receipts will, by necessity, be atrophied. That is the dilemma that we face. If any region in the country could have or should have been able to do a

good job based on the timber sale receipts, it certainly should have been Region VI. We are here today to look at what the history has been, and obviously, where there have been shortcomings it presents new challenges.

But today we are looking a little retrospectively at it. In looking at what the new definition or the new policy path ought to be in this area. I don't think there is as much disagreement as there is about boundaries and reserves and timber harvest levels. But I think much of it is going to be impacted by the timber receipts question and how we utilize that.

Mr. WYDEN. I think, if I could just make a quick comment, not only do I share your view, but I think Congressman DeFazio put it very well. The challenge is getting people's attention here. I mean there is a tremendous amount of work to be done here. The legislation that I have introduced is one way to go. I am sure there are other ways to go. What I found appealing about this kind of approach, and the chairman is absolutely right with respect to receipts going down, is that this kind of an approach in terms of BLM reforestation would really put the program on a pay-as-you-go kind of basis. We would have the certainty of knowing that if you sell a tree you would then set aside a certain amount to replant the tree.

And I think that, as we look to future policies that promote forest health and create jobs, that makes sense. I just hope we can get everybody's attention with something like this that is so very important when, as our colleague Congressman DeFazio has said, so often the more controversial, more incendiary issues dominate the attention.

Mr. VENTO. Are there further questions or comments for our colleague from Oregon? Mr. Smith? Mr. DeFazio?

Mr. DEFAZIO. I have a question, Mr. Chairman.

I appreciate the work that our colleague has done on this and would hope very much that we can, as he said, begin to put more emphasis on these issues. I have a question, and it is going to be a little bit problematic, and so I am not trying to put you on the spot. If you want to defer, you can.

But part of my problem, part of the agency's problem, and part of the problem with the legislation you have proposed, is that given the current court injunctions, given this new SAT report that was passed down by a group of biologists and others in response to the judge, which instead of looking at just vertebrate species looked at some 600 species that are potentially old-growth dependent under NFMA, but they also delved a bit into restrictions on BLM land in that report. I am not sure that we know where on second-growth lands we can make these investments, so I am not certain how we would go forward with an inventory and a report. A few environmental advocates labor. Some scientists have questioned the idea that within these reserves, set up *a la* Jack Ward Thomas, that on all of the second-growth lands nothing could go forward. That only natural processes would go forward. In fact, we could manage these lands back to a desirable state mimicking old growth or whatever age/class distribution or species distribution we wanted better than we could waiting for catastrophic or other events over a long period of time.

But the question would be, does your idea presuppose that we could look at some management activities on the tens of thousands of acres of second-growth lands that are set off limits in these reports? That is the problem here. Until we cross that threshold, right now there is nothing—they couldn't look at anything. You get 50 miles in from Murrelets, Jack Ward Thomas reserves plus the additional stuff proposed in the SAT report, and assume all that is going to be off limits. About 30 percent of Jack Ward Thomas is set aside as old-growth, the other 70 percent is second-growth, and on the BLM lands the proportion is much higher because we have virtually no old growth on BLM lands.

So, what assumptions would we make to enter into this so that, you know, we could cover any—because if they did the report now they would be restricting themselves to about 5 or 10 percent of the land base that is outside of the injunctions and the SAT report.

Mr. WYDEN. Well, it would seem to me that we ought to tie this to the overall solution that we hope will begin to develop on Friday. With the timber summit, as you know, we are going to try to move from there to a comprehensive resolution of natural resources policy, deal with the injunctions, and I would like to see what we are talking about here with the amendments on the K–V fund tied into it.

I think you have a legitimate concern here. If you did it right now you wouldn't even be able to look at many lands. But clearly that is going to change, or we hope it will change, as we get a comprehensive resolution through legislation and really make that beginning effort on Friday.

The fact of the matter is that there are a variety of uncertainties about this legislation. For example, the question that I thought one of our colleagues might ask—and maybe everybody is sparing me this as well—is, how much it will cost. You have asked the question of essentially, where do you do it. We would also have the question of how much it will cost. I mean the cost is going to be determined by how much work needs to be done, the planning and thinning and conversion and fertilization. And your question goes a step further with respect to exactly where it ought to be done, given the situation with the injunctions. My own sense is that we ought to tie this bill into the comprehensive solution that we begin to see develop Friday and in the days afterward.

Mr. VENTO. Further questions? Mr. LaRocco, did you have a question of our colleague?

Mr. LAROCCO. How much will this cost? [Laughter.]

No.

Mr. WYDEN. What I could tell my colleague is——

Mr. VENTO. As much as you want to spend. Yes.

Mr. WYDEN [continuing]. CRS gave us some potential estimates and they are really extraordinary. But I appreciate my colleague sparing me that cost question.

Mr. DEFAZIO. Well, I think we are talking about investment, and I know my colleague supports investment. This is not cost. This is investment.

Mr. LAROCCO. This appears to be good infrastructure and investment in the future.

Mr. DEFAZIO. Yes. Environmental infrastructure. Forest infrastructure.

Mr. VENTO. Mr. Smith has a question or a comment.

Mr. DEFAZIO. If I may, Mr. Chairman, I just wanted to make one statement, and I would be happy to yield to the gentleman.

I just want to say that what we have here, and what I stumbled on in trying to look at the forest health issue, is that when you stick your neck out a little bit on these issues you find that the timber industry and the environmental community and many other interests are very willing to talk about this and come to the table and try and resolve this. Obviously our colleague has been able to bridge that gap already with his legislation in the State of Oregon and in the Northwest. I am still working on that to perfect it in terms of my bill getting the support of the environmental community plus the timber industry. But this I think is a message for the Congress to continue working in this area, because we have these pent-up demands on the forests, and I think we are going to hear from the Chief on that because he has written to me about where they can start these projects immediately. The benefits to the forests and to our Nation are documented.

So I think it is incumbent upon us in these committees and the Members of Congress to continue to work to see if we can pass legislation and work in this area. I commend the gentleman for bringing us his proposal.

I would yield to the gentleman.

Mr. SMITH. I thank the gentleman for yielding. I just wanted to make a point to my friend. He mentioned the Congressional Research Service. Frankly, I don't have much respect nor depend much on their thoughts. Everybody around here knows the majority party runs the Congressional Research Service, and it is kind of like playing Jeopardy. When the majority party wants an answer they send it down to the Congressional Research Service and then CRS fills in the question. [Laughter.]

Mr. WYDEN. I would only say to my friend, besides expressing the fact that I always respect what he has to say, the gentleman who did the work on this particular CRS study used to work for the National Forest Products Association, and I do not know of any criticisms that have been made with respect to his reforestation efforts. There have been other issues that have been more debatable, but I think the fact that our friend Wally Herger is on this legislation, and my colleague has been on many of my bills over the years, attests to the fact that we want to go about this in a bipartisan way.

And I think that the work that CRS has done on this particular issue with respect to reforestation is not open to some of the debate that has been held on other issues.

I thank my friend.

Mr. DEFAZIO. If the gentleman would yield further, have got to say that I didn't know that rule prevailed. I once got an answer that I didn't want from the American Law Division. So either they just didn't know that I was a Democrat, or perhaps I should ask for an investigation of how they came to that conclusion, if that is the way it is supposed to work.

Mr. VENTO. Well, everyone is entitled to their own opinion, not their own facts. So we won't deal with the assassination of the messenger at this hearing any further, I hope.

I think that there has been a stream of new realities and data that have come out and much of it has placed and expanded the problems faster than we can the solutions in this issue.

The thought occurs to me that suggesting limitations in terms of harvest is not enough. The other manifestations of what goes on with forest health, as my colleague from Idaho has discovered in trying to write policy along these lines, also are issues which need to be explored. What is their impact on the other laws, including the Endangered Species Act and other factors. Now, that is really what we have to explore. Beyond understanding what will result in a good secondary growth for timber harvest, what is the impact of thinning and other activities, as Congressman DeFazio has also implied, with regard to other species and watersheds and how does that impact. What is the resource management plan for these areas, what are we pursuing, how are we doing it, do we have the dollars, and so forth.

I think there are many questions that could be and should be addressed, either today or as an outcome of the hearings that we have initiated. We appreciate our colleague from Oregon trying to bravely present some answers to us this morning, and look forward to working with him.

Thank you very much, Ron.

Mr. WYDEN. Thank you, Mr. Chairman.

Mr. VENTO. We are pleased to welcome the first panel of witnesses, the professionals that very often we rely upon for ideas. I noted as I was reading my opening statement we were addressing them. I am very pleased to welcome Chief Dale Robertson of the Forest Service; Mike Penfold, the Assistant Director of the BLM, Department of Interior; and finally, Ms. Joyce Fleischman, the Deputy Inspector General of the Department of the Interior.

Your statements have been, by previous request, made a part of the record in their entirety, so you can proceed to read the relevant portions or to summarize as would best suit the needs of the committee and your expression.

Chief Robertson, please proceed.

PANEL CONSISTING OF F. DALE ROBERTSON, CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE; MICHAEL PENFOLD, ASSISTANT DIRECTOR FOR LANDS AND RENEWABLE RESOURCES, BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY ED SHEPARD, BLM FORESTER; AND JOYCE N. FLEISCHMAN, DEPUTY INSPECTOR GENERAL, DEPARTMENT OF THE INTERIOR

STATEMENT OF F. DALE ROBERTSON

Mr. ROBERTSON. Well, thank you, Mr. Chairman. I would like to summarize my statement.

First, thanks for holding this hearing to talk about the investment needs for the national forests and public lands in the Pacific Northwest. In the case of the Forest Service, we manage over 24

million acres in the States of Oregon and Washington, and that represents about 19 percent of the total land base in those two states. And as you have pointed out this morning, the management of the national forests in the Pacific Northwest is undergoing significant change. It is changing because of us moving to ecosystems management and making adjustments to reflect new scientific information about biological diversity and the health of the forests, and ecosystems management, changing public expectations about how these national forests should be managed, and finally, but not least, dealing with some threatened and endangered species such as the spotted owl, the salmon and marbled murrelet.

All of these factors are significantly changing the management of the national forests in the Pacific Northwest. So, as we look to the future and begin to deal with these changes, it is evident that there is a large amount of work that needs to be done to restore the forest ecosystem in the Pacific Northwest so that the national forests represent healthy and productive and biologically diverse ecosystems. And, in addition, there is a large backlog of work related to the rehabilitation of our recreation facilities and trails, and other jobs that we do on the national forest.

Let me just throw out a few examples of the kinds of work projects that could be undertaken and could be accelerated: restoring and protecting wetlands, restoring riparian areas, improving watershed conditions, restoring fisheries and wildlife habitat, closing roads that we no longer need, cleanup of abandoned mine sites, treating timber stands to increase growth and vigor, improve forest health so that the forest is better able to withstand insect and disease outbreaks and wildfire, and finally, we need to rehabilitate our recreation facilities and trails and improve wilderness management.

I think just as one example of the kind of need we have to restore the forest ecosystem is the Blue Mountains of northeastern Oregon and southeastern Washington, Congressman Smith's district. There we have about 50 percent of the forests where many of the trees are dying, and the scientists are describing this area as basically out of ecological balance, and that is largely due to the exclusion of fire over time. Over the last 75 years it has changed the composition of species in the forest, the forest is overcrowded and it has just not been able to deal with the tremendous stress that it has faced over the last 6 years due to drought conditions.

So the past 6 years' drought has stressed the forest to the point that insects, disease and wildfires kills thousands of acres of trees each year, and there is much work to be done here to reverse this trend, and part of our strategy is to restore the health of the Blue Mountain ecosystem, which includes reforestation, timber stand improvement, restoring the fish and wildlife habitat, revegetating riparian areas, thinning the forests and doing more prescribed burning. So that is just one example on four national forests where there is a lot of work that we need to do to restore the ecosystem in the Pacific Northwest.

So, in summary, Mr. Chairman, there is much work to be done on the national forests in the Pacific Northwest. First, to put these national forests in a healthy, productive and biologically diverse condition. Two, to rehabilitate our recreation facilities and trails

and improve wilderness management, as well as expand recreational opportunities on the national forests through some selective high priority investments and construction projects. And finally, to intensively manage the forest for all of its values and all of its uses, including timber, in an ecosystem management framework.

So when you put all these needs together we have a big job ahead of us to develop an investment program for the national forests in the Pacific Northwest.

So, with that, Mr. Chairman, I would be happy to respond to questions.

[Prepared statement of Chief Robertson follows:]

STATEMENT OF F. DALE ROBERTSON, CHIEF, FOREST SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the subcommittee. Thank you for the opportunity to discuss our efforts towards the rehabilitation, reforestation, and reinvestment in the National Forests of the Pacific Northwest.

The Pacific Northwest Region includes over 24 million acres of National Forest System lands on 19 National Forests in the States of Washington and Oregon. This is 19 percent of the total lands of the two States. These 19 National Forests are guided by the Land and Resource Management Plans that were developed in accordance with the National Forest Management Act (NFMA) of 1976. The Forest Service is committed to using an ecosystem approach to implement these plans and assure the long-term sustainability of the resources.

In recent years, the Forest Service has attempted to meet greatly increased public demands for the full range of goods and services while at the same time addressing the growing public concern over a broad array of environmental issues. We are now working to adjust to new scientific information about biological diversity and ecosystem management, meeting new evolving public expectations, and dealing with threatened and endangered species, such as spotted owl, salmon, and marbled murrelet. These factors significantly change the management of the National Forests in the Pacific Northwest.

The Pacific Northwest Region is implementing ecosystem management to ensure the long-term sustainability of the resources under its management. The Region has an inventory of backlog restoration and rehabilitation work needed for the improvement of National Forest System lands. The need to reduce this backlog was recognized in the President's initiative "A Vision of Change for America" to "protect natural resources and reinvest in America's infrastructure." This inventory includes projects addressing ecosystem restoration, forest health improvement, recreation and wilderness use, range management, trail maintenance and construction, and recreation construction. These are explained in more detail below.

ECOSYSTEM RESTORATION

In the Pacific Northwest, restoration will focus on achieving healthy, productive, and biologically diverse ecosystems. Examples of projects that could be undertaken include protecting wetlands, restoring riparian zones, improving watershed conditions, restoring fisheries and wildlife habitat, closing roads to reduce soil movement and sedimentation, cleanup of abandoned mine sites, and treating timber stands to restore vigor, improve health, and reduce the risk of damaging insect and disease outbreaks and wildfire.

The Forest Service is working jointly with the Federal, State, tribal entities, and the publics of the Columbia River Basin (CRB) area in developing a guide to manage watersheds for the benefit of anadromous fish in the Columbia River Basin. Consistent with our commitment at the Pacific Northwest Salmon Summit, we are protecting and managing these watersheds and establishing monitoring programs to ensure that our management leads to improvement in watershed conditions. The Forest Service is improving its range management and administration to improve watershed conditions, with an emphasis on protecting and improving riparian and aquatic habitat conditions within the Columbia River Basin.

FOREST HEALTH

The Umatilla, Malheur, Wallowa-Whitman, and Ochoco National Forests within the Blue Mountains in northeast Oregon and southeast Washington have developed a strategy of large scale, integrated treatments to restore the health of the ecosystems. Forest scientists estimate that 3.1 million acres, or 51 percent, of the four National Forests are "out of ecological balance." The past six years' drought has stressed the forests to the point that insects, disease, and wildfire kill thousands of acres of trees each year. Streamside areas, soils, forage, and fish habitat also need improvement throughout the Blue Mountains. Preventative work is necessary now to reverse this trend. Part of this strategy to restore the health of the Blue Mountains will include reforestation, restoring fish and wildlife habitat, revegetating riparian areas, thinning, and prescribed burning.

RECREATION MANAGEMENT

The recreation activities in the Pacific Northwest continue to increase at a rapid pace. In 1992, visitors spent over 38 million recreation visitor days in the region's national forests compared to 3 million in 1930. This comes at a time when recreation facilities are deteriorating due to backlog of recreation maintenance and rehabilitation and a greater demand for more law enforcement at recreation sites.

The Forest Service has plans to restore and rehabilitate existing recreation facilities to correct resource damage, improve sites receiving heavy use, and showcase nationally designated recreation areas.

WILDERNESS

The Forest Service manages wilderness areas for the public's use and enjoyment while maintaining their natural condition. The Region has opportunities to increase rehabilitation of heavily used or damaged areas, monitor ecological change, and improve wilderness management.

TRAIL MAINTENANCE

Because of the rising demand for recreation, the Pacific Northwest Region faces a high level of public use on trails. In addition, with the increase of dead and dying timber associated with the forest health issue, more maintenance is needed to open up and maintain trails in the forests most affected.

The Forest Service could focus on labor-intensive projects to provide maintenance and to arrest further deterioration of our trail system. These projects will include clearing the pathways of encroaching vegetation, correcting safety hazards, and maintenance on trail tread, drainage structures, bridges, and signs. Major restoration will be a priority on many of our trails, including National Scenic Trails.

RANGE MANAGEMENT

Eleven million acres, or 45 percent of the Region, primarily on the east side of the Cascades, are located within grazing allotments. Increasingly, the concern over the anadromous fisheries in the Columbia River Basin requires the Region to review existing range allotments.

The Region will amend or develop the necessary allotment management plans to meet forest plan objectives and NEPA requirements. The Forest Service is also working with the State Governments in Oregon and Washington on their concern over the level of noxious weeds and our response to infestations.

TRAIL CONSTRUCTION

Emphasis will be placed on the reconstruction and relocation of substandard existing trails resulting from age, heavy use, location, or lack of maintenance. The Forest Service will also respond to the changing needs of recreationists and increase access for persons with disabilities. New connector trails to link National Forests trails and other non-National Forest System trail systems to enhance customer service and satisfaction are in greater demand and will be addressed.

Attention will also be given to trails and trailheads located in high unemployment areas, in Congressionally-designated areas such as National Recreation Areas and National Scenic Areas, and on National Scenic Trails.

FACILITIES MAINTENANCE

The Region's Fire, Administrative, and Other (FA&O) facilities continue to deteriorate. There is a backlog of projects that will require several years of maintenance to bring to standard. In addition, the recent enactment of the Americans with Disabilities Act has placed high emphasis on accessibility to all buildings.

The Forest Service would provide basic maintenance and correct some of the major accessibility deficiencies in existing Forest Service buildings, primarily offices, and other locations where the public is served.

RECREATION CONSTRUCTION

The Pacific Northwest Region has identified a large number of major recreation reconstruction projects, including the need to meet the accessibility guidelines of the Americans with Disabilities Act.

The Forest Service is placing emphasis on major rehabilitation of sites that have deteriorated over time due to heavy use and deferred maintenance. Water and sewer systems which do not meet environmental standards will be replaced and access within developed recreation sites will be improved and upgraded. Facilities will be reconstructed to bring them up to the Land and Water Conservation Fund standards for user fee collections. Existing facilities will be rehabilitated to protect the health and safety of forest visitors and past capital investment will be preserved.

The Forest Service is also helping to support the rural economic development in those communities most affected by the changes in the management of National Forests. In the last three years, we have taken a very proactive approach in reaching out to the communities in the Pacific Northwest. We are committed to assisting these communities to diversify their economy. We have seen many successes during the short time frame and will continue to assist these communities in their revitalization efforts.

The Forest Service has identified a larger amount of work needed to enhance and protect the Nation's natural resources and infrastructure. We can make major contributions to help distressed communities in the Pacific Northwest. The people of the Pacific Northwest would benefit from the jobs which could be provided on the National Forests. There would be a reduction in the accumulating backlogs, and restoration and rehabilitation work would be accomplished. The infrastructure that supports our National Forest System programs would be improved. It has been through such programs in the past that we have been able to maintain support facilities as well as contribute toward improving the quality of our Nation's resources.

Mr. Chairman, this concludes my prepared remarks. I'll be glad to respond to any questions you or members of the Subcommittee may have.

Mr. VENTO. We will withhold our questions until we hear from the other witnesses. Thank you, Chief, for summarizing your statement.

We invite Mike Penfold to make his statement at this time.

STATEMENT OF MICHAEL PENFOLD

Mr. PENFOLD. Yes, Mr. Chairman. We are pleased to be here, and I can say that we have the same kind of opportunities on the public lands as Chief Robertson discussed. I will be happy to summarize our remarks and concentrate on the forest development program for just a few minutes.

We believe as do the 18 western Oregon counties that share the receipts from these lands with the Federal Government that these forests are healthy and productive. A lot of work needs to be done in some areas. The key factors contributing to this have been good stewardship and public investment. The O&C Act provides for 75 percent of the receipts to go to the counties. However, in 1952 the counties returned 25 percent of the receipts, amounting to over $1 billion, to the Federal Government to be reinvested in development and management of these lands.

We consider the reforestation and forest development programs to be of the highest priority, and are proud of the success that we

have had in this area. We think it has been outstanding. Our success is demonstrated by the fact that there is at least as much standing forest volume today as there was when forest inventories were completed in the 1940s.

However, recent stories and testimony by the Inspector General for the Department of the Interior have charged BLM with mismanagement of these lands and claimed a large backlog in tree planting and other forest development practices. These stories and testimony are based on a 1989 report by the IG that has not been updated. We do not believe that the lands are mismanaged, and are emphatic that the BLM does not have a tree-planting backlog in Western Oregon.

I might refer the committee to the book that you have in front of called *Western Oregon Forest Development Program.* Do you all have a copy of this?

[EDITOR'S NOTE.—This document may be found in the hearing file.]

Mr. VENTO. Yes, we do have copies.

Mr. PENFOLD. All right, sir.

Mr. VENTO. It was distributed with our testimony.

Mr. PENFOLD. If I could bring your attention to page 1 where there is a graph that indicates the tree planting success story that we have had. On the lefthand side is a yellow, orange and red graph that indicates the magnitude of the tree planting job we faced from 1989 up until the present time. The green bar chart indicates the tree planting work that has been done from 1990 to 1992, and then the blue line indicates that there is a carryover of 7,500 acres, which is a rather normal carryover. So we are very much current on the tree planting. This huge carryover was in large part due to forest fires that happened in 1987 and 1989 as well as some speeded up timber harvest.

The forest development program concerns centered around the build-up of this treatment of 108,000 acres of plantation maintenance, 43,000 acres of precommercial thinning, and 178,000 acres of fertilization, as well as 3,200 acres of stand conversion. BLM concurred, in general, with the findings from the IG, although we did take some exceptions to the report. BLM recognized that several factors increased our program needs beyond the budget and work force capability. I explained the wildfires and those issues.

Another point was that in 1984 BLM was enjoined from using herbicides to manage competing vegetation, and this required us to use more expensive treatments and that did reduce the acreages to some degree.

Congress recognized the severity of these problems in the Fiscal Year 1990 Appropriations Act. They provided that 50 percent of the Federal share of O&C receipts above the estimate of the receipts in the Presidential budget would be returned to BLM to invest in forest management and forest development work. This funding and the dedication of our people have enabled BLM to make significant progress since publication of the IG's report.

I refer you now to page 3 of that document. This graph, pie chart, indicates the accomplishments over the 3-year period from Fiscal Year 1990 to 1992. If you add those figures up, you will notice that there is a total of 430,000 acres of work that has been done in

maintenance, thinnings, tree planting, pre-commercial thinning, site preparation, and fertilization. Those practices have taken place on almost 20 percent of the land that we manage out there. A very significant amount of work.

I refer you now to the chart on page 9. That chart is the forest development expenditures by major categories of work. On that pie chart, the important points for you to focus on are the green areas. This shows that 76 percent of our dollar expenditures have gone into on-the-ground work, and how that money was spent is indicated on this chart. If you have questions on any of this information, I would be happy to come back to it. The fact is that $113 million has been invested in forest development in that three fiscal year period.

Mr. VENTO. This is in millions, is that right?

Mr. PENFOLD. Yes, sir. That is 113 million total, so those are in millions. Yes, sir.

Mr. VENTO. Okay.

Mr. PENFOLD. I am sorry. Those are in thousands. So, if we take a look at intensive forest practices, that is a $14 million figure. Okay?

Mr. VENTO. Yes.

Mr. PENFOLD. If I could focus your attention on page 10, that is the forest development by major object class. Here I would like to point out that 45 percent of these dollars were done by contract work, and that is the main point on that chart.

The IG recently announced a follow-up audit of this program. We welcome this updated examination by IG and we are going to work very cooperatively with them on that.

The success of our projects is significant. We have been able to treat sufficient acres to support the timber offered for sale over the past decade. However, we are limited in our annual budget capabilities and must prioritize treatment to those that give us the greatest return. Our first priority is to assure that harvested and burned areas are prepared for planting, are planted, and the maintenance work necessary for seedling survival is conducted.

We never anticipate that we can complete all this work in any one fiscal year, and we normally defer acres needing treatment into future fiscal years. As I mentioned before, much of the carryover is anticipated and we don't consider it a backlog.

Intensive practices such as pre-commercial thinning and fertilization increase the growth and timber value of young stands. These practices are very cost effective. The excess funding we received made it possible to make substantial progress in this area.

I would like you to take a quick look on pages 6 and 7. There are a couple of other charts that I will refer to there. If you look at page 6 first, this indicates the pre-commercial thinning that was done between fiscal years 1990 and 1992, as well as the need to do pre-commercial thinning. On this chart, you will notice on the righthand side a fairly large blue area of carryover work that we believe needs to be done. The President's economic package would accomplish about 70 or 80 percent of the work indicated in that blue column on this pre-commercial thinning chart.

The next page is fertilization. We would be able to get some of that large carryover work done with the economic stimulus package, but that remains to be a fairly large workload that we face.

Let me emphasize that these intensive practices were prescribed for treatment based on assumptions made in our 1980 timber management plans where rotation of 80 to 100 years was assumed. The uncertainty of restrictions on our land base due to northern spotted owl protection and the other species that we are trying to recover, the outcome of the forest conference and the result of our forest management plans and the completion of that, obviously are going to have a lot of effect on where it makes sense to make investments on these lands.

I would like to reiterate that the investment in our forestlands is necessary if BLM is to meet its statutory commitment to managing ecosystems for the sustained yield and all the other species that are important in those ecosystems out there. The practices used by BLM are the most scientifically advanced practices available and are highly cost effective when implemented timely. Quite frankly, we are pretty proud of what we have done out there, Mr. Chairman.

And this concludes my prepared remarks. I would be happy to answer any questions.

Mr. VENTO. Thank you, Mr. Penfold.

[Prepared statement of Mr. Penfold follows:]

STATEMENT OF MICHAEL PENFOLD, ASSISTANT DIRECTOR FOR LANDS AND RENEWABLE RESOURCES, BUREAU OF LAND MANAGEMENT, UNITED STATES DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON NATIONAL PARKS, FORESTS, AND PUBLIC LANDS OF THE COMMITTEE ON NATURAL RESOURCES, ON REHABILITATION, REFORESTATION AND REINVESTMENT ON PUBLIC LANDS AND NATIONAL FORESTS OF THE PACIFIC NORTHWEST

I appreciate the opportunity to appear here today to discuss the Bureau of Land Management's (BLM) forest management in the Pacific Northwest. Coming as it does just a few days before the Forest Conference, this hearing presents an excellent opportunity to set forth the BLM's programs and to correct some misconceptions.

The BLM manages approximately 2.2 million acres of forestland in western Oregon. This land, referred to as the Oregon and California Railroad Grant Lands, or O&C lands, is valuable for many resources, including timber, wildlife and fisheries habitat, water, and recreational uses. The O&C lands are managed under authorities in the Federal Land Policy and Management Act, the O&C Act of 1937, and the Coos Bay Wagon Road Act.

We believe, as do the 18 western Oregon counties that share receipts from these lands with the Federal Government, that, in general, these forests are healthy and productive. Key factors contributing to this have been good stewardship and public investment. The O&C Act provides for 75 percent of receipts to go to the counties. However, since 1952, the counties have returned 25 percent of the receipts, amounting to over $1 billion, to the Federal Government to be reinvested in development and management of these lands.

From 1937 until the early 1980's, the O&C lands were managed using the 25 percent government share and the 25 percent returned funds from the counties. This method of funding worked well, but was subject to the normal market cycle of the forest products industry and resulted in unacceptable fluctuations and uncertainty in funding. The Congress determined that the long-term nature of forest investments could not tolerate such fluctuations and in 1982 started directing appropriations for the management of these lands. Since then, the returned portion of the O&C Fund is deposited in the United States Treasury.

We consider the reforestation and forest development programs to be of highest priority and are proud of the outstanding success we have had in this area. Our silviculturists and technicians are highly trained and have some of the most advanced adaptive reforestation research at their disposal. Their skill and dedication are evidenced by the fact that, despite the harvest of 48 billion board feet of timber

since 1938, there is at least as much standing forest volume today as there was when the first inventories were completed in the 1940s.

Recent news stories and testimony by the Inspector General (IG) for the Department of the Interior have charged the BLM with mismanagement of these lands, and claimed a large backlog in tree planting and other forest development practices. These stories and testimony are based on a 1989 report by the IG that has not been updated. We do not believe the lands are mismanaged and are emphatic that the BLM does not have a tree planting backlog in western Oregon. Our tree planting is current and we have conducted more than enough forest growth enhancement treatments to support the timber sale offerings under the 1980s timber management plans.

The IG found that the BLM, during the Fiscal Years (FY) 1987 to 1989, did not perform the planned level of intensive forest practices and did not place proper emphasis on seeking access into timbered areas. The forest development program concerns centered around the build-up of a treatment backlog of 108,000 acres of plantation maintenance, 43,000 acres of precommercial thinning, 127,000 acres of fertilization, and 3,200 acres of stand conversion. The BLM concurred, in general, with the findings, although we did take some exceptions to parts of the report.

Even before the 1989 IG audit of our western Oregon forestry program we recognized that we had problems and concerns.

These problems and concerns resulted from several factors that increased our program needs beyond our budget and work force capability to respond.

In 1987 and 1988 severe wildfires swept through southwest Oregon. These fires created an immediate need to reforest thousands of acres which had not been programmed. Salvage logging to recover fire-killed timber over the next few years also added unanticipated work to our planned reforestation efforts. The fires also increased our workload in plantation maintenance—that is, practices to manage the competing vegetation to maintain survival and growth of the seedlings—for the past 6 years and for the next few years to come.

Also at that time, contracts that had been extended as part of the Contract Modification Act were near termination and the lands had to be logged. This, coupled with high lumber prices supporting logging of newer timber sales, added acres in need of treatment beyond our expectations.

Additionally, in 1984 the BLM was enjoined from using herbicides to manage competing vegetation. This required us to use more expensive treatments, thereby reducing the acreage that could be treated within existing budgets and causing us to defer lower priority treatments.

The IG stated that it would take a one time appropriation of $48.2 million and 2 to 8 years to eliminate the backlog. The BLM never received the $48 million appropriation, but did receive some aid. Congress recognized the severity of the backlog problem in the FY 1990 Appropriations Act by providing that 50 percent of the Federal share of O&C receipts above the estimate of receipts in the President's Budget would be returned to BLM to invest in forest management and forest development work. This funding and the dedication of our people have enabled the BLM to make significant progress since the publication of the IG's report. For example, over 430,000 acres—an area equivalent to 20 percent of our land base—received on-the-ground treatment over the three year period, including 99,000 acres of reforestation, 49,000 acres of site preparation, 157,000 acres of plantation maintenance, 42,000 acres of precommercial thinning, and 85,000 acres of precommercial thinning, and 85,000 acres of fertilization. Today there is no reforestation backlog and the extent of the backlog in other treatments has been significantly reduced.

We also believe that the approximately $113 million invested in the Oregon program over the past three years has been used in a prudent and effective manner. Approximately 76 percent of these funds was used to carry out treatment of 430,000 acres. About 3 percent was used to conduct inventories and maintain the complex records associated with this program. Approximately 16 percent was used for program management and support activities such as training and procurement. About 5 percent was used for research and development, planning, and environmental assessment. I will discuss research in more detail later in this statement.

I point out that 45 percent of our expenditures, or nearly $51 million, was paid to private contractors to accomplish a major portion of the on-the-ground project. Our forest development program is, and will continue to be, an important source of jobs for the private sector. The IG recently announced a flow-up audit of this program. We welcome this updated examination by the IG.

The success of our projects is significant. We have been able to treat sufficient acres to support the timber offered for sale over the past decade. However, I do not want to infer that we are able to treat every acre prescribed for treatment by our silviculturists. We are limited to our annual budget capabilities and must prioritize

treatments to those that give us the greatest return. Our first priority is to assure that harvested or burned areas are prepared for planting, are planted, and that maintenance work necessary for seedling survival is conducted. We never anticipated that we can complete all of this work in any one fiscal year. We normally defer acres needing treatment into future fiscal years. Much of the carry-over is anticipated and not considered backlog.

Intensive practices such as precommercial thinning and fertilization increase the growth and timber value of young stands. These practices are very cost effective. The excess funding we received made it possible for us to accomplish these practices. However, under funding for FY 1992 and FY 1993 we were able to do only a small amount of fertilization and thinning. This resulted in a larger carry-over into FY 1994 than we would like. However, we emphasize that these intensive practices were prescribed for treatment based on assumptions made in the 1980s timber management plans where a rotation age of 80 to 100 years was assumed. The uncertainty of restrictions on land use based on northern spotted owl protection and the outcome of new Resource Management Plans made it unwise to invest in treatments for forestlands that may not be harvested or will be managed on longer term rotations where timber is not the overriding objective. We are beginning to get a clearer picture of what areas may be available for future timber management and will start to treat these areas, consistent with applicable laws.

Based on a recent assessment of treatments planned for accomplishment in FY 1993, the expected carry-over of acres, and pipeline needs, we anticipate that the FY 1994 program need will be 45,559 acres of maintenance, 63,832 acres of precommercial thinning, and 162,370 acres of fertilization.

The President's Economic Stimulus Package includes over $15 million for western Oregon management. Approximately $9.4 million of this is slated for much needed road maintenance work, with the remaining $5.6 million for reforestation practices. We anticipate that if this package is passed and implemented, 70 to 80 percent of our pre-commercial thinning treatment needs will be met.

We have experienced lower bids for treatment contracts than we estimated. This is resulting in contract savings that we are using for more contracts to reduce our unmet needs and to provide for local jobs. We expect that this will result in an additional $1 million worth of work being contracted.

Forest development work is more than investing in the visible program that results in acres treated. It is an extremely complex program that requires hundreds of foresters, technicians, and administrative staff. We have had to establish and maintain seed orchards to produce the seed for reforestation. We have gigantic freezers to store seed collected from hundreds of seed zones and elevation bands for several different species of trees. We have large coolers to store seedlings from the time they are lifted in the nursery to the time they are planted in units. We also have a large cooperative tree improvement program to provide fast growing, disease resistant planting stock in the future.

All of these items are expensive, but necessary to maintain a program as large as ours.

Another important use of the funds appropriated for forest development is research. The BLM has invested several million dollars over the past 15 or more years in research programs that have provided a model for adaptive research and technology transfer to practitioners. Two highly effective programs have been the Intensified Forest Research (IFR) program and the Coastal Oregon Productivity Enhancement (COPE) program. The now completed IFR program resulted in state of the art reforestation practices in southwest Oregon. This returned to the timber base over 100,000 acres of BLM lands that had previously been withdrawn because they presented reforestation problems. The COPE program is continuing to study forest management programs in coastal areas. Both of these programs were cooperative efforts among the BLM, Forest Service, State of Oregon, Oregon State University, industry, and local governments. We have also recently established a cooperative research center at Oregon State University that will be addressing forest management problems.

Finally, I would like to address methods that we believe would improve the funding processes for our treatments. Forest management is a long-term investment. Stand treatments are not prescribed day to day, but over an entire rotation. There needs to be a better mechanism to help maintain funding levels equal to treatment needs. Several mechanisms have been suggested over the past few Congresses.

The FY 1993 Interior Appropriations Act included a provision establishing a Forest Ecosystem Health and Recovery Fund. This fund returns the Federal share of timber receipts from salvaged timber to the BLM for forest health treatments. This will assist the BLM in more rapidly responding to forest health problems before they escalate into epidemics.

I reiterate that investment in our forestlands is necessary if the BLM is to fulfill its statutory role of managing for sustained yield for community and industrial stability. The practices used by BLM are the most scientifically advanced practices available, and are highly cost effective when implemented timely. We are proud of our programs and the excellent and innovative techniques we use in the management of our O&C lands. I have displayed much of this in graphs and other visual charts that I will submit for the record.

This concludes my prepared statement. I would be happy to answer questions.

Mr. VENTO. We will now hear from the Deputy Inspector General before turning to questions for this panel. We are pleased to welcome Joyce Fleischman, whose report has been discussed already by Mr. Penfold, and perhaps she can give us more information.

Ms. Fleischman.

STATEMENT OF JOYCE N. FLEISCHMAN

Ms. FLEISCHMAN. Thank you, Mr. Chairman. Members of the subcommittee, I am pleased today to appear before you to discuss the results of our audit work in the Bureau of Land Management forestry operations in western Oregon.

Our most recent audit on the Bureau's forestry operations was issued in September of 1990 and generally covered the period between 1987 and 1989. At the time of our audit, the Bureau's timber sales program in western Oregon was generating annual revenues of over $200 million. Although this program was highly profitable, returning revenues of over four times the cost of the program's operations—I think we estimated at the time approximately a $4.30 return on every dollar invested—we found that the Bureau had not requested sufficient funding to conduct its forest timber growth.

Specifically, the Bureau had not requested the resources needed to reduce the backlog of forest management activities that existed in 1989. Those backlogs at that time consisted of 108,000 acres for plantation maintenance, 43,000 acres for pre-commercial thinning, 127,000 acres for fertilization, and some 3,200 acres for timber stand conversion. Based on historical cost information that we obtained from the BLM we estimated that the Bureau would need a one-time funding of approximately $48 million to eliminate those backlogs.

Our report did not address reforestation as that term is used by the BLM to mean tree-planting backlogs. As a result of the lack of aggressive forestry management, substantial timber growth was lost during the 4-year period of 1986 to 1989. At that time we projected that revenues received from the eventual sale of this timber would be reduced by about $90 million. We also projected that the losses would amount to approximately $21 million annually until those backlogs were eliminated. At today's prices, the value of lost timber growth for that 4-year period would be approximately $104 million, with an additional annual loss of $24 million.

Also, we learned at the time of that audit that the Bureau was unable to harvest and sell an additional 800 million board feet of mature timber with a value of over $300 million. At today's prices we estimate that value of mature timber would be approximately $340 million.

The BLM also could not effectively manage other timberlands that were capable of producing an additional $4.8 billion worth of future timber sales revenues over the 60- to 80-year life cycles of

those forests. The Bureau could not sell or manage this timber effectively because it had not committed sufficient resources to acquire easements through private lands that were essential to access approximately 132,000 acres of Bureau land on which the timber was located.

Without this access, substantial losses of timber revenues will occur on an annual basis. I would like to emphasize that the report that we issued in 1990 considered the spotted owl controversy and focused solely only on those lands that were outside the areas of controversy. Our report discussed those management actions by the Bureau of Land Management that, if implemented, should maximize timber harvest activity on Federal lands that were not at that time restricted by the spotted owl issues.

Since our audit was completed, some boundaries may have changed and some lands that may not have been included in the spotted owl controversy at the time, and those lands that we looked at at the time of the audit may now be included under various injunctions and other prohibitions of activity on those lands.

The Bureau's response to our audit was positive, and the Bureau agreed to request full funding to reduce the backlogs and to acquire the necessary easements for access to Federal lands. However, based on information provided by the Bureau at the 1992 Senate appropriations hearings for its 1993 budget, at that time the Bureau told the Appropriations Committee that it still needed approximately $39 million to eliminate its reforestation and forest development backlogs.

As a result of a recent congressional inquiry of my office, we requested the Bureau's Oregon State office to provide us with updated information on the backlogs addressed in our 1990 audit report. The information supplied to us by that State office in February of this year indicates that the plantation maintenance backlog identified in the 1990 audit has been significantly reduced, from 108,000 acres to 46,000 acres. The BLM Oregon State office also indicated that the backlog of pre-commercial thinning has remained at 43,000 acres, that the fertilization backlog has been partially reduced from 127,000 acres to 101,000 acres, and that the timber stand conversion backlog has about doubled to 6,600 acres, and that there is no current backlog in tree planting or reforestation.

However, we did not verify the accuracy of the information provided to us by the BLM State office in February of this year. We also were not able to ascertain or obtain information from them as to whether the Bureau has secured the necessary easements on private lands so as to access and increase timber operations on their public lands.

Because of the significance of the audit findings, and because of the current interest by the United States Congress in these issues, we have scheduled a follow-up review of the issues raised in our 1990 report, and we actually began the work about the middle of March—this month. Based on that follow-up audit, we will determine whether the Bureau has implemented the recommendations that we made to it in September of 1990, and whether the underlying program deficiencies have been corrected.

In addition, the audit will determine whether reforestation and forest development funds have been used solely for their intended purposes.

That concludes my prepared statements. I would be happy to answer any questions.

Mr. VENTO. Yes. Thank you very much, Ms. Fleischman.

Mr. VENTO. Mr. Penfold, just let me see if I can get the amounts here right. I don't know if you have them, but you state you manage 2.2 million acres of forestland. How much of that is secondary forest management that would fit into this restoration type of discussion we are having today of that 2.2 million acres?

It is important that we understand the base, because if we look at some of these numbers in terms of backlog you would wonder what we are talking about. Some of it is virgin; it has never been cut. Other is, perhaps, wilderness. I don't know exactly what the make-up is of those BLM lands in this area.

Mr. Shepard?

Mr. SHEPARD. Mr. Chairman, the figures that were included in this report were based on our 1980 plans. The new plans, the new RMPs that we are developing now——

Mr. VENTO. Well, let's just go with the base numbers that we have here.

Mr. SHEPARD. The 2.2 million acres, with our new plans, roughly 1.6 billion will be available in the timber base in some way. Forty-one percent of the 2.2 million acres will be available for intensive practices if the plans go through as they are now proposed.

Mr. VENTO. Yes. What you are looking at is a certain universe of forest in BLM that is subjected or being manipulated with regards to these activities that we are talking about today, which were, incidentally, the subject of the IG's report as well.

So out of that 2.2 you say there is 1.6 that is available eventually somehow under the plan for harvest. But some of that has never been harvested. Some of it is not being subject to this fertilization, thinning, replanting.

Mr. SHEPARD. I don't have a total figure for that.

Mr. VENTO. Okay. But, you know, when you look at that you say we have got 100,000 acres that need fertilization, as an example, and if you only had a million that were really secondary forests that are subject, that would represent 10 percent over a period, since the 1940s, that they have had a program going on it would represent a substantial backlog.

The difference here, Mr. Penfold, is your program is not driven by forest receipts; is that correct? Not strictly?

Mr. PENFOLD. Driven from the standpoint——

Mr. VENTO. Dependent upon a fund that is set aside from allocations of receipts, you know, when you make sales.

Mr. PENFOLD. That is true, and the Congress appropriates.

Mr. VENTO. The Congress appropriates directly.

Mr. DEFAZIO. If the chairman would yield for just a second?

Mr. VENTO. I yield. I yield.

Mr. DEFAZIO. Except for the portion which is contributed by the counties, which through the appropriations process which is one-quarter of the receipts. So that amount does vary according to the receipts.

Mr. PENFOLD. Mr. DeFazio makes a very important point there.

Mr. VENTO. Yes. Well, O&C is sort of a special category. So that is a factor.

And what about this issue? I didn't notice it in your prepared remarks, although it may be there. I was just looking at it for the first time this morning, Mr. Penfold. What about the issue of easements?

We understand the checkerboard pattern of land ownership. In fact, I would like to get a little better focus on that.

Mr. PENFOLD. Yes. The IG, I believe, would have liked to have seen a more aggressive total program for easement acquisition in the O&C lands. Our program focuses on those easements we need in the near, coming years, so we disagreed that we had any significant and major problem as far as not being able to acquire the easements that we need. And, of course, there are reciprocal agreements in the areas where you have large private holdings.

But easement problems primarily are when you are getting up into the checkerboard, so there is a large need for better easements out there. But we think that we are keeping up fairly well with our priority needs.

Mr. VENTO. Recently we had a report back from the GAO that indicated that a lot of public lands in the West, in fact, nearly 50 million acres, are inaccessible and essentially locked up because of easement problems. This is, obviously, a different case here. I think we are talking about easements for the purpose of some of the restoration, some of the reforestation work apparently and/or preparation for sale.

Mr. PENFOLD. Yes. Most of our acquisition of easements is focused around forestry practices, and across the West there is a huge need for a more aggressive allocation of funds to acquire public easements and to do exchanges to provide legal rights-of-ways. That is a big problem area across the Western States.

Mr. VENTO. Ms. Fleischman, did you want to comment on any of this in terms of my questions?

Ms. FLEISCHMAN. At the time we did this audit regarding the question of easements, the Bureau told us that they needed approximately 885 easements to obtain access to 800 million board feet of harvestable timber; that is, mature timber ready to cut, and the value of that timber at that time was $302 million. They had a total of $300,000 and 6 full-time positions dedicated to obtaining those 885 needed easements. Needless to say, we estimated that if they continued at that rate it would take 25 years to obtain the necessary easements to get to that timber.

We hope that they have improved that dedication of personnel and resources, because 25 years strikes me as a long time to go to try to get easements to harvestable mature timber.

Mr. VENTO. Mr. Penfold.

Mr. PENFOLD. Obviously, a lot of programs in western Oregon will need to be looked at in light of new approaches that are being considered in our western Oregon plans and what comes out of the forest conference. It would be nice to have, of course, an easement acquisition program that is substantial and very long, future looking. I think we will have a substantial easement acquisition need when our plans are completed.

My point was that in terms of the priority access for timber sale purposes we felt we were keeping up pretty well. It was a little bit as opposed to a long-term program that would acquire all of our easement needs for a 25-year period, for example.

Mr. VENTO. Chief Robertson, can you comment? You don't have the same challenge with regards to easement, but I guess you still have some problems in the area.

Mr. ROBERTSON. Yes, we have a serious problem. It is not like BLM because of the checkered ownership, although we have some checkered ownership. But we have an active rights-of-way easement program. I think we acquire about 500 rights-of-ways or easements a year.

Mr. VENTO. In Region VI?

Mr. ROBERTSON. No, that is national.

Mr. VENTO. National, yes.

Mr. ROBERTSON. And we have got large chunks of that 50 million acres or whatever it is that we still need access to.

Mr. VENTO. Yes. Well, that is a nationwide figure for all public lands that GAO provided for us.

Very often, Chief Robertson, the work for reforestation plantation is financed by timber purchases, isn't that correct, or are there other dollars that come through other means?

Mr. ROBERTSON. It is a combination of what we call K–V funds from timber receipts, plus appropriated dollars.

Mr. VENTO. And so what has the ratio been in recent years? You can always fill in the numbers here specifically if you feel more comfortable, but I would like to get sort of a thumbnail sketch of it now.

Mr. ROBERTSON. Well, for example, in Fiscal Year 1993 for reforestation we had $57 million of K–V money in Region VI, and we only had about a little over nine million appropriated dollars, so that is about 6-to-1 K–V. But most of our need for reforestation is created by timber sales and the need to replant and reforest those areas.

Mr. VENTO. Do we reprocess all the funding through the timber sales and eventually harvest? I guess at the time of harvest is when we receive the dollars. But do we finance almost all of the dollars? The individual contractors that are doing the harvest, do they have certain responsibilities? They have credits for road-building and other types of activities that go on. Do they have other responsibilities that go on in terms of replanting or restoration at the same time?

Mr. ROBERTSON. Well, we have a timber sale contract with very detailed provisions about erosion control and fires and all of that. But in the case of reforestation and timber stand improvement, as they pay for the timber we take a certain percent of that, which is determined before the sale is made, and put it into what we call the K–V fund, which then is used for timber stand improvement, reforestation, as well as watershed and fish and wildlife habitat work. So, in that case we take the money out of the receipts.

Now occasionally but not very often we will contract back or work out an arrangement where they will do some of this work.

Mr. VENTO. Much of this is dependent upon a reframing of all the plans and putting in all the new information that we need. I

commented earlier that the receipts are declining in the area. You are reducing your work force in the Pacific Northwest, is that correct, Chief?

Mr. ROBERTSON. Yes.

Mr. VENTO. And the planned reduction this year is about 900 full-time equivalents?

Mr. ROBERTSON. Well, that is over the last couple of years. We have proposed about a 900 to 1,000 reduction in our primarily timber-related work force and that will be completed by the end of this fiscal year.

Mr. VENTO. And are you exploring ways to add agency jobs in other resource management areas, such as wildlife or recreation?

Mr. ROBERTSON. Well, our budget is expanding in recreation and fish and wildlife, so we are doing a lot of retraining and as people related to timber sales, if they can fit into one of the expanding programs, we are doing that and then doing some retraining for the new job. But we are trying to place our people to the extent we can——

Mr. VENTO. So there is a shift in terms of personnel focus here. You are increasing the numbers in other areas as the timber specialists are retrained, and through attrition, mostly, you are trying to do it. Is that correct?

Mr. ROBERTSON. It is a combination of a transfer between programs and attrition. But you can't always take somebody from a timber program. For example, if you need a fisheries biologist, you can't very well take a forester from a timber sale program. So there is some limit on how transferable some people are from one job to the other. But to the extent we can make them qualified for the new job through training, or retraining, we are doing that.

Mr. VENTO. Are you actually asking for changes in the appropriations and requests of the Congress through the administration concerning these programs, these wildlife rehabilitation programs?

Mr. ROBERTSON. Yes. Our budget request that has come up the last couple of years or so have asked for increases in fish and wildlife and recreation.

Mr. VENTO. Mr. Penfold, the same for your budget on this?

Mr. PENFOLD. Yes, sir. Yes.

Mr. VENTO. Well, let me yield to my colleagues who have been patiently waiting here.

Mr. Smith.

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

Mr. Penfold, does the BLM have a tree-planting backlog?

Mr. PENFOLD. No, sir. We do not have a tree-planting backlog in western Oregon.

Mr. SMITH. Well, I must be confused here. It sounds like there is criticism that you are behind in reforestation. You are not behind in reforestation?

Mr. PENFOLD. No, sir.

Mr. SMITH. Is that what you are telling me? Why am I confused?

Mr. PENFOLD. Well, I think the problem is at the time the IG took a look at those programs back in 1989 we had just gotten done with a huge amount of forest fires out in that region. Timber companies were cutting out their sales at a very rapid rate. So it appeared to the IG that there was a very large volume of many, many

hundreds of acres that needed to be replanted. They saw that as a backlog. We saw it as a big workload. We have gotten on top of that workload. So that I think is the problem, Mr. Smith.

Mr. SMITH. So you have corrected that tree-planting backlog?

Mr. PENFOLD. Absolutely. We have gotten right on top of it.

Mr. SMITH. And do you think the IG has recognized that in their report?

Mr. PENFOLD. I think that the IG understands pretty well where we are right now in terms of their current comments that we just heard, and again we are happy to have them take another close look at it with the audit that is coming up.

Mr. SMITH. I might just note in passing, while access to BLM lands across private lands may have delayed some timber sales, with the run-up in the cost of lumber and timber that is the wisest thing that has happened to this country probably, as far as looking at the benefits to the Treasury.

By the way, on this question of timber-planting backlog, I thought there was a real attack by ABC News on Dean Bibles a week or so ago, and I thought he was condemned unfairly because I think this issue was part of the condemnation of Mr. Bibles. As I understand it, that initial IG report came out in 1989, or the one before this current one. Mr. Bibles didn't come on board until 1990. I understand that IG report had already been detailed and written. Is that correct?

Mr. PENFOLD. Mr. Smith, that is absolutely right, and as an aside on that, I think that criticism of Dean Bibles was totally unfair and inappropriate. Dean has provided excellent leadership. As these figures that I have just presented to this committee have pointed out, he has provided excellent leadership to get that work done.

Mr. SMITH. I understand the IG also was critical of the BLM losing money because of slow access acquisition. This item up here of $2 billion, is that possible?

Mr. SHEPARD. Mr. Smith, as I understand the $2 billion, that figure was based on a worst case scenario. That if we did not do the plantation maintenance, I believe it was 108,000 acres that the IG reported, and we lost all of the plantations and had to go in and site prep, perhaps, and replant, and the potential growth that we would lose over the rotation, the 80 years, would be about $2 billion worth of growth.

Of course, our top priority is tree planting and reforestation, so that would not occur. That was just a probability.

Mr. SMITH. All right. Chief Robertson, does the Forest Service have a tree planting backlog?

Mr. ROBERTSON. No, sir.

Mr. SMITH. Tell me again, review for me again the process or the procedure. I understand by law you have to replant and reseed within a period of time. How many trees do you replant versus one you cut?

Mr. ROBERTSON. Well, it is probably 30–40 trees that we plant per one tree cut because as you remove a big tree you replace it with a lot of small trees.

Mr. SMITH. I understand also that in some cases because of weather restraints and other problems those reforestation pro-

grams are failures. Do you revisit that area when you have a failure?

Mr. ROBERTSON. Yes. You know, planting trees is kind of like farming. There are just some bad years sometimes. You have some failures, just like you have crop failures. We have been running somewhere around 90 percent success, and there is about a 10 percent failure rate on the average per year, and we do an annual survivor survey and then go into that 10 percent or whatever it is and replant.

Mr. SMITH. Mr. Penfold, what are the practices of the BLM?

Mr. PENFOLD. They are the same, and Mr. Shepard tells me our success rate is about the same as well.

Mr. SMITH. Okay.

I was just in Oregon, as you know, Chief Robertson. You mentioned the east side problem. There are forests, you well know, on the east side, trying to harvest salvage, which has been an accelerated effort. It is my understanding that every salvage sale has been appealed—every salvage sale. How can we get through this jam-up if we are trying to protect forest health, take out the salvage in a proper time, never harvest near a stream bank, never go into a roadless area, and yet we can't seem to move the salvage that everybody agrees must be harvested? Is it stagnation of the law? Is it something that you can do administratively?

Mr. ROBERTSON. Well, some of both. The basis for the appeals is rooted in law, but there are two ways in which we can deal with those appeals: One, in emergency conditions we can exempt timber sales from appeals, and we have done that, I believe, in many of those cases; and, two, speed up the appeal process once we get an appeal.

We do have draft regulations now to implement the new appeal process that passed last year as part of our appropriation bill being reviewed now within the administration. So I am hopeful that we will get those new appeal regs out shortly for review and comment and then finalized some time soon, and that will accelerate the time it takes to deal with these appeals.

Mr. SMITH. Mr. Penfold, this is a hypothetical admittedly. I think that Judge Frye in Oregon really did not comprehend her decision with the implication of the elimination of salvage on BLM lands. Is there any effort by your Department to review and appear again before Judge Frye on this very issue of salvage with the thought that her ruling actually covered salvage when she may not have even considered it?

Mr. PENFOLD. The larger picture is that all of our programs in western Oregon are being reviewed right now after the draft of our plans are out. As part of the Forest Conference, that is going to generate additional activities.

What we would anticipate having is a very well coordinated program with the U.S. Forest Service to present to our various publics and the Congress.

Mr. SMITH. So you are not going to go piecemeal, you are telling us, just on the issue of salvage. I understand this. As I recall, 60 to 100 million board feet of dead timber in the southern part of the State of Oregon—that dying and dead timber—is infesting green standing beside it. It ought to be taken out quickly if we care any-

thing about forest health or the rest of the timber. If you want a good example, you well know, you just go to the east side where half the timber is dead, as Chief Robertson has already indicated, and more dying all the time.

So there is a good deal of salvage available, and there is a lot of disease—is that correct?—and we have got to take care of it.

Mr. SHEPARD. We have a real problem down there in our Medford District. Your number is correct. I think we have somewhere in excess of 100 million feet that has been killed or damaged by insects.

We did go back to the judge on a fire salvage situation, and she did release us, and we last week sold I think it was 8.75 million feet of salvage material. But as our plans are completed, and hopefully the conference is successful, we will be able to go back to the judge with something this summer.

Mr. SMITH. Thank you.

Mr. VENTO. Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman.

I have a more global concern, and then I will get to more specifics. And the chief is familiar with the question; I have put this question to him before in budget hearings—I have listened to this without any background or knowledge.

I think that we are doing everything you thought it was prudent to do or your agency was capable of doing in order to improve the productivity of these lands, given the problem, and we are not exactly certain on what portion of these lands we are going to be managing for commodity values versus other values.

In any case, it sounds like you are saying we have got all that we need, and I guess I would question that, and I just want to restate the question in the hope that, given a new administration, we don't have the same kind of bullet-heads down at OMB who are making you come up here and lie to us about your needs, which went on over the last decade.

So, do you have all the money you need in these accounts to do all the activities that you think are prudent to increase the productivity of these lands?

Mr. ROBERTSON. Congressman DeFazio, we——

Mr. DEFAZIO. And this is a question absent the restraints or constraints from OMB or other people putting pressure on your budgets. If you could propose a budget, would you propose what you are going to get?

Mr. ROBERTSON. On reforestation, we are okay, we have got sufficient funding. We do have a backlog of timber stand improvement work we could do, and there are about 429,000 acres of timber stand improvement work that we could do. We normally do about 140,000 acres a year. So that is over 3 years of work that we could do on timber stand improvement, primarily pre-commercial thinning.

Mr. DEFAZIO. Okay. And do you have a total cost on that?

Mr. ROBERTSON. If we did all of that, it would be about $68 million.

Mr. DEFAZIO. Sixty-eight million dollars. Okay.

Mr. ROBERTSON. Now the other thing is, again, pre-commercial thinning is a big part of that, and there is more coming on line

every year, but the sustainable level of timber stand improvement and pre-commercial thinning is somewhere in that 130,000/150,000 acres a year. So we need that 120 to 130 plus do something about the 429,000 acres.

Mr. DEFAZIO. Okay. And how about new activities? I notice there is a page in the BLM report where they depict pruning. Are you doing a significant amount of pruning in these reproduction stands? Is that included?

Mr. ROBERTSON. In fiscal year 1992 we pruned 4,400 acres in all of Region VI, and I suspect the bulk of that was on Ponderosa pine, but there would be some Doug fir as well, and there was some fertilization. We did about 33,000 acres of fertilization last year. But, again, that is something else we could do more of.

Mr. DEFAZIO. I would think that 4,400 acres doesn't sound like a lot of pruning.

Mr. ROBERTSON. No.

Mr. DEFAZIO. Is pruning a cost effective exercise, projected to be cost-effective over time? I notice private industry is doing it, and they are not usually involved in charitable enterprises.

Mr. ROBERTSON. It depends. It is marginal in places. You don't increase growth, but you increase the quality of the lumber. So you are looking for high-quality logs for plywood and lumber, then pruning—and you have to grow them for a long period of time to get your money back. In certain cases it is cost effective; in most cases, it is not.

Mr. DEFAZIO. I realize for an optimal sort of clear log you would grow it over a long period of time, but taking something that is at this point, say, 35 years of age in an area where you are going to go in and do substantial harvesting, whether it is at that point a heavy commercial thinning or selective harvest or light-touch forestry, whatever you want to call it, given the future characteristics of the stand, I would think that in 15 to 20 years you would accumulate some amount of clear on the outer part of that tree, not the whole tree, obviously, and not as much as something that has stood longer, but there would be a significant increase in value.

Let me just recount a story. When we took Secretary Babbitt to the Rosburg Forest Products Riddle, Mr. Ford, who owns the mill, made the point of saying that they had recently hired and added back a substantial number of employees on the clear veneer line because it was cheaper for them—they made money by adding back employees so they could get more discriminate sorts, so they could look for very small pieces of clear veneer.

So I would assume that the economics of this have changed. That is, yes, you could say, "Well, we are looking at a very long-term investment activity." On the other hand, I think that maybe in 15 to 20 years, given the extraordinary value of this veneer and given the fact that there isn't going to be much, if any, old-growth clear veneer available, that it would be a prudent sort of investment, and in fact, one whose economics have changed dramatically in the last year and will continue to change.

Mr. ROBERTSON. I agree with you, the economics are changing fast.

Mr. DEFAZIO. Okay.

Now the same question to BLM. You have already essentially, I think, in your presentation shown that there are some areas where you have got some carry-overs, particularly fertilization, pre-commercial thinning. But beyond that, we have had the concerns about the access and others. How much more money would it take to satisfy these other than, you know, annual recurring backlogs? How much would it take to get us basically up-to-date and only dealing then with future occurrences?

Mr. SHEPARD. The estimate we have right now is around $48 million and approximately 3 years to do it in. I would caveat that. That is with the uncertainty of not knowing what land is going to be available. It would just not pay to pre-commercially tend an area that is going to be managed on a 300-year rotation or not managed for timber at all.

As far as the easements go, I don't have a number on that. However, I would state that we have never been unable to offer our ASQ as a result of easements. We get the easements as we go, and that is why they are spread out over a large number of years. We would like to see more emphasis on easing that position, but it hasn't really stopped us from selling timber.

Mr. DEFAZIO. Since you depicted the pruning activities, how many acres of pruning did BLM engage in, do you know?

Mr. SHEPARD. We are just starting to get into pruning. We have done very little of that right now. It is something we are looking at as the economics change, as you mentioned. Right now, that is not a part of our timber management plans, but may be in the future.

Mr. DEFAZIO. Okay.

Just back to the chief for a second: I assume on your pre-commercial thinning backlog the same question prevails; that is, in terms of what percentage, some percentage, of those 400-some-odd——

Mr. ROBERTSON. Four hundred and twenty-nine thousand acres.

Mr. DEFAZIO. Right—would possibly not be in a future timber base?

Mr. ROBERTSON. No. Well, I should be careful about what is in our timber base and what isn't. It is what we anticipate that would be in our timber base.

Mr. DEFAZIO. Given the proposed recovery plan, or given your proposed plans, or what is the caveat?

Mr. ROBERTSON. Well, I would say there is an element of uncertainty about this, and I don't know to what degree.

Mr. VENTO. If the gentleman would yield, I would have the same question to the Chief that Mr. Penfold wasn't able to answer, and that is, what you are basically talking about is secondary growth areas, and I was just wondering what your universe is. You have 24 million acres, but you subtract from that wilderness, you subtract a lot of other areas, and then you subtract virgin areas, because you obviously aren't pre-thinning in those areas, I don't think.

I think it would be useful for us, especially retrospectively looking at what is the base number of acres we are talking about here in secondary growth as opposed to the whole 24 million acres, and excluding the virgin areas, if you would give us some idea of that,

Chief. So then we would know that 429,000 is an example; if you have 10 million acres, then we would know that it is about 5 percent.

Mr. DEFAZIO. And there is also the west side/east side. I mean you can answer the question pretty readily up front. If you use Wilderness Society numbers, of the acres in question in the Gang of Four report, which are west side USFS, you would have 3.8 million acres in old-growth and 10.2 million acres in other. Now that is rounded. But then if you include east side, I assume that some substantial amount of these acres are east side, and I don't know what the acreage numbers are.

But if the Chief could clarify those numbers, it would be useful for future discussion.

Mr. VENTO. It would be helpful to me to get that eventually, I think, as well as from Mr. Penfold—if you understand the question I have raised. I understand you didn't have it at your fingertips.

Mr. ROBERTSON. We would be happy to provide those figures. They are there; I just don't have them with me.

[The information follows:]

Information responding to the questions raised by Congressman Vento.

* The total number of acres available for TSI as reported by the Chief, as reported from the National needs are 429,214

These acres are all in second growth, which are all suitable acres. There are no old growth acres in the TSI need category.

The breakdown of available acres in and out of HCA's is as follows.

FY93

KV

HCA	OTHER	Total
5148	53241	58389

APPROP

HCA	OTHER	Total	
29829	70080	9909	
34977	123321	158298	FY93 Grand Total

FY94

KV

HCA	OTHER	Total
8860	50306	59166

APPROP

HCA	OTHER	Total	
25158	84767	109925	
34018	135073	169091	FY94 Grand Total

FY95

KV

HCA	OTHER	Total
5637	53148	58785

APPROP

HCA	OTHER	Total	
12653	30387	43040	
18290	83535	101825	FY95 Grand Total

GRAND TOTAL (93-95)

HCA	OTHER	TOTAL
87285	1341929	429214

158298 FY93
169091 FY94
101825 FY95
429214 ACRES

*****ASSUMPTIONS*****

TSI treatments may NOT occur in an EARLIER Fiscal year than listed because of resource management requirements and project scheduling. eg. FY94 events may NOT occur in FY93. This may not be as critical with the FY94 & FY95 acres.

FY93 has ALREADY been funded for 108688 acres, leaving a total of 49610 acres available for funding in the Appropriated category.

Mr. VENTO. Mr. DeFazio, I cut off your questioning.

Mr. DEFAZIO. No, no; that is fine.

Mr. VENTO. Okay. Mr. LaRocco.

Mr. LAROCCO. Thank you, Mr. Chairman.

One thing I would like to do is put in a plug for my legislation on forest health. We have the Forest Service and the BLM here. One of the components of my bill says that the Secretaries of Agriculture and Interior can declare a forest health emergency and go right into areas where we know that there is a problem, and one of the things that is impressive about your testimony here, Chief, is that in all of your concerns about forest health you don't just say this is one prescription, it is salvage sale, we have gone beyond that, and I think that is important.

I have a couple of specific questions I want to ask. One of the discussions we had here with my colleague from Oregon was on the appeals process for salvage sales. You did not discuss how it is working with the Executive Order of the President, where we raised, I believe, the regional forester's ability to have a salvage sale from 100,000 to 1,000,000 board feet. Is that not true? And how is that working? Are you putting more salvage sale up under that Executive Order, and is that still in effect?

Mr. ROBERTSON. Yes. We have delegated to the regional forester to make that decision, and he or she has the authority to either exempt the timber sale or not under a salvage operation, and most of the regional foresters are using that.

Mr. LAROCCO. They are using that authority?

Mr. ROBERTSON. Yes, sir, especially where time is of essence. I mean if there is time then they are not exempting, but if time is of essence they are using it.

Mr. LAROCCO. One of the things that I need clarification on is ecosystem management. We all talk about ecosystem management. We talk about biodiversity, and you actually say in your testimony here that the Pacific Northwest Region is implementing ecosystem management to ensure it. Is this a policy now from the Forest Service that has come down to the field? Is it implemented? Is it in black and white? Is it in writing? Or is it an experimentation?

Anecdotally, I had somebody in my office yesterday who said, "I hope you are putting in the requirement that the Forest Service implement ecosystem management in the forest," and I said, "I would if I knew what it was," because I still think that we are in the developmental stage here, but now I see it is on the ground.

Help me out on how this goes from what you are saying here to the forest plans, say, in the Nez Perce, Clearwater, Boise, Payette, or wherever.

Mr. ROBERTSON. Okay. First, yes, it is policy. We will follow an ecological approach to the multiple-use management of a national forest, and it is an important, I say, ecosystems approach to the multiple-use management. Ecosystems is a means to our end, which is multiple use management.

What that means is, we are going to manage the forest—"sustainability" is a key word here—sustainability of all uses and values of the forest, and we will manage these forests for healthy, productive, biologically diverse ecosystems over time.

Now that may seem abstract, but what it means is, we are going to get out of the plantation forestry business. We are going to be managing the forest, that part we are managing, and try to maintain very much of the diversity that exists in a natural forest—you know, some big trees, a diverse canopy, and the kind of diversity that you would find in a natural forest.

When you move beyond what that means in this watershed or this location—and, I might add, we have a lot of demonstration projects, and we are beginning to try to fold in ecosystem thinking in everything we do out there, but we do have some very good demonstration projects. There is no answer, it is not a blueprint, and it is not black and white.

What we try to do at this level is state the policy, state the philosophy, and how we are going to manage with a sensitivity to ecosystem values, but when it gets down to the end, putting it on the ground, we have to depend on our interdisciplinary folks—you know, the fisheries biologists, the wildlife biologists, the soil scientists, the foresters, the landscape architects—working together, saying this is what ecosystems management means when it gets down to this watershed level.

That is the other part about ecosystem management. You just don't go in and look at the road or the timber sale, you look at how that road or timber sale, or whatever the activity is, fits into the bigger mosaic and pattern, because in the end we are trying to maintain a diverse, healthy, productive ecosystem over an area. You can't have everything on every acre, and so the bigger picture is very important.

That is changing the way we have historically viewed the forest to a great degree, and it does mean something, because it means our people on the ground making decisions, they are making some different kinds of decisions so that this forest will look different than it has in the past. You will not see these big, square clearcuts or plantation forestry.

Mr. LAROCCO. Some of that is reflected in your testimony, and I think it is good news. Quite frankly, in the drafting of the wilderness bill that I am going to introduce tomorrow we try not to be as prescriptive as prior wilderness bills in Idaho that failed, by the way, because they were overly prescriptive, and I think you should be given the chance to develop these new techniques and implement them on the ground.

In your testimony here when you talk about protecting wetlands, restoring riparian zones, improving watershed conditions, restoring fisheries, all of this stuff is done with the idea of forest health in mind without simply saying we have got a dead stand of timber out there and let's go out, and it is a salvage sale opportunity.

I want to ask you a question on policy. I am not going to try and set you up here; I will lay my cards on the table. Today there is a headline in the *Idaho Daily Statesman* that says that the Boise Forest supervisor wants to have a salvage sale in an area that is proposed for wilderness under the forest plan in the Needles area, and quite frankly, I am a little chagrined about this because I have announced to anybody that cared—and I assume supervisors care—that I am going to introduce a bill by the end of March. This is

under the proposed wilderness areas in the plan, and he is proposing a salvage sale in that area.

There is plenty of salvage on the Boise National Forest, and I don't get it. I don't understand what the policy is and why we are making a big deal about this right now. I don't understand the timing of it, quite frankly, Chief; I don't understand the policy; and I think I should be given the opportunity to say where I think those wilderness boundaries go because we have had enough delay, uncertainty, instability in my region as it is.

So I don't know what your policy is. That doesn't sound like ecosystem management, that sounds like it is playing to certain interests that say, "Hey, let's get it out of there. I know what forest health is, and that is taking that stand out." So what is the policy?

Mr. ROBERTSON. Our policy, Congressman, is to be very sensitive to where the Congress is in terms of proposed wilderness areas.

Mr. LAROCCO. Yet this is under your plan. This is under the Forest Service plan. I haven't released mine.

Mr. ROBERTSON. Now, first of all, I don't know the background.

Mr. LAROCCO. I know, and I had that disclaimer. I just want to know what the policy is.

Mr. ROBERTSON. But this would be a case where we are proposing a salvage sale in an area that the forest plan proposes wilderness?

Mr. LAROCCO. Yes, sir.

Mr. ROBERTSON. Well, that just shouldn't happen unless we go through a long drawn out process.

Mr. LAROCCO. Here is the headline, Chief, right here: "Boise Forest Urges Logging Of Trees Before They Die," and, "Officials say the trees in the Needless roadless are are too dense."

Mr. ROBERTSON. We do harvest in roadless areas, especially if the forest plan permits that. But if the forest plan proposes wilderness for that roadless area, that is a different story. We should not be doing that.

Mr. VENTO. In fact, if the gentleman would yield to me——

Mr. LAROCCO. I would be happy to.

Mr. VENTO. The practice had been, when there was legislation pending and it was actively being considered—of course, Idaho, I guess, would probably get a little frustrated here with the plan having been on hold for a while—but when legislation is proposed, there is generally a willingness to follow out the provisions of that until such time as there is a decision on it, especially in areas like Montana where you really test the patience of the Forest Service to follow that. We are very appreciative of that. We would hope that the BLM would follow a similar practice so that it at least gives us an opportunity to continue working on these particular matters. I think you can see the problem right here that we face.

Mr. ROBERTSON. If I could just follow up, Congressman LaRocco, it sounds like we have got a problem, and you and I or Forest Supervisor Steve Mealy needs to talk about that.

Mr. LAROCCO. Well, I am going to introduce my proposal in about an hour, and we won't have a problem after that, I'll tell you; it will be very clear what we are going to do.

We are going to move this process along, I hope, with the cooperation of my chairman. Idahoans have worked together. I have

had many town meetings out there. We are building upon all of the efforts that have led us to this point. You know, people are demanding that government act, and I think you are doing a good job. I like your testimony here, and I think you are moving along, and I think you are meeting the expectations of the American people. We have got a lot of work to do, as you know. I have got communities in crisis because of this backlog, and I'm trying to deal with that, and I'm willing to take the heat on it. I just woke up to this this morning, and I thought, "My goodness, what unbelievable timing."

But I think my time has expired. I want to invite both the BLM and the Forest Service to work with me further on the development of H.R. 229. We are not there yet, but things are changing rapidly, and I certainly invite you to do that, Chief, and Mr. Penfold and the BLM.

Mr. VENTO. I just want to ask a few more questions myself. I was brief in my questions, but if others have a question, just let me know as we are in the process here.

Chief, your statement on movement from a plantation-like treatment is music to my ears and I think really serves as a signal to a changed attitude with regard to implementation of something called new forestry, which I know came out last year, and it is very encouraging to recognize that.

Of course, given this particular posture—and hopefully Congress will be supportive of it—I think we have a potential to avoid a lot of the problems and put the Forest Service and the BLM back in charge of managing the forests. Obviously, all of us want to try to define and refine what ecosystem management is, which is difficult to do, but I certainly support that particular thrust myself, and I think the majority does in the House and Senate.

Today, as I said, I need the base numbers. We need that in terms of focusing. You pointed out, Chief, that you have 429,000 acres that could use pre-commercial thinning, and other types of work would even be expanded over that in terms of watershed restoration and so forth, would they not?

Mr. ROBERTSON. Yes, they would.

Mr. VENTO. I have got some numbers here in terms opportunities, but could you give us numbers in terms of acreage with regard to some of those activities as well at some point, if not today?

Mr. ROBERTSON. Yes, we would be happy to do that.

[The information follows:]

Pacific Northwest Region Resource Needs

Timber stand improvement - precommercial thinning	429,000 acres
Wildlife and fish habitat maintenance	132,000 acres
Wildlife and fish habitat improvements	21,900 structures
Watershed restoration	3,100 acres
Trail maintenance	8,100 miles
Recreation and trail construction	10,300 miles

Mr. VENTO. We need to have a base that we are operating from, if areas still remain uncut, virgin areas, old-growth areas, or otherwise. You don't anticipate sending crews in to work in natural areas that have been untouched do you? Chief, do you have work going on in those areas?

Mr. ROBERTSON. Well, we don't have a lot of work going on in those areas now.

Mr. VENTO. No, I know, but what is the design?

Mr. ROBERTSON. I think Congressman DeFazio talked about this earlier. We have got to decide what the land base is that we can use for management, and once we determine that land base, which is very much up in the air right now, then we will decide how to manage that.

So right now we have an injunction that we are staying out of all spotted owl habitat, and most of the natural areas that you described are spotted owl habitat.

Mr. VENTO. Yes.

Are there constraints built into the budget process that prevent forest supervisors and BLM district managers from asking for funds that they need for forest rehabilitation projects, Chief?

Mr. ROBERTSON. Well, yes and no. I would say yes, there are constraints, with a safety valve. But normally how we handle our budget process is, we ask our forest supervisors, regional foresters, to give us alternative budgets. One is a no change budget from last year; another one, plus 10 percent; and a minus 10 percent; so that we have got a range. So we do try to keep them confined to a realistic budget. But then the safety valve—if they have got something out there they just need to do, they can't fit it into the regular budget, they can send those projects into us.

Mr. VENTO. Isn't this the case where there are dramatic changes in terms of use where we are going to need to liberalize that process? It assumes that the base numbers are accurate in terms of what goes on for watershed or precommercial thinning.

You said these aren't plantations with monocultures of Doug firs and so forth, at least that if the ecosystem type of management approach. It isn't so much what we plant, I might say, that wasn't the criticism of the IG which I think came up here. It wasn't the issue of tree planting or reforestation. That is hardly reforestation in the ultimate sense. The criticism was that you didn't maintain what you have. It wasn't a matter of a die-back or bad year or something, it was a matter of not going forward and maintaining what you have. I think both of you need to address that.

But let me first get to Mr. Penfold with regard to budget questions, and I will come back to that.

Mr. PENFOLD. Our process is very, very similar to what the chief just described, Mr. Chairman.

Mr. VENTO. Okay.

Mr. PENFOLD. I also agree with your point. As we see these new forest plans, we are going to have to take a fundamentally new, basic look at the mix of funds that we want to have to drive those activities.

Mr. VENTO. It sounds like you got a little liberalization when the IG report came out, but because you are responding to O&C lands and there is a concentrated effort and legislative initiative in that

area, I think you are a little bit of a beneficiary generally there as opposed to maybe what the other BLM lands might be able to receive.

Mr. PENFOLD. I think that is a fair statement.

Mr. VENTO. Let me go back, Mr. Penfold, to this question of maintenance. Reforestation involves not just the planting of young trees, but maintaining them in place. I note that both of you have commented about fire and about drought and about other things but that the die-back rate is about 10 percent.

While some of these factors can be important, they are all to be expected, I guess, in the normal weather patterns of the Pacific Northwest. We have got another drought, far north now, and the one in California looks a little better, but you have still got problems in Region VI and in the districts we are talking about here.

What about the overall maintenance program? Wouldn't you agree that that is really more important than the planting aspects of this, Mr. Penfold?

Mr. PENFOLD. Maintenance is extremely important. Going back with our field people to look at those plantations to see if they have survived, see if they are not being covered up by other vegetation and need to be released—maintenance is extremely important.

Mr. VENTO. And that is the criticism. The IG's report really didn't talk about the tree plantation effort at all. In fact, she made a disclaimer today; Ms. Fleischman did.

Mr. PENFOLD. Let me emphasize, the priority for our funds is getting the trees planted and making sure that the important elements for keeping those trees alive are taken care of. So that is where our priorities have been. We have not put as much emphasis on some of the fertilization and the pre-commercial thinning.

Mr. VENTO. Chief Robertson?

Mr. ROBERTSON. Yes, the same with us. Reforestation is the number one priority, and then, to the extent that we have funds left over in our budget, we do these sorts of things like pre-commercial thinning to increase growth.

I might add, Mr. Chairman, back on a previous question, what we give our forest supervisors in the budget process is a lump sum, and they have the flexibility now to shift the lump sum dollars to reflect their priorities, and I know our present budget system permits supervisors now to shift money from timber sales or whatever over to other programs, and they come in with their priorities to me.

Mr. VENTO. So they have money for preparation of sales, and if you get injunctions they can take the money out and put it into reforestation activities, commercial thinning, and other activities insofar as it will go.

Mr. ROBERTSON. Yes. But they always get to the bottom line before they get through with the work they want to do. I mean that is just the nature of the system.

Mr. VENTO. Their money comes out of the K–V funds, but it has to be appropriated out again; is that correct? Is there any direct money that comes back to you? BLM gets the 25 percent receipts; it comes back in, and they get it from the counties. You don't have that same sort of set-up, do you, Mr. Robertson?

Mr. ROBERTSON. Well, the K–V is that way. We do include it in our budget to give a full description in our budget, but it comes back direct and does not need to be appropriated.

Mr. VENTO. What is the health of that K–V fund now with the curtailment of harvest in this area? Region VI is a major contributor to the funds, so it is losing some of its size. Is that correct?

Mr. ROBERTSON. That is correct. It is going down significantly in Region VI, and it will continue to go down.

Mr. VENTO. It isn't due to the budgetary borrowing for fire funds at this particular time. In recent years, whatever else we did, I think we finally got the fire budget straightened out. Is that correct?

Mr. ROBERTSON. You had it straightened out, but we still have to deal with last year.

Mr. VENTO. Well, that is a typical problem.

Mr. ROBERTSON. So we still have about a $294 million debt to pay off.

Mr. VENTO. How about BLM? How is our fire fund there? We are not borrowing from land and water any more.

Mr. PENFOLD. Well, we don't have a K–V fund.

Mr. VENTO. No, I know that. So you borrow from land and water and from other accounts. We tried to straighten that out. What is the status of the fire fund over there? Do you know, or not?

Mr. PENFOLD. I don't. I guess I can't answer the question. Fundamentally, though, we are not using the fire fund to plant trees. We do some emergency rehabilitation work, such as emergency water drainage and erosion control, but tree planting is done through other funds.

Mr. VENTO. Well, I could ask a few more questions, but we have got other witnesses. This is an interesting dialogue, Mr. Penfold. Chief Robertson has talked about the ecological management approach that is being articulated in the Forest Service and recognizes this. How would you respond to that?

Mr. PENFOLD. I appreciate a chance to respond to that question, Mr. Chairman. We have been in good coordination with the Forest Service on ecosystem management. We are taking a slightly different tack on how to get it implemented into our agencies, but the concepts are the same. We are making good progress.

Last year, after a lot of consultation with our various publics, we published a document called "Our Growing Legacy." It was a more narrowly focused document on forests, but it recognized that we needed to take ecological approaches to determining what kinds of products should be coming off of those forests that the BLM manages. That is going to be expanded over this next year with our new director in a policy statement such as the chief has already signed for the U.S. Forest Service. So we think we are moving quite aggressively in this.

Obviously, there is a lot that we all have to learn about how to go about doing this. We see it very much as a mix of taking care of the ecological resources on the public lands, being concerned with working with the different partners who manage lands in the landscape such as the Forest Service and the private sector we need to coordinate with, thinking a lot about the social economic

effect of those total decisions. We think that is all part of ecosystem management.

Mr. VENTO. Yes. I think your challenge, especially with the land ownership pattern in the O&C lands, represents an extraordinary challenge to try to work with the State and/or other private owners of those lands.

One of our goals has always been to try to study that process to see if we could come up with some degree of consolidation, but that is a really difficult challenge. I am reminded of the fact that even in the Gallatin where we had these outstanding natural lands last week, it has taken since 1925 to come up with a consolidation of about 80,000 acres out there in Montana. So these ideas sound good and practical when we are sitting here in the rarified air of the committee room, but out in the field, on the ground, they are tough to accomplish.

I want to thank Joyce Fleischman for her work, and we hope we can welcome you back, Joyce, when you conclude the latest review of the Department of the Interior's activities in the O&C lands in Oregon. We will get a more current report on where the policy path has led with regard to these programs. Ultimately, we won't be looking back, or retrospectively, at what is going on but prospectively of what can be done in these areas, which of course is being kicked off this week again, with the optimism and hope that there will be ultimately a solution to this issue.

The gentleman from Oregon, Mr. DeFazio, do you have any further questions?

Mr. DEFAZIO. No, thank you, Mr. Chairman.

Mr. VENTO. Thank you all very much.

We are pleased to welcome a panel of distinguished witnesses.

[Pause.]

Mr. VENTO. Let me just call up the panel. We may be interrupted by votes, but I think we can probably get one or two of the testimonies done before we have to go.

I am pleased to welcome Neil Sampson, the executive vice president of the American Forests; Dr. Gregory Aplet, the senior ecologist of the Wilderness Society; Mr. Jack Desmond, the director of the Northwest Reforestation Contractors Association of Eugene; and, finally, Frank Gladics, vice president of the Western Forest Industries Association.

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

Mr. VENTO. We will have to leave in about ten minutes to make our vote, but I thought we could perhaps at least hear from one or maybe more of you at this time.

Mr. Sampson, why don't you proceed with your testimony and summarize or read the relevant portions of it.

PANEL CONSISTING OF R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT, AMERICAN FORESTS, WASHINGTON, DC; GREGORY H. APLET, FOREST ECOLOGIST, THE WILDERNESS SOCIETY, WASHINGTON, DC; MARTIN JACK DESMOND, DIRECTOR, NORTHWEST REFORESTATION CONTRACTORS ASSOCIATION, EUGENE, OR; AND FRANK GLADICS, VICE PRESIDENT, WESTERN FOREST INDUSTRIES ASSOCIATION, PORTLAND, OR

STATEMENT OF R. NEIL SAMPSON

Mr. SAMPSON. Thank you very much, Mr. Chairman. I would like to summarize and perhaps add a couple of points that aren't even in the formal testimony.

I tried to outline some of the challenges that we are facing, and it seems to me that you have covered them quite well this morning. As we know now, change is inevitable in those forests. You have either got to manage for what you want or get what you get, and sometimes what you get isn't what you want, so we have got some really significant challenges out there.

I think there is an important point that you have brought up several times this morning, and this is that forestry is not agriculture. We are glad to hear the chief say that they are recognizing that, getting away from some of the plantation approaches on some of those lands that are pretty difficult. What you get when you try to reforest a place is liable to be affected more by what happens right around those years when you are trying to do it. We have got several million acres out there where reforestation failures have occurred simply because of the climate conditions, the weather conditions of that year, or some aggressive competition or some other things, and you have to recognize that those are going to continue.

Our testimony today indicates that the work I have been doing with the global change issue suggests that our problems will get worse, not better. The variability that we are seeing in climate and the trend toward drier, more difficult climate situations, while it can't be predicted with any accuracy, is at least of a high enough risk that it seems to me that we ought to look at our immediate past this last couple of decades where, in the mountain region, we have had about 15 years of hotter, drier than average conditions. We maybe ought to look at that as the new norm and not as something that is outside of the norm, and that means really considerably more of a challenge.

We poked a little bit into the notion of ecosystem restoration. One of the problems is that you had to put what can succeed there now. Some of the soils and sites are so degraded and so changed either by timber harvest or by some of the subsequent things that happen that you simply can't go back to what was and you have to go to what will work.

I listed a few examples of our Heritage Forest Program, and I want to mention a couple or three things in connection with that. We are raising funds in the private sector and putting projects together in cooperation with public agencies, and we are doing them for ecosystem restoration, not reforestation, and I think that is a big difference that you need to sort of poke on a little bit when you go for the additional data from the agencies.

We are not looking at what you do after a timber harvest, we are looking at what you do with lands that have failed in the past: What do you do with those orphan spots out there, the really tough spots? They may have degraded significantly in the process. And the answer is that you have to do some things that are pretty creative and sometimes pretty expensive, and sometimes you fail, and you have got to be prepared to go back and do it again because it is going to take some investment and some persistence.

In Mr. LaRocco's district in northern Idaho, we have had two marvelous projects to try to reforest Farragut State Park, and that is a rock pile, if you have ever walked out there, and it is a rock pile that was tramped on by several hundred thousand scout feet over about 50 years, and it got to be in pretty tough shape. We lost a pretty significant amount of that planting last summer. It was hot, and it was dry, and we are just going to have to go in and do it again. That is about the size of that. There are a lot of places out there like that.

I think as you look at the reforestation and restoration and rehabilitation and reinvestment challenge, you have got to realize that you get past the easy ones pretty fast and you get into the stuff that is going to take some additional attention and work and time. But the opportunities are out there.

One of the things that I wish you would ask the Chief and the BLM is to tell you the difference between a reforestation backlog and a tree-planting opportunity because they are different. A reforestation backlog is always aimed at the timber base, and it is always aimed at the land that has been harvested timber. It says very little about some of those areas that have fallen out of the timber base in the past, been defined out of it simply because they failed at reforestation.

There are about 218 million acres of forest that we classify as noncommercial timber land. Some of it is rock ridges that won't grow anything, but a lot of it is land that absolutely can be reforested. It is not now in the timber base, and therefore no data is collected on it by the Forest Service, and you need to understand that when they give you data they are ignoring that entire land base that is outside the timber base.

So poke at that a little bit when you are asking questions. If you ask a different question, you will get a different answer.

Mr. DEFAZIO. Could I ask for a quick clarification here, Mr. Chairman?

Mr. VENTO. Yes.

Mr. DEFAZIO. Are you familiar with the reforestation backlog that disappeared back now?

Mr. SAMPSON. Yes.

Mr. DEFAZIO. Those are the kinds of lands you are talking about, correct?

Mr. SAMPSON. That is the kind of land.

Mr. DEFAZIO. Okay.

Mr. SAMPSON. My organization, well before I was there, held a conference in which the industry, the State foresters, the State agencies, and the Federal agencies all committed to reduce a huge backlog. Industry did it with tree planting, the State agencies did it with nurseries and tree planting, and the Federal agencies did

it by redefining those lands out of the timber base. Therefore, the backlog disappeared.

Mr. VENTO. Well, as you noted, I was trying to get more definition on that.

Mr. DEFAZIO. And what has happened to those lands since, to the best of your knowledge?

Mr. SAMPSON. To the best of my knowledge, they are still just sort of sitting there, and what is distressing to us is that the data collection on them stopped happening, so that today, if you ask what of that land base is physically incapable, biologically incapable, of being reforested versus the stuff that is just plain nasty and tough or it has just grown up to a brush field and nobody wants to address it, the answer is, the data isn't there.

You can go to any ranger district you want to and ask if they have got some, and the answer is yes; ask where it is at, and they will show you; ask them if they would like to do something about it, and the answer is yes. That is why our Heritage Forest Program works as well as it does. I really ought to single out BLM, who has probably been more aggressive than Forest Service in looking for these kinds of opportunities.

At any rate, there is a difference between a reforestation backlog and a reinvestment opportunity, and you really need to poke at it to get at it because you won't get it out of the national data, in my judgment.

I am going to stop with that. You know, the jobs abound out there, let's face it, and they are not just tree planting because, quite frankly, that isn't where all the new jobs are going to be created in the longer term. The thinning, the pruning, the fuel reduction, the prescribed burning that are needed to get those forests back in condition, that is more fire tolerant so that we have less disaster—wildfires.

You poked at the pruning idea a little bit. Well, there is more than quality timber involved in pruning. Where those forests are abounding with those ladder limbs, dead ladder limbs, that give you high opportunity for crown fires, pruning can be a huge help in reducing that risk and in fire hardening those stands so that a ground fire is more likely and more tolerable.

So those areas exist. It is particularly important that they work around the areas where they are already roaded, where the houses are, and where the risks are high.

The money that we are investing in this ought to both be accounted for in terms of its investment as a future resource opportunity, but it ought to be accounted for as a fire risk reduction too. We just open the money pump and pour it all over those wildfires that start out there, and, quite frankly, a lot of that stuff can be prevented if we do the investment in forest improvement that is out there right now.

With that, Mr. Chairman, I would stop and, obviously, would be happy to answer questions.

[Prepared statement of Mr. Sampson follows:]

STATEMENT OF R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT

Mr. CHAIRMAN, Members of the Subcommittee:

I am Neil Sampson, Executive Vice President of American Forests. Our Association has been concerned with the management and future of America's forest since

1875. The topic of this hearing is reforestation, and the evidence suggests that we have been less successful on our public forests than we expect. We at American Forests have not conducted a field survey of reforestation to bring before you today. Instead, what we would like to do is outline the situation that is facing the forests, not just of the United States, but of the world, because we believe this situation is most relevant to the topic before you.

The thrust of our message is that there are excellent reasons why reforestation has not always been as successful as foresters would hope. Part of it has to do with the way in which forests are harvested, and the environmental events surrounding and following that harvest. In too many places, the site has been so altered by the harvest that the subsequent conditions prevented seedling survival. We believe that many of those situations can, in the future, be avoided through changes in harvesting and reforestation methods; most of which are being implemented (or, at least, tested) on the federal forests today.

This is no panacea, however. We are further convinced that the reality of how forest ecosystems work, and the increased risk being created by global environmental and climate changes, could easily make restoration of health forest ecosystems more difficult in the future than what has been experienced in the past.

And changing harvest methods in the future won't do anything for the forest where reforestation has failed. There are millions of acres in that condition, and they need our help. That help, some of which is gong to be fairly expensive, should not be limited to those places where it can be justified on timber economics alone. We need to re-invest in our public forest for a variety of reasons, both economic and environmental, and restoring forest ecosystems is one of the ways needed.

We believe the American public supports such re-investment. As a matter of fact, we have been very successful in the past three years in raising private dollars to support forest ecosystem restoration projects. Our program is called Heritage Forests, and we believe it is demonstrating some very positive ways in which damaged forests can be brought back to ecosystem health.

NEW ECOLOGY

Ecologists are telling us some very important things about forest ecosystems these days, some very different from what we were told in the past. We call it "new ecology," although it was being posed by leading ecologists many years ago. Today, the messages are coming through in a much more direct manner, and they bear importantly on the challenges of managing and restoring forest. Some of the relevant messages follow.

There is no such thing as "natural balance," a "balance of nature," or a "natural steady-state system." Ecosystems, whether affected by people or not, constantly change, and have always done so. Many of those changes are highly important in terms of the ability of forests to produce goods and services that people depend on. Sometimes, changes can be highly destructive, in terms of how humans measure forest values.

A lot of ecosystem changes are caused by natural conditions that proceed at a slow and gradual pace. Climate change, species evolution and migration, and soil formation are examples. Others occur in an instant. Disastrous wildfires, major storms, and volcanoes do their thing, and continue to do so.

Forests don't always respond to gradual changes in gradual ways. A forest may tolerate a gradual shift in climatic conditions, or a change in nutrient input, with no perceptible impact on trees or other major species for many years. If there is a change, it is lost in the "noise" created by the fact that trees live and die, animal populations cycle up and down, and the weather varies from year to year. Significant change may be hidden for many years within the "normal" variation in the system.

But the forest may also pass through a "threshold" where many or all of the trees suddenly die. Again, cause and effect may be hard to identify. Drought, insects, disease—any or all may be present. But the real cause? That's sometimes hard to tell. And it may be due to long-term, gradual shifts that we're still unable to clearly identify.

Thus, recent changes in nutrient input, acidity, and atmospheric deposition could not be shown to kill trees, and a multi-million-dollar study on acid rain concluded that, so far as science could demonstrate, acid rain was causing no serious widespread harm to forests. But the changes are there, altering important ecosystem processes, and they will continue to manifest themselves as the system responds to the altered state.

When the trees suddenly die in a forest, whether from natural disaster or a timber harvest, there's no guarantee that the same species or species mix will return,

or that the same forest ecosystem will emerge. That may be more related to the conditions under which the trees died, and the environmental conditions for a decade or two following, than it is to the "site" involved. This is consistent with the "chaos" theory, which holds that many events and trends in nature are shaped by the events and trends that happen to be occurring around them at critical times. Tree seedlings trying to grow during a long drought will probably fail; the fact that they happened to sprout during a dry period instead of a wet period is a random event, but a critical one that may determine the forest's fate for centuries.

When a new forest is becoming established, small changes in environmental conditions tend to be magnified. It's like starting across the ocean on a slightly wrong bearing; by the time you reach the other shore, you'll be a long ways from your intended destination. Likewise, a new forest that starts up with a different nutrient cycle or micro-climate regime may be vastly different than the forest that preceded it.

A new forest that suffers repeated re-burns during the seedling establishment years, or that hosts an unusually high population of grazing animals, may turn into grassland or a brush field, and trees may not return for decades, or centuries. If the soil conditions and climate change enough, that ecosystem shift could go so far as desertification and be, so far as we know, permanent. Some of today's deserts were once thriving forests, but they won't be again without major climate change or human intervention.

Most of the species that live within an ecosystem live out of sight, and many of the critical processes that drive the system are also invisible. Our observations and, for the most part, our scientific inquiry, have focused on the parts and processes we can see. So we know a lot about trees and how they grow, about large wildlife, and about how watersheds react. We don't know nearly as much about the little brushy species, or soil organisms, or how carbon and nutrients cycle through the species and the system. But some of those "minor" species, and the processes in which they play a vital role, may be a critical key in keeping the whole system healthy.

GLOBAL CHANGE

The industrial age has resulted in a rapid and continuing buildup of atmospheric gases such as carbon dioxide, methane, and chlorofluorocarbons. Those gases work in the atmosphere to trap heat in a somewhat similar manner to the glass on a greenhouse, thus the concern over "greenhouse gases" and the "greenhouse effect." Industrial processes also emit oxides of nitrogen and sulfur into the atmosphere that have changed atmospheric chemistry and altered the nutrient input into natural and managed ecosystems. Some of these compounds may also have a climate impact; probably a net cooling that may have helped offset the effect of rising greenhouse gas levels.

Science has a hard time with these issues, because what's happening is different than anything that happened in the past, and it is happening on a global scale, so there's no way to carve off a little piece, move it into the laboratory, and test it for certainty. We can't replicate events to prove cause and effect, so the debate rests on theories and models which, while absorbing the world's most sophisticated computers, are still, in the words of their operators, "very crude approximations" of what really goes on in the world.

In spite of all that uncertainty, the likelihood of significant climate change is too high to ignore, primarily because the potential effects on human societies could be so enormously disruptive. When the stakes are high enough, even a small probability of occurance is enough to send us scrambling for our insurance company.

"Global warming," as it is often discussed, is not the most serious threat. An average rise of 1–3° C by 2050, which most scientists feel is likely, would mask significant regional changes, most of which cannot be predicted with current models. And it will proceed, if those predictions are correct, at a speed with which natural processes may not be able to cope.

Regional effects that reduce precipitation and increase summer temperatures will be the most important to agricultural and forest production. Those are felt to be most likely in mid-continental regions at mid- to upper latitudes, such as the United States, Canada, and Russia. Some changes, such as a warming expressed primarily as an increase in winter minimum temperatures, might be of little impact.

Natural forests may have a hard time adjusting to the rate of climate change, which many feel will be 3 to 10 times faster than the fastest recorded species migration rates. Another aspect of changing and unstable climate conditions will almost certainly be an increased occurance of major hurricanes and wind storms, which can increase the area of forest destroyed each year by natural events.

The forest ecosystem where trees are removed or destroyed under rapid climate change may, in fact, not return. If the conditions for seedling survival and success are not available in the decades after the trees die, some other kind of system will emerge. That system may or may not be what people need or want. Forest managers need to be ready to do what it takes to restore desirable ecosystems, over larger areas, with more difficulty, and higher costs. That will mean a significant increase in public understanding and support, led by policymakers in Congress and the Administration who understand the difficulty, and are willing to take leadership in acquiring the necessary priority and funding to do the job.

ECOSYSTEM RESTORATION

The challenge posed by climate change and environmental stress, seen in the light of the "new ecology" ideas, may force us to look harder at what the task to which we have set ourselves when we begin to try to restore forest ecosystems.

In the past, we would have looked at the history of the site, and tried to mimic the forest system that was historically successful. Or, we might substitute a system that had been proven to succeed. In many places, that still works. Douglas-fir is planted on sites that supported a hemlock-fir mixture in the Pacific Northwest, and Loblolly pine replaces Longleaf pine in Southern forests. In many cases, those are good sites with excellent growth conditions, and perhaps the best successes enjoyed favorable weather for a few years.

But the reforestation failures on many forests tell us that this can't always be counted upon. And, in some places, the situation has changed so dramatically that we simply can't expect an easy return to a healthy forest. Where topsoil has been lost, or the lack of forest cover has changed micro-climates into harsh, dry, overheated situations, an entirely different set of challenges may be involved, and different approaches demanded.

In those situations, ecosystem restoration may demand that we become more adept at determining what can succeed on a given site, in light of the current and future conditions likely to be critical. It may be, in many instances, that the plans needed to "colonize" a degraded site may not be those that are destined for long-term success. Instead, they are essential as a "bridge" to the ecosystem that can succeed.

Our Heritage Forest partners in Costa Rica, Ecuador, and Hawaii, for example, are all faced with the challenge of restoring tropical forests. Primary tropical forests contained hundreds of species; restoring that complexity is a tremendous challenge. But there is strong evidence that it is also unnecessary. Instead, what may be needed is to get the vertical structure of trees established, so that degraded grasslands can once again become a home for the tree-climbing, tree-roosting animals and birds common to the region. When those critters return, they spread the seeds of indigenous species, and a complex secondary forest begins to develop. What eventually results may never be exactly like the primary forest, but it can become an excellent tropical forest; highly valued for its many products, goods, and services. And it will be the ecosystem that has demonstrated the ability to develop and succeed under the existing conditions—a major victory compared to no forest at all.

So our partners are planting Acacia species in many places, because it can be easily established, and is a successful colonizer that can compete with the coarse grasses and other vegetation. It attracts the birds and tree-climbers, and they spread seed. In many places, the Acacia won't be found after 10–15 years; it will have been crowded out by the profusion of native trees established on the site. But it will have done its job, providing shade, nitrogen, and an initial structure for the new forest.

In Indiana, I have seen tree farms where the farmer has planted 6–10 species in a single field. Some were planted on special areas because of soil or site considerations. Others provided early-succession shade and competition that helped longer-lived trees succeed. Not all the trees—or species—will live to maturity, and the resulting forest will have many aspects of self-selection and response to changing environmental conditions.

In Arizona, New Mexico and Oregon, riparian area forests are being re-established as a means of restoring water flow and quality in streams. The species are not commercial; in many areas seed or cuttings must be collected from remnant trees in order to get the right planting stock. The pioneer plants may or may not survive—a streambank is a pretty hazardous place for a tree to try to succeed, but the re-introduction of woody plants along the stream, combined with close control of grazing animals and some mechanical structures to help the stream begin to heal itself, are working miracles in some places to return mountain valleys to ecosystem health.

HERITAGE FORESTS

The examples above represent a few of the experiences encountered in must three years through the Heritage Forests program created by American Forests. In this program, we raise private donations for forest ecosystem restoration projects—tree planting, in short.

We have had exceptional cooperation from federal and state agencies. We need to single out the Bureau of Land Management, whose employees have been quick to jump at the chance for a public-private partnership that could help them restore some of the degraded areas they administer. But we have also had excellent projects with the Forest Service, a variety of state agencies, and some private sponsors. The Soil Conservation Service, through its Resource Conservation and Development Program, has been exceptionally good at finding projects, rounding up co-sponsors, coordinating volunteers, and helping projects succeed.

In terms of fundraising, we have developed outstanding partnerships with companies such as MasterCard, the Winery of Ernest and Julio Gallo, TI industries (a manufacturer of picture framing materials), XTree (a computer software company), Fellowes (a manufacturer of storage containers), Reese Brothers (a leader in youth fundraising programs) and H. Alpert & Co. (personal care products). These companies, along with over 40 others, have involved their distributors and customers in a concerted effort to raise money for tree planting in Heritage Forests. We collect their contributions, along with those of school children and individuals from every walk of life, and assemble enough to make specific projects possible.

Land managers submit project proposals—often projects that they have a portion of the funds to accomplish, but not the full amount. Many times, local cooperators add to the mix, often bringing volunteer labor to do the actual tree planting work.

The result to date is almost 1 million trees, in over 30 projects. It's really just a drop in the bucket, we know that. But the program is growing rapidly, beginning to make an impact, and, more importantly, beginning to demonstrate that people who care, when they work together, truly make an important difference.

We are tremendously pleased with this success, because we think it demonstrates several lessons of great importance to your concerns with reforestation. Those include:

1. People care, and they will help. The American public loves its forests, and if you show them how they can contribute, within their means, to a *bona fide* improvement in those forests, they will do so.

2. Land managing professionals, in every agency, love the forests in their care, and agonize over the inability to get funding support to do the tough ecosystem restoration jobs that don't show promise of clear payback in terms of timber or other financial return. We must not let our attention to budget controls prevent us from being willing to do what our stewardship responsibility demands. The fact that a few private dollars can make such a difference suggests that federal budget priorities need a hard look.

3. Ecosystem restoration is possible, but not always easy. In some places, we've had failures. If we keep working on tough sites, we'll have future failures. Our Heritage Forest partners support that approach. We'll keep working on those failures until we turn them into successes, if we can figure out a way.

FOREST MANAGEMENT POLICY IMPLICATIONS

All of the above brings new challenges to forest managers. The first challenge may be to some fairly strongly-held views that have developed both among foresters, environmentalists, and the general public.

Trees are not a crop like long-lived corn, and that becomes even more evident under climate change conditions. Trees, even in intensively-managed forests, are part of a much more complex ecosystem than agricultural crops, more at risk from changes in ecosystem processes and environmental impacts. Crops that live and die in a year or two can be altered to meet new conditions; trees that live for 20 to 400 years provide far fewer opportunities.

Forests simply cannot be totally removed from a site one day, then replanted the next, without going through significant micro-climate and site changes that may, in fact, prevent seedlings from successfully establishing. As a young field scientist for the Soil Conservation Service, I measured summer mid-day soil surface temperatures of over 150° F. on open south-facing granitic slopes in southern Idaho. Our attempts at re-establishing vegetation resulted only in tender young plants being cooked at the soil surface.

Had those sites been shaded—even shaded for 2–3 hours at the peak sun angle, the situation might have been tolerable. As it was, it was impossible. It is my understanding that similar situations were documented by the Forest Intensified Re-

search (FIR) research effort in southern Oregon during the 1980's. Their conclusion was that the start of a successful reforestation following timber harvest needed to begin with the harvest itself.

We are convinced that, as the federal agencies pay more attention to ecosystem management principles in guiding their forest harvest decisions, it will almost certainly dictate silvicultural methods that lower the risks associated with clearcutting many forest sites. It is ironic that clearcutting, designed primarily as a means of improving reforestation of shade-intolerant species, has contributed to so many reforestation failures when used on the wrong site or under the wrong conditions. The fact that clearcutting works in some places, and is needed in some places, must no longer mean that it is used everywhere. We're convinced that the agencies are moving in that direction, and that those efforts will help avoid some of the future problems.

But ecosystem management is no panacea, either. Some of the best-planned efforts may fail, either because people are still learning, or because unforeseen events overwhelm the best-planned situations. We have to accept the fact that there will be failures, and be ready to provide the follow-up investment and care that it takes to overcome them.

There is another issue associated with current discussions of forest ecosystem management that may also cause major problems. I'm afraid an "icon" is emerging as people laud "pre-settlement conditions" as a goal for today's managers. That is a concept that ought to be used with great care. For one thing, we don't know what those conditions were. When forest ecologists have a hard time describing how a particular forest ecosystem functions after years of observation and research, what makes us think we can "interpret" how they worked in the past from a few grainy photos and a random explorer's journal note?

Even where we think we know what presettlement conditions were, that information has little bearing on what we confront today. First of all, most of those forests weren't "pre-management." Native Americans manipulated forest and range lands considerably. Second of all, we can't return to that. Major wildfires, even low-intensity ones, that swept across millions of acres virtually every summer before settlement, would today run into towns, crop fields, houses, and human lives. People won't tolerate pre-settlement smoke levels to prevail; they would violate clean air standards and cause an irresistible public outcry about the health impacts of smoke. Neither the country (nor the world) is the way it was in the 18th Century; the forests cannot be, either.

So ecosystem management must be based on what we need today, in terms of goods and services from forest lands. We need to learn how to mimic or utilize natural processes, such as fire, but within the parameters that modern populations and land use patterns can tolerate. That won't be easy, and global change doesn't promise to make it any easier.

There is an organizational issue involved, as well. The basic premise of environmentalists a couple of decades ago was that public forests (particularly the National Forests) were captured by local interests (the industry) and that the only way to break that hold was to "nationalize" these issues. By bringing forest issues to Congress, appealing to the fact that these forests belonged to "all the people," the transition was successfully made. Now forest decisions are made in Washington. One result is a host of alphabet-soup laws such as NFMA, FLPMA, NEPA, ESA and a host of others that prescribe a complex, expensive, and often contentious process for making forest management decisions. Because some elements of these laws are often at serious cross-purposes, or because people just find them very hard to follow without slipups, federal forests are now managed more by lawyers, accountants, and "process managers," than by resource specialists.

That's a decidedly mixed blessing, even for those who promoted it so vigorously. And it will be deadly for any type of ecosystem management, which is, at its heart, adaptive management. Managers need to meet change; try to predict the onset of destructive events or thresholds and avoid them; try to manipulate the vegetation in the system so that it is more resilient under the pressures of stress.

When they try something, and it fails, they need to be able to go right back in and try to rectify the mistake, before the situation gets even more difficult. That means decentralized, science-based management decisionmaking, flexible and able to respond to fast-changing conditions. It means public involvement, but the public must be close enough to the forest to deal in the realities of what is happening on the land, at the time.

All of that is impossible when decisions are dictated from headquarters, and the forest conditions today don't line up with the legislative or regulatory prescriptions of last year. Both the "nationalization" of decisions accomplished in recent years and the centralized organization of agencies like the Forest Service are inconsistent with

adaptive management. When the ecosystem can change faster than the bureaucracy of the management agency, you have a serious problem.

The challenges to improving reforestation, ecosystem restoration, and ecosystem management, therefore, do not all reside out in the forest, with the agency managers charged with the stewardship of our public lands. Some of those challenges face the Congress, as it struggles to balance national interests and political forces with emerging ecosystem science and changing environmental conditions.

One of the major challenges, Mr. Chairman, is for Congress to regain a greater measure of trust in the professionals that are on the ground, and give them the freedom to actually carry out ecosystem management. If you do that, they will make mistakes, and you will need to be both sensitive to the critics and supportive of the professionals in their efforts.

There will continue to be reforestation failures, made inevitable by unforeseen events and the need to address high-risk situations. If the response from Congress is to support continued attempts until success is achieved, you will replace failure with success. If the response from Congress is to constantly criticize those whose attempts fail, you will continue to see agencies stop trying anything risky or innovative, and people covering up their inevitable failures.

If you do not give these professionals some trust and latitude, the very future of the federal forests are in increasingly serious jeopardy, and the more criticism you heap on them, and the more tightly you constrain their actions with detailed legislative prescriptions and regulation, the worse it will get.

That may not be the reforestation message you hoped to hear from us today, but it is where our view of the current situation brings us. We'd be happy to try to answer any questions you may have.

Mr. VENTO. I appreciate your response. It was worthwhile.

We have a series of four of five votes now, the first of which, after this Journal vote, will be fifteen minutes, then each will be five after that. So I think the practical thing to do is to suggest that we recess and come back at about 1:00 p.m., and I hope all of you can be here.

We hope to wind up the hearing in about an hour, and hopefully we won't be disturbed by more interruptions in terms of votes, but there are no guarantees on that. That is what I intend to do, to come back at 1:00 p.m., and give you a time specific about trying to be here if the schedule permits me on the Floor, so you can get your lunch.

We will stand in recess at this time.

[Whereupon, at 12:10 p.m., the subcommittee was recessed, to reconvene at 1:00 p.m.]

Mr. VENTO. The subcommittee will resume its sitting.

Let me invite Dr. Aplet, who is now present, to make his statement.

Please proceed, Dr. Aplet.

STATEMENT OF GREGORY H. APLET

Mr. APLET. I appreciate the invitation to appear here.

Due to the notice that we received, I prepared a written statement that I am finding difficult to whittle down into any short——

Mr. VENTO. We have a problem here because the votes I thought were going to take place did not, and so we may be interrupted for votes. I am going to have to ask you just to take about five minutes. Your entire statement will be made a part of the record, and you can either summarize it or just reference it as you go through it.

Mr. APLET. Okay. I will try to just keep this brief and hit the highlights.

I think the earlier guests today made a strong, compelling case for the need for rehabilitation in the Pacific Northwest, but I do

think that it is prudent at some point to stop and consider what it is we are trying to rehabilitate, what it is that we want to restore.

Chief Robertson, I thought, made some important remarks regarding what it is that ecosystem management is to be, and one of the important things he said it was to be is a change in the way business is done in order to maintain biological diversity across the forests.

In my book, maintaining biological diversity is going to require restoring the habitat that supports biodiversity, and in terrestrial systems habitat means vegetation. Vegetation is a very complex construct that actually involves much more than just trees, so while planting trees can bring us a long way towards restoring vegetation, it cannot be all that we look at.

The character of vegetation is as much affected by disturbance as it is by things that we ordinarily consider as determining vegetation, like climate and soils and the species involved. Factors like wind, flood, and fire can determine whether vegetation is forest, shrub land, or grassland.

Human beings tend to have their greatest influence on vegetation through their influence on disturbance, and in the Pacific Northwest we are starting to realize that the disappearance of old growth Douglas fir forests is essentially the result of increasing the frequency and intensity of catastrophic disturbance in the form of clear-cutting on the east side, which we have also discussed at length today.

Fire suppression, another change in disturbance cycles, as resulted in the growth of firs and Douglas firs into the forests where fire once excluded them, and their presence now threatens to change the entire disturbance dynamic of those forests.

So it is now clear that in order to avoid catastrophe and rehabilitate natural ecological systems will restore to the landscape the disturbance patterns with which the native biota evolved. In some places this will require dramatically reducing the amount of wood we can expect to produce from the site. It will also likely require the use of prescribed fire, reduction in grazing, and limitations on visitor use. In some places, it will require allowing what have traditionally been considered catastrophes, such as fires and floods, the space they need to run their course. None of this excludes humans from the ecosystem, but it will require a dramatic change in the way we view our relationship with it.

The Pacific Northwest is actually one of the best understood regions in the country in terms of natural disturbances, and an appreciation for the role of disturbances has allowed scientists to explore means of mimicking natural disturbance in forest management. New forestry relies heavily on leaving large quantities of wood following harvesting as a direct attempt to mimic the post-disturbance environment. Elsewhere, experimentation with prescribed fire has shown that fire cycles can be restored through management. Further improvement in these methods promises to allow society to benefit from the products of the forest without destroying its means to produce. Federal investment in these methods would allow us to continue to rehabilitate and reforest long into the future.

I am going to conclude this discussion with a short list of recommendations for rehabilitating Northwest ecosystems from my point of view.

Number one, save the blueprints. The highest priority of Federal land management agencies in the Pacific Northwest should be to identify and protect the functioning ecosystems that will provide the information essential to intelligent management. In forests, these are likely to be roadless areas and watersheds containing functioning old growth communities. These areas will be essential in the future both for the information they provide and as standards against which to compare management elsewhere.

Research natural area designation, which has been so sparingly used in the recent past, should be widely applied to maintain these areas.

[Prepared statement of Mr. Aplet follows:]

STATEMENT OF GREGORY H. APLET, FOREST ECOLOGIST, THE WILDERNESS SOCIETY, BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON NATURAL RESOURCES, SUBCOMMITTEE ON NATIONAL PARKS, FORESTS, AND PUBLIC LANDS, CONCERNING REHABILITATION, REFORESTATION, AND REINVESTMENT ON PUBLIC LANDS OF THE PACIFIC NORTHWEST, MARCH 30, 1993

Mr. Chairman, and members of the committee, I am Gregory H. Aplet, forest ecologist for The Wilderness Society. I am pleased to be invited to express my views on this important and timely issue.

It is now widely recognized that our nation's forests and other public lands have suffered greatly at our hands, and nowhere are the results of this mismanagement more apparent than in the Pacific Northwest. The recently acknowledged dire condition of the northern spotted owl, the marbled murrelet, and anadromous fish stocks confirms what many have feared for years: that the ecosystems of the Pacific Northwest have been stressed beyond their means to support their full complement of life. The situation is at least as serious on the east side of the Cascades where, according to the charter of the Blue Mountains Natural Resource Institute: "Forests and rangelands in northeast Oregon and southeast Washington fall far short of their productive capacity to provide various products, services, and benefits. These forests are among the most insect- and disease-infested forests of North America. Introduced, non-native grasses are dominating rangelands, juniper is spreading, and noxious weeds are threatening both forests and rangelands. Biological diversity is reduced. The buildup of unprecedented levels of dead and dying vegetation places the forests under continual threat of catastrophic fire."

Testimonials such as this make a compelling case for the alteration of management practices in order to rehabilitate ecosystems. But before diving headlong into rehabilitation, it is prudent to consider what it is we are tying to restore.

For the last century or so in the Pacific Northwest, the objective of management has been the conversion of unproductive natural forests into highly productive, managed tree farms. The result has been the impoverishment of native biodiversity. As nature has become scarce, society has reacted to its loss and now demands that public lands be managed to protect natural ecosystems. Through the Endangered Species Act, the National Forest Management Act, and other legislation, society has formalized its desire to restore to the nation's public lands the conditions that support the full range of native biodiversity.

This broad charge, restring biological diversity, must now become the objective of natural resource management. That this signal is now being received at the highest levels of the federal land management structure is reflected in the recent announcements of the USDA Forest Service and Bureau of Land Management to manage from the perspective of ecosystems rather than products and outputs. Restoring biodiversity though ecosystem management will require restoring to the landscape the vegetation patterns and ecological processes that define the habitat of native species. In many cases, this require only that the land be left alone to heal itself; in others it will require considerably more effort. This is especially true where commodities are to be produced.

Vegetation can be described as a function of three factors: the physical environment, species availability, and disturbance. Physical factors, such as climate and soil parent material, determine what can potentially exist on a site. Species avail-

ability constrains the set of species that can inhabit a particular environment, and disturbances, such as fire, windstorms, and floods, interact with the physical factors and the species to determine the character of the vegetation. For example, in some parts of the West, on cool, wet, north-facing slopes, fire may burn infrequently, allowing enough time for forests to develop. On warm, dry slopes across the valley, frequent burning results in the formation of grassland vegetation. Disturbance produces two very different habitats, despite the fact that regional climate, soil parent material, and species availability may be the same in both places. Furthermore, the cool, moist vegetation of the forest understory discourages fire in the forest, while grasses encourage fire spread, thus reinforcing the disturbance cycle.

Humans tend to have their greatest influence on vegetation through their influence on disturbance pattern, frequency, and intensity. While some spectacular cases of human alteration of species availability have occurred, such as the disappearance of chestnut from the Eastern forest as a result of the introduction of a Eurasian blight fungus, our most pervasive influence has been on disturbance, through both harvest practices and fire management. In the Pacific Northwest, the disappearance of old-growth Douglas-fir forest is essentially the result of increasing the frequency and intensity of catastrophic disturbance in the form of clearcutting. On the east side of the Cascades, fire suppression has resulted in the growth of insect-ridden firs and Douglas-firs suppression has resulted in the growth of insect-ridden firs and Douglas-firs into forests from which fire once excluded them. Their presence now threatens to alter the fire regime from one of frequent, low-intensify fires, easily endured by Fire resistant pines and larches, to one susceptible to high-intensity, catastrophic fires, which no species will survive. The Blue Mountains Forest Health Report described the situation this way: ". . . when human activities and processes fail to mimic the natural events that shape and define the vegetation conditions and character of stands, nature may intervene on its own behalf, through pest epidemics and catastrophic wildfires, to correct the unnatural state."

It is now clear that in order to avoid catastrophe and restore to the landscape the natural ecological systems upon which biodiversity depends, we must restore to the landscape those disturbance regimes with which the native biota evolved. In most places, this will require dramatically reducing the amount of wood we can expect to produce from a site. It also likely will require increased use of prescribed fire, grazing reductions, and limitations on visitor use. In some places, it will require allowing what have traditionally been considered catastrophes, such as fire and floods, the space they need to run their course. None of this excludes humans from the ecosystem, but it will require a dramatic change in the way we view our relationship with it.

Unfortunately, our understanding of exactly what needs to be done is only in its infancy. Appreciation for the important role of disturbance in ecosystems has only been fully embraced by the ecological profession in the last decade or so. Natural disturbance patterns and processes are under investigation in many forest types, but much more work must be done before this knowledge can be turned into recommendations for management.

One of the best understood regions of the country, in terms of natural disturbances, is the Pacific Northwest. Many management problems are now understood in terms of human alteration of natural disturbance processes. Westside endangered species problems are understood as resulting from large-scale, catastrophic harvesting. The short term solution requires protecting the remaining older forest from further disruption. On the Eastside, forest health problems are known to result from disruption of fire cycles and now threaten to catastrophically alter the forest.

This appreciation for the role of distrubance has prompted scientists to explore means of mimicking the effects of natural disturbance in Northwest ecosystems. "New Forestry", which relies on leaving large quantities of wood following harvesting, is a direct attempt to mimic the post-disturbance environment. Experimentation with prescribed fire has shown that fire cycles can be restored. Further improvement in these methods promises to allow society to benefit from the products of the forest without destroying its means to produce. Federal investment in these methods will allow us to continue to rehabilitate and reforest long into the future. I conclude this discussion with a short list of recommendations for rehabilitating Northwest ecosystems.

(1) Save the blueprints. The first priority for federal land management agencies in the Pacific Northwest should be to identify and protect those functioning ecosystems that will provide the information essential to intelligent management. In forests, these are likely to be roadless areas and watersheds containing functioning old-growth communities. These areas will be essential in the future both for the information they provide and as standards against which to compare management

elsewhere. Research Natural Area designation, so sparingly applied in the recent past, should be widely applied to maintain these areas.

(2) Stick to science. Insist that whatever is done be proven in experimental trials. The federal government should identify a class of mildly degraded lands that, through scientifically credible restoration actions (e.g. prescribed burning), can be restored relatively easily to high-quality, low-risk conditions. Recently, salvage logging has received considerable attention as a possible tool in the restoration of Eastside ecosystems. However, salvage, while an effective means of removing wood from a forest ecosystem, has not been proven to be an effective tool in rehabilitation or reforestation work.

(3) Invest in information. As mentioned, the application of disturbance information to management is in its infancy. There is still much to be learned about the way ecosystems function before we can effectively manage them for the full range of biodiversity. The failure of regeneration efforts speaks volumes to our poor understanding of forest ecosystems, even when the objective is simply timber production. To begin to manage forest ecosystems, even when the objective is simply timber production. To begin to manage forest ecosystems, we must learn much more about the behavior of those systems.

Information gathering provides a tremendous opportunity for investing in the future of Pacific Northwest public lands. Forest Service Research, particularly the Forest Inventory and Analysis program, currently monitors the condition of U.S. forest resources, but its focus is dominantly on timber. Congress should encourage FIA to expand its inventory in scope and intensity to help address our most pressing resource management questions. In the near future, there may be an opportunity for Forest Service Research to work with the Secretary of the Interior's proposed Biological Survey to provide a coordinated national inventory of biological diversity.

(4) Proceed with caution. Managers must avoid demonstrating the arrogance that has gotten us in the current situation. Admit that we do not currently know everything we need to know to rehabilitate damaged ecosystems. Reasonable approaches must be developed with patience, based on the best available science, and should be site-specific in application. Physical environments, species availability, and natural disturbance regimes differ tremendously from place to place. A management prescription that restores native vegetation in one place cannot be expected necessarily to work elsewhere. We must avoid the temptation to implement blanket prescriptions. Congress should encourage federal land managers to engage the scientific community and each local community to develop suitable prescriptions for local applications.

The currently degraded state of biodiversity in the Pacific Northwest is a national tragedy, but it also presents an opportunity to invest in building a healthy future for these vital ecosystems. By directing funding to inventory and research and encouraging the integration of research and management, Congress can aid in the rehabilitation of the public lands of the Pacific Northwest.

Mr. VENTO. Dr. Aplet, I have looked at your statement. It is an excellent statement, and I think it is very helpful. It will be in the record. I am going to have to stop you at this point simply because I fear that we won't get the other two witnesses in for a few words here before the bells ring. Perhaps we will even have time for questioning when we get done. But I did read the statement. It is an excellent statement.

Let me now introduce Mr. Desmond, so he has a chance to say a few words.

STATEMENT OF MARTIN JACK DESMOND

Mr. DESMOND. Chairman Vento, Congressman DeFazio, we are pleased to be able to testify here at this hearing today—maybe.

Mr. VENTO. No, no. You have got five minutes. You see, we have 10 minutes. I have to leave for a vote at quarter after, so let me give you five and then the other witness five, and I guess we will have to leave it at that and submit our questions in writing.

Mr. DESMOND. Okay. I feel like the little guy looking up at these big looming Federal agencies. What I would like to do briefly in my testimony is perhaps offer up one small element towards resolution

of this rather bitter old growth, timber supply fight that has been going on here in the Pacific Northwest.

Last week our association completed a 60-page report entitled "Investing in America: Intensive Management Opportunities in the Pacific Northwest." I want to offer a bit of caution in there, but what we did is, we looked at the possibility of increasing intensive management on both public and private forest lands in the Pacific Northwest, both in Oregon and Washington, and we found that perhaps upwards of 7,300 jobs could either be created or maintained. These are jobs that we feel are both environmentally and economically sound.

We heard the chief of the Forest Service talk, and, in looking at the new forest plans, approximately 55 percent of the acres to be harvested call for high levels of intensive management. That includes site preparation, tree planting, stand maintenance, pre-commercial thinning, fertilization, and commercial thinning, and because our members are so dependent on Federal contracts we continually monitor the number of contracts that the Forest Service is putting out.

On page 3, we obtained data from the Forest Service projecting out their reforestation needs, and then on page 4 their precommercial thinning needs in Region VI for the next couple of years. Briefly, there are about 100,000 acres of tree planting that they are proposing as well as about 150,000 acres of thinning.

Everybody knows that there is this line item that runs through both graphs, and that is the K–V cash balance, and essentially what it does is, it shows from fiscal year 1989 a cash balance of $260 million; the Forest Service is estimating that that is going to drop down to $95 million in fiscal year 1995. However, later on in the report, just about two weeks ago we obtained from the Forest Service what their K–V balances are right now and their projected expenses, and right now in Region VI they are estimating a $42.7 million deficit in their K–V fund.

Now one of the things that the Forest Service is real quick to say is that that is just a paper deficit and we have the authority to recompute the timber sales, and so forth and so on. However, our association is quite concerned that they are not going to have the funds available to do the work and a lot of this work is going to get short-changed.

I would like to just finish up quickly on the Forest Service and just say that there are a couple of thoughts I have for creating these intensive management forestry jobs. One is, a lot of people recognize that the timber cut on the National Forest lands was too high in the past and that the cut needs to be reduced. However, there is also what I would call a balance, for a lack of a better word, that the timber sale program does need to be restarted just in part because of the tremendous loss of income that is occurring.

We would also like to encourage the Forest Service to enter into more public/private partnerships with contractors. For example, what a number of our members are doing, particularly in Representative Smith's district, and probably even more in the future in Representative DeFazio's, is coming in, doing like precommercial thinning work which now, because of the high chip prices, they can actually turn around and sell that on the market. So that way, the

cost of the precommercial thinning is paid for by this, and we feel there are a lot of opportunities to increase that.

Finally, there is a need for the Forest Service to operate in a more cost-efficient manner, and I have a couple of examples both in my report as well as in my testimony about the Forest Service wasting money, and I might mention that the BLM also does that same thing.

Let me just touch briefly on the BLM. We have certainly heard a lot of testimony about that. I would like to just talk a little bit about the human element. One of our members was out the other day looking at some BLM lands in northwest Oregon, and these are lands that the BLM harvested 15 or 20 years ago, and he said that because they haven't engaged in proper intensive management these lands are essentially turning over to brush.

I have heard all sorts of figures provided by the BLM of what their precommercial thinning needs are, backlog needs are. Apparently the latest one is 43,000 to 66,000 acres. My seat-of-the-pants estimate is, it is 150,000 acres. I realize time is real short, and I will just point out that we have heard a lot of testimony from the BLM, and while they are current with their tree planting needs, they are actually falling further and further behind on their precommercial thinning and fertilization needs, and there are a couple of charts in here that show quite distinctly the number of acres accomplished has been declining since fiscal year 1991, and there are a number of reasons for that. So I will just finish now.

[Prepared statement of Mr. Desmond follows:]

TESTIMONY BEFORE THE NATIONAL PARKS, FORESTS, AND PUBLIC LANDS SUBCOMMITEE OF THE INTERIOR COMMITTEE

By

Martin Jack Desmond, Director
Northwest Reforestation Contractors Association

March 30, 1993

Chairman Vento, Representative DeFazio, and other distinguished gentlemen and ladies, my name is Martin Jack Desmond, director of the Northwest Reforestation Contractors Association. Our association is pleased to be able to provide testimony on forest investments on our public lands. Our association consists of 75 member companies who provide forestry-related services for public agencies and private timber landowners.

As we are all aware, there is a very bitter fight that has been waged over timber supply and old growth forests in the Pacific Northwest for over a decade. `Our testimony will address what we believe is one small element of the puzzle to help resolve this acriminous debate.

Our association completed a 60-page report entitled *Investing in America: Intensive Management Opportunities in the Pacific Northwest* last week that analyzed the potential for both forestry job creation and increased timber volume through intensive management from both public and private forestlands in the states of Oregon and Washington. There are many opportunities to create intensive management forestry jobs in the Pacific Northwest that are both environmentally and economically sound. I have been requested to limit my comments to investments on public forestlands so I will not be discussing the private forestland component except for one relevant item.

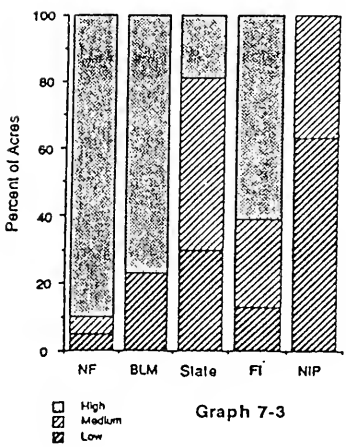
U S FOREST SERVICE

Of the 50.1 million acres of forest lands in Oregon and Washington, the Forest Service manages 19.3 million acres. In Oregon and Washington, the agency manages 48.2% and 27% of the respective states' forestlands.

Under the previous land management plans, the annual sale level in Region 6 (Oregon and Washington) was approximately 4.5 billion board feet. The new land management plans approved in the late 1980's would have set the annual sale level at approximately 2.9 billion board feet. However, the court injunctions over the northern spotted owl and other appeals have sent the Region 6 timber sale program into a major downward spiral - declining by more than 90% from FY 90 to FY 92. I might note that the wood lumber composite price has jumped 75% from October 1992 to February 1993. There are a variety of opinions for the upward spike in lumber prices.

Management intensity

The new forest plans commit the Forest Service to very high levels of intensive management to generate more timber yield. The plans include genetically improved stock, site preparation, control of competing vegetation, pre-commercial thinning, fertilization, and commercial thinning. Over 55% of the acres project planting, pre-commercial thinning, fertilization, commercial thinning, and final harvest while only 5% project only planting and final harvest as shown in the following graph and table.



Graph 7-3

MI	Acres (% of total)				
	NF	BLM	State	FI	NIP
1. Plant, final harvest (FH)	5	23	30	10	63
2. Plant, fertilize, FH	0	0	40	0	0
3. Plant, precommercial thin (PT), FH	3	0	11	17	0
4. Plant, commercial thin (CT), FH	2	0	0	9	37
5. Plant, PT, CT, FH	13	0	0	14	0
6. Plant, PT, fertilize, FH	22	2	19	0	0
7. Plant, PT, fertilize, CT, FH	55	75	0	47	0
8. Other	0	0	0	3	0
Total	100	100	100	100	100

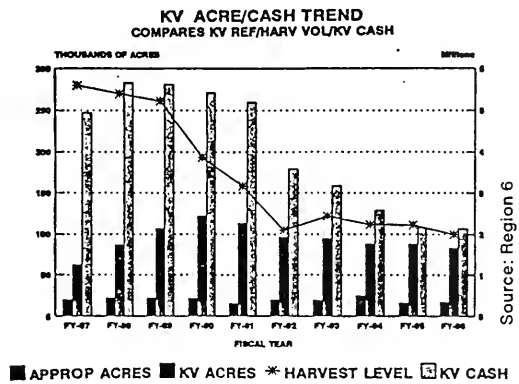
Table 7-1

Source: Sessions et al,

However, to achieve such high levels of intensive management requires both commitment and funding from the federal government. The funding for

Forest Service intensive management is provided through two major sources: appropriated taxpayer dollars and timber sale revenues.

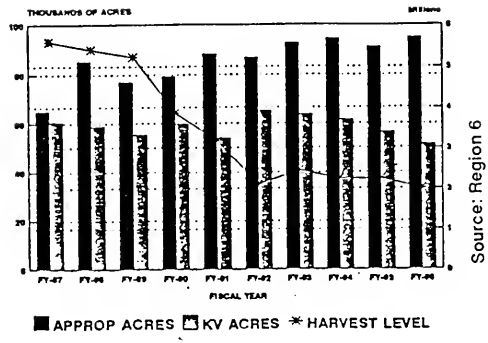
Since many of our members are dependent upon Forest Service and BLM intensive management contracts, our association has been monitoring the types and amounts of contracts offered by both agencies. The number and quantity sizes of the contracts have been shrinking during the last several years. At our association's annual conference, the Forest Service provided our members with an overview of projected Region 6's intensive management activities for the next five years. The first chart compares the harvest, reforestation and KV cash trends for the region.



Since the chart is reproduced in black and white, the "approp acres" accomplishments is the small bar while the "KV acres" is the large bar. The chart is very illuminating. First, the number of acres reforested is projected to decline as the harvest level declines. (I might note that this chart under-projects the steep decline in the timber sale level so that the number of acres to be actually reforested will likely be less than predicted). Second, most reforestation activity is paid through the KV fund. Third, the KV cash balance projects a steep decline from over $260 million in FY 1989 to a projected $105 million in FY '95. Generally, the Forest Service is projecting a need to reforest approximately 100,000 acres annually.

The next chart shows the projected thinning stand improvement (TSI) acres trend with a slightly increasing TSI appropriated acres and a slightly decreasing level of TSI KV acres. Generally, the Forest Service is projecting a need to thin approximately 150,000 acres annually.

TSI ACRE TREND
COMPARES APPROP TO KV

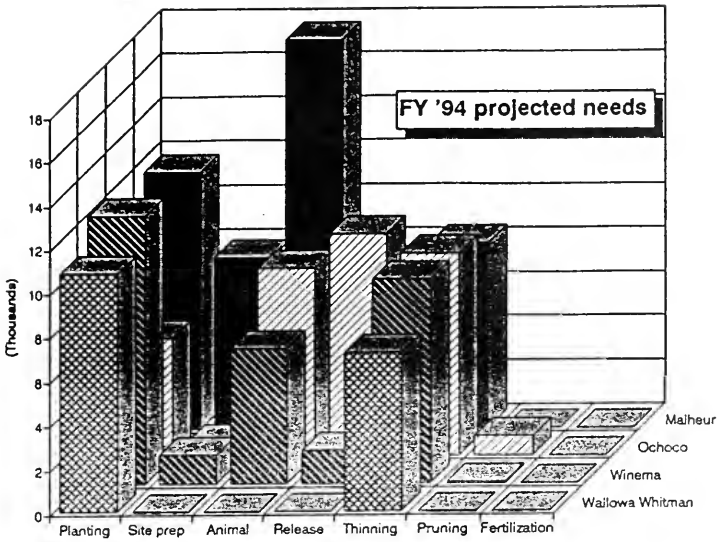


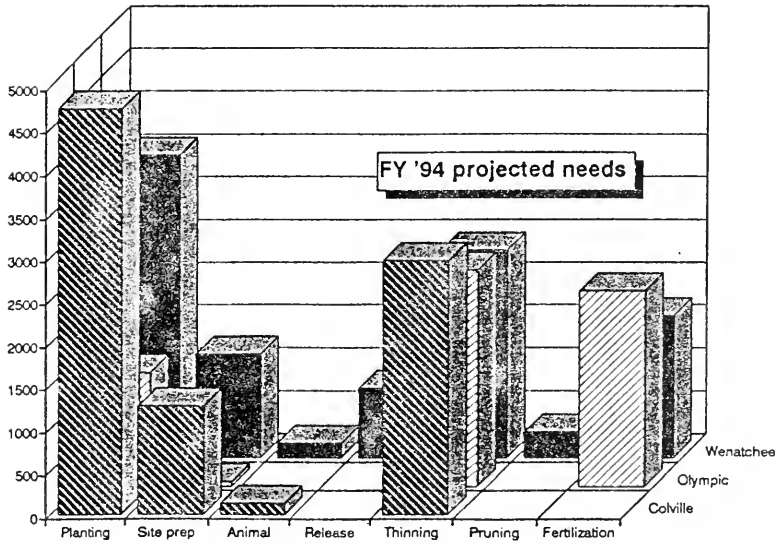
Last month, we requested data from each of the 19 Region 6 national forests for the projected reforestation and forestation needs for FY 94 and FY 95. The projected FY 94 reforestation workload is graphically displayed on the following two pages for thirteen of the forests. (Some of the forests provided incomplete data so that some of the categories which display no proposed activities may simply be lacking data)

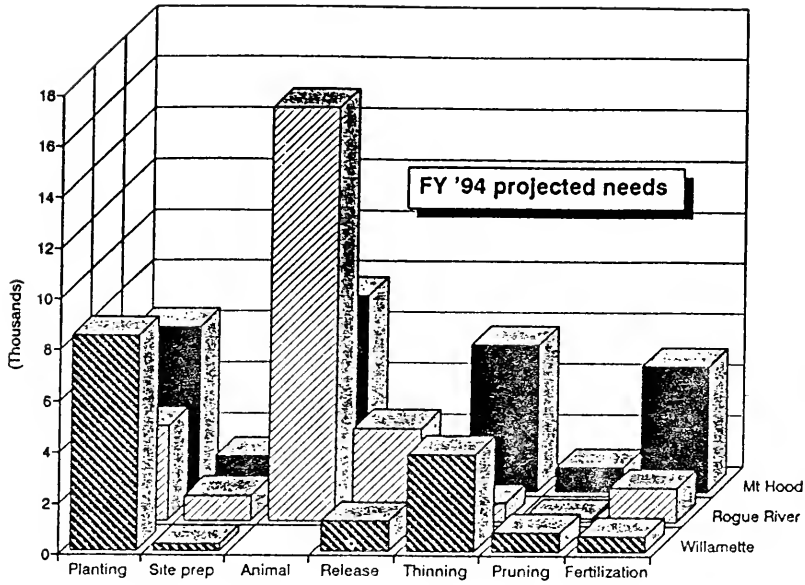
The forests are grouped together by eastern Oregon (2 charts), western Oregon, and Washington. As discussed and displayed in our *Investing in America* report, there is a massive shift of proposed activities from the "west-side" of the Cascades to the "east-side." Part of the shift is due to the collapse of the timber sale program on the west-side and an increase in the amount of proposed forest health type projects on the east-side.

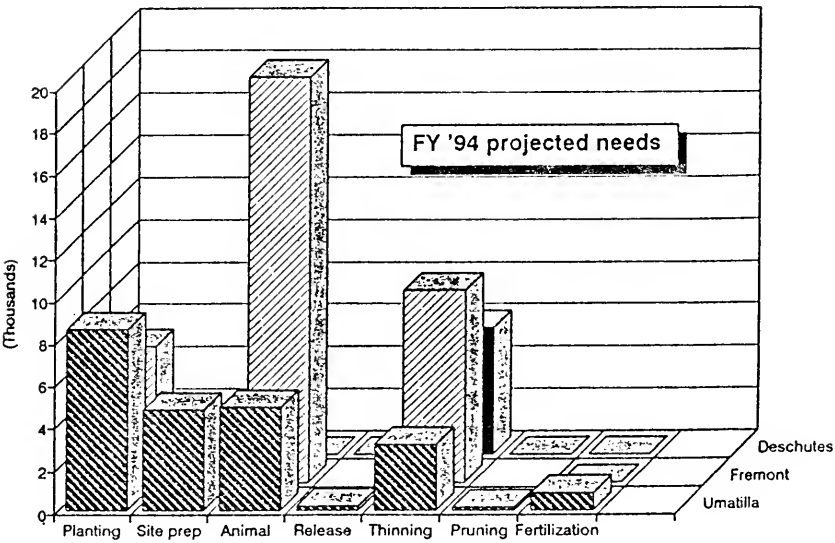
Our association also requested information about the status of the cash balances and projected expenses for the KV fund for Region 6. The information was provided by the Region 6 office and is displayed following the two pages of graphs.

Last spring, we requested KV data and projected workloads from each of the individual 19 national forests in Region 6. At that time, our association estimated that the total projected expenses exceeded cash and projected cash collections by approximately $11 million. Based upon our limited knowledge of the KV system, it would appear that the KV fund balance is rapidly "hemoraghing" and is now displaying a projected $42.7 million deficit, as of September 1992.


FY '94 projected needs
(Thousands)
18
16
14
12
10
8
8
4
2
0
Planting
Site prep
Animal
Release
Thinning
Pruning
Fertilization
Malheur
Ochoco
Winema
Wallowa Whitman


FY '94 projected needs
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Planting
Site prep
Animal
Release
Thinning
Pruning
Fertilization
Wenatchee
Olympic
Colville





Source Region 6 national forests

REGION 6: KV SUMMARY
September 1992
($000's)

Forest	Cash & Collections	Projected expenses	Net Balance
Colville	12,147	13,148	(901)
Deschutes	15,501	17,001	(1,500)
Fremont	22,339	22,424	(85)
Gifford Pinchot	14,167	16,240	(2,073)
Malheur	53,377	52,160	1,217
Mt Baker Snoq	11,184	9,492	1,692
Mt Hood	24,169	24,236	(67)
Ochoco	19,707	23,522	(3,815)
Okanogan	9,800	10,962	(1,162)
Olympic	7,366	6,986	380
Rogue River	23,460	32,660	(9,200)
Siskiyou	19,728	21,286	(1,558)
Siuslaw	28,058	32,743	(4,685)
Umatilla	16,115	23,058	(6,943)
Umpqua	15,847	15,645	202
Wal Whitman	20,215	25,837	(5,622)
Wenatchee	12,500	15,134	(2,634)
Willamette	50,266	57,418	(7,152)
Winema	24,283	23,168	1,115
Region 6 total	400,329	443,120	(42,791)

Source: Region 6

We recognize that the agency has the authority to adjust timber sale funds to retrieve additional dollars to eliminate the deficit. The region has unofficially informed our association that they are moving rapidly to narrow and eliminate the KV deficit. Individual Forest Service employees have also stated that they will not be eliminating any stand maintenance work to reduce the projected expenses. However, our association must express a certain degree of skepticism that stand maintenance work will not be eliminated to reduce the deficit.

Region 6 previously had a large KV cash balance due to their large timber sale program. We suspect that when the timber sale program collapsed, the agency continued to maintain its large staff which drained the KV budget. Since the timber sale program has essentially stopped, the agency is not generating as much income. The KV cash balance will likely worsen.

Cost efficiency

Our report discusses "less than efficient use" of taxpayer funds by the Forest Service and BLM. For example, the Willamette NF issued its FY 92 annual monitoring and evaluation report last week. The report shows that the Willamette NF sold only 22 mmbf of its 491 mmbf ASQ in FY 92 - or approximately 4% of its sale program. However, the agency spent $8.8 million on its timber sale preparation program - more than what was projected in its forest plan for a timber sale program that would sell 491 mmbf annually. One can suspect that much of those timber sale costs were related specifically to the northern spotted owl.

One can also reasonably conclude that the Forest Service and BLM timber sale programs will be less than in previous years. Both agencies need to operate in a more economically efficient manner.

USFS recommendations

Our report offered a number of recommendations to generate reforestation jobs and increase timber volume on Forest Service lands. First, we would like to suggest that there is a critical need for all of the affected parties (timber industry, environmental groups, other) to negotiate in good faith and to make compromises. Organizations that are unwilling to compromise and negotiate in good faith should be excluded from the resolution process.

Re-start timber sale program: Many people recognize that the previous cut was too high. The sale program needs to be lowered. However, the present sale level (which is essentially non-existent) will cause wide-spread economic harm to many parties. The federal government will lose hundreds of millions of dollars of timber sale revenues. The counties, if the federal government was to eliminate its "subsidy," would lose tens of millions of dollars. The Forest Service will lose hundreds and perhaps thousands of its employees in Region 6. Many mills in Oregon and Washington have already shut down. Unemployment in rural communities has stayed high. Forestry workers and loggers who have been able to get other jobs have typically taken a pay cut. In an effort to reduce taxpayer expenses, our association recommends that the President and the US Congress need to re-start the Forest Service timber sale program

Replenish KV fund: The Forest Service borrowed $90 million from its KV fund nationwide to pay for FY '92 firefighting costs. Congress has apparently not fully appropriated all of the funds to replenish the account.

We would recommend that Congress replenish the funds and work with the agency to reduce excessive firefighting costs.

KV fund transfer to federal government: Despite the $42.7 million KV deficit in Region 6, some of the forests apparently had surpluses and $4 million were transferred to the federal treasury. We would suggest that Congress amend the KV Act so that the region did not have to return "surplus" funds when the region itself had a deficit.

Timber Management Improvement Act: This legislative bill, sponsored by Representative Ron Wyden, would direct the Secretaries of Interior and Agriculture to prepare a yield report on second growth timber management opportunities for lands in Oregon, Washington, and northern California. An updated report on intensive management opportunities for the Pacific Northwest is needed.

Public/private partnerships: The Forest Service should be encouraged to develop more public/private partnerships to address the forest health issues. Proposals can be developed that would allow the contractor to remove diseased and dying trees, prescribe burn the sites, and replant at little or no cost to the federal government through the sale of the dead trees.

Audit and performance committee: A committee composed of non-government and government individuals is needed to specifically review and monitor Forest Service and BLM budgets to make sure that the line officers are meeting or exceeding target goals, whether for reforestation, timber stand improvement, trails, timber, wildlife, or recreation.

BUREAU OF LAND MANAGEMENT

The BLM manages 2.6 million acres of forestlands in western Oregon. Of these forestlands, 2.2 million acres are classified as commercial forestlands. The BLM is currently developing new resource management plans which will likely decrease the timber sale program from a level of 1.1 billion board feet to approximately one half of that historical level.

Previously, the O&C lands have provided approximately 15% of the total timber harvested in the state of Oregon. The O & C Counties received 50% of the timber sale receipts. Historically, the counties have received an average aggregate total of $113 million annually.

In FY 1990, the timber sale program totalled 1.14 billion board feet on western Oregon BLM lands. In FY 92, the BLM sold only 35 million board feet.

Intensive management activities

Like the Forest Service, the BLM has committed itself to high levels of intensive management activities on its lands. Under the new proposed draft resource management plans, the Eugene District BLM proposes that 11% of its preferred alternative's ASQ is attributable to pre-commercial thinning, fertilization, and conversion activities. The Coos Bay District BLM attributes 13.4% of its ASQ to intensive management activities.

The Office of Inspector General released an audit report on BLM's forestry operations in western Oregon in September 1990. The report found that the agency "had not performed the planned levels of plantation maintenance, precommercial thinning, fertilization, and timber stand conversions. Consequently, timber growth with an estimated net value of $90 million in future revenues was lost during fiscal years 1986 and 1989. The Government and the 18 counties will continue to lose about $21 million in timber growth annually as long as the present backog in plantation maintenance exists" (excerpted from the summary report).
As you will recall, the OIG repeated those charges before this subcommitee in February 1993.

Despite the report, the backlog is increasing. Due to budget shortfalls and certain budget priorities by the BLM to preserve its own staff, the BLM did not perform any pre-commercial thinning activities in FY '92. For FY '93, the BLM is proposing to reduce the pre-commercial thinning program to one tenth the previous levels of FY 90 and FY 91.

There is considerable confusion over the size of the backlog. BLM and OIG inspectors now apparently claim that the backlog in western Oregon is as follows:

- 46,000 acres in tree planting
- 43,000 acres in pre-commercial thinning
- 101,000 acres in fertilization
- 6,600 acres in stand conversion

Our association, however, is very skeptical of those figures. In a letter to Representative Wyden in February 1993, we estimated that the pre-commercial thinning backlog was likely in the range of 150,000 to 200,000 acres - based upon the number of acres planted by the BLM over the last decade.

The acreage accomplishments for the BLM in western Oregon are shown in the following table:

Fiscal Year Funding/Workloads	FY 90	FY 91	FY 92	FY 93 Request	FY 93 AWP
Funding (000)	$37,218	$45,483	$38,773	$38,571	$30,644
WORKLOAD MEASURE (acres)					
Base:					
Inventory	142,000	191,000	152,400	146,000	127,300
Site Preparation	21,884	23,378	10,723	14,666	14,176
Tree Planting	38,905	36,088	26,375	23,447	17,380
Maintenance/ Protection	56,700	46,748	48,635	53,642	36,076
Intensive:					
PCT/Release	19,876	20,457	51	34,091	2,250
Fertilization	24,271	60,285	5,566	70,913	3,100
Conversion				130	0
Pruning				50	0
Total Acres	303,636	377,956	222,304	342,939	200,282

Source: BLM

The trends are quite disturbing as the number of acres accomplished for tree planting, maintenance, PCT/release, and fertilization are declining from FY 90. Some of the decline can be attributable to the northern spotted owl court injunction (such as site prep and planting), but other categories such as thinning and fertilization are also showing steep declines which are not directly related to the Endangered Species Act.

Congress appropriated $30.6 million for BLM forest development/reforestation line item for FY '93. That appropriation represented an $8 million decrease from the previous year and was insufficient to address all of the proposed work plan activities.

As discussed in our *Investing in America* report, the BLM has been spending excessive amounts of the forest development/reforestation budget on

categories that appear not to be directly related to this line item. The following chart provides a breakdown of the allocation of the funds.

Item	FY 92	Percent	FY 93	Percent
AWP Allocation	($000)		($000)	
Workmonths	4281		3831	
Labor	$12,672	32.7	$12,701	41.4
Office/Support	$5,114	13.2	$1,771	5.7
Seed Orchard	$1,756	4.5	$1,891	6.2
COPE	$1,300	3.3	$1,300	4.2
RMP	$731	1.9	$614	2.0
Cooler/Research	$703	1.8	$285	0.9
Contracts	$16,497	42.6	$12,082	39.5
Total Dollars	$38,773	100.0	$30,644	99.9

Source: BLM

The category "Labor" is a misnomer and, in fact, relates to BLM personnel. The BLM acknowledges in budget documents that 95% of all intensive management work on its lands is performed by contractors. However, the percentage of funds allocated to contracting work for FY 93 is less than 40%. Meanwhile, the percentage of funds allocated to BLM personnel now amounts to 47% (Labor and office/support).

The OIG release a February 1992 report that sharply criticized the BLM for spending twice as much - $188 million - on administrative costs in FY 90 than had been approved by the US Congress. I might note that the BLM disputes the findings of the OIG report.

BLM recommendations

Re-start BLM timber sale program: As noted under the Forest Service section, many people recognize that the historical BLM timber sale program was too high. However, the present sale program will likely cause an unacceptable level of financial harm. The President and the US Congress need to re-start the program, albeit at a lower level.

Stable funding sources: Unlike the Forest Service, the BLM does not have a similar KV type program. Two legislative proposals have been offered. Senator Packwood has proposed a $15 million annual Reforestation Trust Fund that would come from a tariff on imported lumber. The Forest Service

currently receives $30 million annually from this tariff fund. Representative Ron Wyden has proposed in the Timber Management Improvement Act that the KV legislation be amended to include the BLM. The Board of Directors of our association has endorsed both legislative proposals.

Congress is apparently moving an emergency $14 to $15 million reforestation funding package for FY 93. This legislation should be passed.

Economic efficiency: The BLM spends an excessive amount of funds on administrative and other non-related items that is charged to the reforestation/forest development budget. The agency needs to learn to operate in a more economically efficient manner, particularly since the agency is falling further behind on its intensive management needs.

Audit and performance committee: As discussed in the Forest Service recommendations, this committee would monitor and review BLM budgets to make sure that the agency was efficiently spending its money.

Funding for non-industrial forestlands

Although outside of the scope of this particular committee, our association requests that the US Congress provide a matching appropriation of $5 million to help fund a Reforestation Trust Fund proposal developed by Oregon's Secretary of State Phil Keisling to properly re-stock the 600,000 acres of under-stocked non-industrial forestlands in western Oregon. The proper reforesting and management of non-industrial forestlands in Oregon and Washington can lessen the pressure to cut old growth forests on public lands.

SUMMARY

There are a number of opportunities to create intensive management forestry jobs on both public and private forestlands in the Pacific Northwest that are environmentally and economically sound. The investment will provide jobs in the short-term. More importantly, the investment will generate more timber yield from existing cut-over lands in the future.

Our association wishes to thank Chairman Vento for the opportunity to provide testimony.

Group urges better federal care of forests

■ Reforestation contractors call for a resumption of logging on federal land to protect jobs

By KATHLEEN MONJE
Correspondent, The Oregonian

EUGENE — A regional reforestation contractors' group called Tuesday for a return to logging in public forests and better care for all forest lands to help create or keep more than 7,000 jobs.

Both Sen. Bob Packwood, R-Ore., and Rep. Peter DeFazio, D-Ore., supported the Northwest Reforestation Contractors Association's request for more government investment in federal forests and tax incentives for private forest land owners.

The association, which is made up of 75 reforestation companies in Oregon, Washington, Idaho, California and Montana, released a report Tuesday that will go before a House Interior subcommittee next week.

Martin Jack Desmond, the group's spokesman, criticized the U.S. Forest Service and the Bureau of Land Management for failing to keep up with the replanting, thinning and fertilizing needs of the land under their control.

The two federal agencies operate inefficiently and spend too much on administrative costs, Desmond said.

The BLM's failure to take care of reforestation requirements and to build roads to Oregon timberlands could cost the government $2 billion in future logging revenue, he said.

Likewise, a $42.7 million deficit in the Forest Service's reforestation fund for the region threatens future timber volumes, Desmond said.

The northern spotted owl controversy has contributed to the management backload because both agencies' timber sale programs have plummeted by almost 90 percent over the last two fiscal years, he said.

Neil Summers, president of member company Shiloh Forestry Inc. of Eugene, said his reforestation payroll has dropped from 75 employees to fewer than 50 in the last two years because of the court-ordered logging bans on the owl's behalf.

On private lands in Oregon, about 700,000 acres of forest need pre-commercial thinning and another 600,000 acres are either unplanted or underplanted, Desmond said.

The association would like to see Secretary of State Phil Keisling's proposal for a reforestation trust fund enacted. The trust would provide, through general obligation bonds, a $12 million rotating loan fund for landowners.

Packwood aide Hance Haney said the senator plans, for similar reasons, to reintroduce two bills vetoed by former President Bush.

The bills would give the BLM $15 million for reforestation efforts and would provide tax incentives to private forest landowners.

DeFazio aide Betsy Boyd said Oregon's Fourth District representative thinks the association's proposals are important. DeFazio arranged for Desmond to testify at a congressional hearing to be held Tuesday in Washington, D.C., Boyd said.

The timber industry agrees with the goals as well, but believes that first the government must limit environmentalists' ability to appeal timber sales and forest management activities such as thinning, said Ted Ferrioli, spokesman for the Willamette Forestry Council.

"We think the jobs in this proposal are real, but the strategies will only work if there's an end to appeals," Ferrioli said.

Oregonian 3/24/93

Daily Journal of Commerce

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Report: Job potential linked to reforestation

By BARRY FINNEMORE
Daily Journal of Commerce

More than 7,000 forestry jobs either could be maintained or created by taking advantage of numerous "intensive management opportunities" on millions of acres of private and public timberland in the Northwest, according to a report released Tuesday.

The 60 page document, commissioned by the Northwest Reforestation Contractors Association, indicates that site preparation, tree planting and maintenance, and pre-commercial thinning, pruning and fertilization hold long-term economic and environmental benefits for the region.

The report expressed concern that the U.S. Forest Service would not carry out intensive management work due to funding problems, and it criticized the Bureau of Land Management for failing to keep pace with intensive management needs.

The report identified a "number of intensive management opportunities" in Oregon and Washington that can boost wood fiber availability into the next century. It warned, however, that employment figures are projections based on per person production estimates that could "vary widely."

An association spokesman expressed hope that the report would be used by state and federal officials and others to help resolve the Northwest timber crisis.

See REPORT, Page 31

REPORT Continued from Page 1

"There is an urgent need to create environmentally and economically sound forestry jobs in the Pacific Northwest," noted Martin Jack Desmond, the report's author.

At a Portland news conference, Desmond stressed that those jobs are not "make-work" jobs, and added that for every dollar invested in reforestation there is a $3 return.

Federal timber sales have dropped by almost 70 percent in the last two fiscal years as courts have tied up logging until the threatened northern spotted owl situation is settled. That has resulted in a deficit in the U.S. Forest Service's Region 6 reforestation fund.

Timber-dependent industries, communities and local governments will continue to feel the sting of the downturn, according to the report. It also said that depleting timber supply from Forest Service and BLM lands has led to a 75 percent increase in composite lumber prices in six months.

The report recommended in part that Congress restart the federal timber sale program and that the Forest Service and private companies work together more closely. It said the request-for-proposal process allows contractors to propose activities to the agency and needs to be utilized more.

Among the report's other findings:

• In western Oregon, an estimated 600,000 acres of non-industrial forestlands are classified as either non-stocked or understocked. Stocking and managing the 2.6 million acres of non-industrial forestlands statewide potentially could triple the average annual harvest of 360 million board feet, according to the report.

• About 698,000 acres of pre-commercial thinning opportunities exist on the 5.6 million acres of private industry forests statewide.

• On private- and state-owned lands in Washington, biological treatment opportunities exist on some 3.7 million acres. (A separate report last year projected a 20 percent increase in annual growth if the lands were treated).

• Pre-commercial thinning could create about 60 million board feet of net annual growth, and establishing and rehabilitating 710,000 acres could generate about 950 million board feet of net annual growth.

Members of the Northwest congressional delegation are working in support of reforestation. Both Rep. Ron Wyden, D-Ore., and Sen. Bob Packwood, R-Ore., have or plan to introduce legislation aimed at boosting investment in and management of privately owned forests.

In addition, Oregon Secretary of State Phil Keisling has proposed a Reforestation Trust Fund to help private landowners replant understocked non-industrial lands. The fund would create an estimated 330 of the 7,300 intensive management jobs the report projects.

Keisling said the goal is to raise $10 million from the state and federal government to establish the fund. Under the proposal, landowners would pay the government a percentage of their timber receipts. He said the goal is to reforest 250,000 acres over 10 to 15 years.

Mr. VENTO. Thank you.

That will help us shorten up our questions to BLM. As you noticed, I was trying to focus on what these base numbers were rather than just looking at them in the abstract, because unless you tie them down you aren't doing it.

Mr. Gladics, I apologize for the shortness of time, but I am trying to save some time at the expense of your colleagues here so that you are able to make a statement for about five minutes. Please proceed.

STATEMENT OF FRANK GLADICS

Mr. GLADICS. Mr. Chairman, we appreciate that, and the folks that I represent, the small lumber mills in the West, are very much interested in trying to find ways to harvest our National Forests and maintain our health.

Sitting here today listening to the testimony, there are a few things, though, that seem to have either been overlooked, or maybe it is my perception, that I would like entered into the record. One is that the Pacific Northwest was not all old-growth forests before we started to make our mark on the forests, and I would submit for you a BLM technical study that shows the amount of burned areas in Oregon in 1850 and then carries up that life stage cycle through the 1990s, if I could submit that for the record.

Mr. VENTO. That will be submitted and properly referenced in the committee hearing.

[EDITOR'S NOTE.—The document may be found in the hearing file.]

Mr. GLADICS. The other thing I would like to commend to your reading is a publication put out by the United States Forest Service, but it was done by the Forest History Society down in Durham, North Carolina, that looks at 100 years of forestry in America, and I have a number of copies I can leave with the committee. It shows that we have really done some phenomenal things in this country in terms of reforestation and in terms of rehabilitating some of the large game animals that were so heavily impacted.

Mr. VENTO. That similarly will be referenced in the committee hearing and kept in the files.

Mr. GLADICS. Finally, I will leave with you something not from the Pacific Northwest but something from the inner mountain West on the Black Hills National Forest. It is a book that was put together on the Custer expedition, which was 100 years ago in the Black Hills, and a number of matched photos that show what we had when Custer went through the Black Hills, a very sparse forest, heavily impacted by fire and native fire, compared to what we have now. I think that, too, tells a story that the American public needs to understand of what happened.

Mr. VENTO. Similarly, that will be referenced.

[EDITOR'S NOTE.—The document may be found in the hearing file.]

Mr. GLADICS. Next, I would like to kind of touch on some ironies that I heard about in the hearing today and ask this committee and Congress to think about those as you formulate directions for our Federal lands.

I think we heard the IG say that they were upset with the BLM, that they were losing an opportunity to make money on some lands because they weren't planting them quickly enough. That is somewhat opposite from the amount of money that you could make if you actually harvested. Right now, you are losing billions and billions of dollars because you have sales held up that have been sold that are unharvested. Those, obviously, will lead to reforestation needs that would, obviously, lead to new forests.

Second, I heard a lot of talk about ecosystem system management, but at the same time I hear a lot of talk about setting aside areas. I think if you look at our National Forests across the country, there is a very large need for managing these areas to maintain the forest's health, and Mr. LaRocco's bill and Mr. Sampson's efforts to gain attention for that we support because we believe you have forests that have been mismanaged through the preclusion of fire and the preclusion of active management practices. Now we have a tremendous cost facing us to deal with those.

If you look at the Blue Mountain forests in eastern Oregon, we have 50 percent of the trees dead. We are not being able to salvage that volume. That is not generating any revenues that could be used for planting or harvesting of the trees or rehabilitating those sites. The Forest Service is going to come to this Congress at some point if people want trees on that land, and they are going to be asking for tremendous amounts of money to do that job. We are not so convinced that the budgets we have seen proposed will allow for that. That is an irony that we need to address. Ecosystem management is one way to address it, but you cannot say let's set aside everything in these dynamic processes and just preserve them and expect them to last, particularly in the inner mountain forests which tend to get to a certain age and die, and if you look at the age distribution in the inner mountain country, we have many forests that are sitting right on the edge of that time period where they start to fall apart.

Timber harvesting and our K–V system and the B–D system that we have do lay out a format where money does go from the purchaser back to the agency that allows you to do a lot of that work.

The final irony that I saw, and I guess it hit home when I was eating lunch and I saw all the beer distributors in town here with buttons that say, "Beer tax will cost 80,000 jobs." We are talking about going from an economy that produces not only money out of the woods in terms of salaries for loggers but also produces money for the sawmillers and the people that work in those jobs and the distributors of wood products. I know there is a lot of talk about retraining, and I was kind of hoping for a beer distributorship, but I don't think I am going to get that now.

It is very important when we look at rehabilitating the forests and those jobs that we understand that those forests and that economy are very truncated. Yes, you can plant trees and you go thin trees and you can make a living at that, but that does not support entire communities in a similar fashions that sawmills have, and that needs to be taken into account as we move forward in this.

That is not to say that the forests don't need to be rehabilitated; I think both things should occur. We should be able to harvest stuff on National Forests because we do have age class distribution

balances and forest health imbalances that need to be addressed and rehabilitate those forests at the same time. Our members believe that you can do that and stand ready to work with this Congress and the administration to try to find opportunities like the Applegate project to make that work.

[Prepared statement of Mr. Gladics follows:]

STATEMENT OF FRANK GLADICS, VICE PRESIDENT OF WESTERN FOREST INDUSTRIES ASSOCIATION, PORTLAND, OR

Good morning. My name is Frank Gladics I am Vice President for the Western Forest Industries Association. I am here today speaking on behalf of my association and the American Forest & Paper Association. I appreciate the opportunity to discuss with you our views on reforestation and forest management on public lands in the Northwest.

With about 1.4 million employees, operations in all 50 states, and annual sales of $190 billion, the forest resource industry is a significant contributor to the nation's economy. This impressive performance is due, in large part, to this nation's and our industry's strong commitment to sound forest management.

A HISTORY OF COMMITMENT TO SOUND FOREST MANAGEMENT

The U.S. is second to no other country in its commitment to sound forest management. This fact is accurately portrayed in the recently released book "American Forests: A History of Resiliency and Recovery." I would like to submit a copy for the record and commend it to your reading.

The fact is, forest management and the condition of U.S. forests have improved dramatically since the turn of the century—and continues to improve. Forest growth nationally has exceeded harvest since the 1940s. Each decade this margin between growth and harvest increases. By 1986 forest growth exceed harvest by an impressive 37 percent—this volume of forest growth is 350 percent greater than it was in 1920.

This impressive record is due, in large part, to our commitment to reforestation. In 1991, timberland owners, corporations, and government agencies planted 1.68 billion seedlings—over seven trees for each American—to reforest America's forestland. In addition, millions of acres of forests are managed to ensure they regenerate naturally.

The national forests reflect a similar commitment to reforestation. In 1991, the Forest Service reforested over 503,000 acres of national forests following harvesting and wildfires. The Forest Service planted over 50 different species of trees in this effort, reflecting the tremendous variety of trees in the 122 national forests.

Additionally, to provide for a variety of species in replanted forest stands, the Forest Service and BLM leave residual trees and shrubs during timber harvests. Seeds from these remnant trees complement planted seedlings to ensure diversity of future forest stands.

Since 1980, the Forest Service has reforested over 5.2 million areas of forestland. Ninety percent of these acres were successfully replanted on the initial attempt. The agency has since successfully reforested the vast majority of the remaining 10 percent of the acres. The forest products industry strongly supports reforestation efforts as an essential tool in forest management. Aggressive reforestation on both public and private forests will ensure that we maintain the strong ecological integrity and economic and aesthetic qualities of our forests for future generations.

U.S. SUCCESS IN FOREST MANAGEMENT GOES BEYOND TREES

The U.S. commitment to sound forest management extends beyond trees and reforestation. Significant advances have been made in the areas of wildlife, recreation, watershed, and other forest resource enhancement and protection. Again, the facts clearly show that this nation has been successful in implementing protection and management practices that improve all forest values. For example, since the turn of the century, the area consumed by wildlife each year has been reduced by 90 percent.

Wildlife enhancement is also a success story. Many species, such as wild turkey, elk, and pronghorn, once on the verge of extinction, are now thriving due to sound forest management and cooperation between private landowners and public agencies. I might add that these remarkable comebacks of each of these species was accomplished well in advance of the passage of the Endangered Species Act.

THE PACIFIC NORTHWEST—REFORESTATION AND MANAGEMENT PRACTICES ON NATIONAL FORESTS ARE SOUND

Reforestation and timber stand improvement acreage in Region 6 were at near-record levels this past year. In 1992, on Region 6 national forests, almost 130,000 acres were reforested, with timber stand improvement activities extended to more than 76,000 acres.

Regenerated forests are rarely comprised of a single species. Planting and the planned reseeding and sprouting by residual trees and shrubs result in a reflection of the natural diversity of the region. All forest conditions, not just old growth, are important components of the forest ecosystem and part of the biological diversity. The "original" natural condition of the Pacific Northwest forest was a mosaic of old growth and young, mostly even-aged stands that resulted from fire, insects and disease. I would like to submit for the record the publication "The Truth About America's Forests" which visually depicts the forest stand age classes of the Pacific Northwest in the year 1850.

More than 30 percent of the national forests in Oregon and Washington are old growth—some 6.29 million acres. More than half of this old growth (3.3 million acres) is in wilderness and other land classifications where timber harvesting is not permitted. Further, on National Parks and other public lands, there are at least an additional one million acres of old growth in the two states.

SATELLITE IMAGERY OF THE PACIFIC NORTHWEST—NASA NEEDS TO COME DOWN TO EARTH

Over the course of the last several months, numerous newspaper articles have featured reprints of satellite imagery comparing approximately 500 square miles of the Mt. Hood National Forest near Timothy Lake with a location in the Amazon Basin. Drawing any kind of conclusions on reforestation from 570 miles away is, at best, impossible. In addition, any experienced forester will tell you that questioning U.S. forest management practices based on comparing these imageries is ludicrous.

Satellite imagery uses reflected light to develop contrasts. Young forests and ground covered with shrub vegetation reflect more light than older forests. For this reason the younger forests, 3–40 years of age, will resemble bare areas and contrast sharply with the older forests surrounding them. I would like to submit for the record photos taken from conventional aircraft which show areas identified as "bare" by the NASA satellite imagery, which are in fact, fully forested. These pictures show an area fully stocked with 10–20 year old trees with management prescriptions fully preserving the ecological integrity and diversity of the site.

The Mt. Hood National Forest planted 3.8 million trees in 1992—about five trees for each harvested. Based on our experience in the area, about 95 percent of these trees will survive. Over the last 40 years, approximately 180,000 acres of this national forest has been harvested and regenerated. This amounts to only 16 percent of the total forested acreage.

Perhaps it was simply an unfortunate oversight that the NASA satellite imagery does not include the six wilderness areas and the Spotted Owl Conservation Areas which together comprise nearly 500,000 acres on the Mt. Hood. The areas shown in the press includes part of the Mt. Hood and the Warm Springs Indian Reservation that have been fragmented by harvesting. As described above, this fragmenting has been a natural process of the forests of the Pacific Northwest. In my view, and in the view of most foresters, replacing wildlife and losses to insects and disease with harvesting and reforestation makes sense.

As I stated above, inferring that this nation's commitment to forest management practices are somehow inferior to those of a developing country is absolutely entirely false and unfair. While there will continue to be debate at the margins over forest management in the U.S., everyone agrees on the fact that forest management in this country is founded on sound science, continuously improves by implementing new technology, and is guided by the most environmentally sensitive laws, policies, and regulations in the world.

THE PROBLEM IN THE PACIFIC NORTHWEST IS TIMBER SUPPLY

The national timber supply situation has now reached a state of crisis. There is no evidence that it will abate in the foreseeable future. While some factors are temporary, such as court injunctions, even temporary impediments are becoming permanent because of their persistence and cumulative impacts. Every obstacle is put in the way of a stable and predictable timber supply. This is not a crisis brought on by biological constraints, rather it is driven by politics and policies. As I mentioned above, growth far exceeds harvests in this nation.

This supply shortage has caused lumber prices to rise dramatically. Since October, the price trend of structural framing lumber has risen over 100 percent. Reflecting long term uncertainty, lumber futures have increased at maximum levels on many recent trading days. These unusual circumstances have caused manufacturers to ship hardwood lumber to the West coast as a substitute for softwood framing lumber. Similarly, prices for fine hardwood sawlog veneer logs are escalating to record levels.

Do not be misled by opponents to timber management and others who want you to believe this drastic increase in lumber prices is the result of increased demand and predictable seasonal fluctuations in lumber prices. This view is incomplete and misleading. I would like to enter for the record a copy of our comments on the recent CRS report on lumber prices.

Demand is stronger than the 1991 recession low, but is average from a historical perspective. This year we predict consumers will demand 48 billion board feet, still below the peak of 50.6 billion board feet. Even with average demand, prices are still shooting through the roof.

In 1992, housing starts increased only 18 percent from the near record lows of 1991. This is weak in comparison with the 61 percent increase in 1983 as the country came out of recession. Housing has traditionally led this country out of economic recession. A lack of timber needed to produce lumber and other building materials threatens to stall a strong economic recovery.

SUMMARY

The U.S. is second to no other country in its commitment to sound forest management.

Forest management and the condition of U.S. forests have improved dramatically since the turn of the century—and continues to improve. Growth now exceeds harvest by more than 30 percent.

More than 30 percent of the national forests in Oregon and Washington are old growth—some 6.29 million acres. More than half of this old growth (3.3 million acres) is in wilderness and other land classifications where timber harvesting is not permitted.

All forest conditions, not just old growth, are important components of the forest ecosystem and part of the biological diversity.

Some have claimed not to have seen the forest for the trees—with satellite imagery you may not see the forest or the trees.

There is reason to be optimistic regarding timber supply. The President has announced his commitment to breaking the timber supply gridlock in the Pacific Northwest through a forest summit this Friday. As always, we stand committed to finding practical solutions. As solutions are found, it is our hope that we can get back to doing what we do best—supplying our nation with wood and paper products in an environmentally sound manner and nurturing our renewable forest resources.

That you for the opportunity to testify. I would be happy to answer any questions.

Mr. VENTO. Thank you for abbreviating your remarks. It is especially difficult because I have so many questions I would like to ask, but I have got two minutes to get over to vote. I didn't want to hold you up. Then I think other business will intervene. So we will all send some written questions along, and you can try to respond to them. Obviously, it has been a very provocative panel, and it would have been helpful to ask questions, but there just isn't the opportunity today.

Thank you very much for your patience and your help in making this a good hearing. We stand adjourned.

[Whereupon, at 1:21 p.m., the subcommittee was adjourned.]

APPENDIX

MARCH 30, 1993

ADDITIONAL MATERIAL SUBMITTED FOR THE HEARING RECORD

[illegible]
9th District, California

COMMITTEES:
WAYS AND MEANS
DISTRICT OF COLUMBIA
SELECT NARCOTICS

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515
March 22, 1993

TIMBER LOBBYISTS
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& ARE UNAWARE
OF REAL REASON FOR
LUMBER PRICE RISE

Dear Colleague

The Congressional Research Service examined the claims that the spotted owl is the culprit for recent significent increases in lumber prices. These claims have been made by the National Association of Home Builders in recent news articles and mis-leading advertisements.

CRS concludes

"The economic recovery is probably the major cause of the lumber price rise. Although the lumber price rise is substantial, existing evidence suggests that it will not significantly slow housing starts or the economic recovery."

"The impact of spotted owl protection on Federal timber sales is uncertain."

"Changes in economic conditions can also affect lumber prices."

And perhaps the most telling and obvious conclusion:

"Since small changes in mortgage rates have a greater effect on home buyers than doubling lumber prices, it seems unlikely that changes in lumber prices can have a significant effect on housing demand."

I hope you will consider these important points by the Congressional Research Service when dealing with some of the artificial hysteria on timber issues.

Sincerely,

Pete Stark

Pete Stark
Member of Congress

3.20-93 THE WASHINGTON POST

Improving U.S. Economy Cited As Driving Up Lumber Prices

SENT BY:Xerox Telecopier 7020 ; 3-24-93 ; 2:55PM ; 12022259621→ ;# 2

U.S. House of Representatives
Committee on
Merchant Marine and Fisheries
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CYNTHIA M. WILKINSON

March 22, 1993

LUMBER PRICES AND ENDANGERED SPECIES
FACTS AND FICTION

Dear Colleague:

The recent rise in lumber prices has been widely reported in the press and accompanied by much speculation about the root causes of the increase. National campaigns by several interest groups have been organized to attribute the price rise to the Endangered Species Act.

In an effort to sort fact from fiction, the Congressional Research Service (CRS) has prepared an analysis of the rise in domestic lumber prices. CRS concludes that the economic recovery is probably the major cause of the lumber price rise, but seasonal factors, the countervailing duty on Canadian lumber, and injunctions on the Federal timber sale program due to the failure of the last Administration to comply with the requirements of the National Forest Management Act, the National Environmental Policy Act and the Endangered Species Act have also contributed.

Mr. Ross Gorte, the author of the CRS analysis, will brief interested members and staff on his analysis. Mr. Gorte is an Economist and Natural Resource Specialist with the Environmental and Natural Resources Policy Division of CRS.

The briefing will be held on Friday, March 26, 1993 at 1:00 p.m. in the Merchant Marine and Fisheries Committee hearing room (1334 Longworth House Office Building). All interested Members and staff are welcome to attend.

If you have any questions about the briefing, please contact Ms. Lesli Gray at 226-3547.

With kind regards.

Sincerely,

Gerry E. Studds
Chairman

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April 1, 1993

The Honorable Bruce Vento
United States House of Representatives
Washington, DC 20515

Dear Congressman Vento:

I would like to clarify a point raised in Mr. Neil Sampson's testimony before your committee hearings on March 30, 1931. As you may recall, Mr. Sampson advised you to ask more penetrating questions the next time Chief Dale Robertson testifies before your committee. He then accused the U.S. Forest Service of "re-defining" the agency out of a substantial reforestation backlog problem. As evidence, he asserted that the Forest Service re-classified 213 million acres of what the Agency formerly identified as a reforestation backlog as "other forest land" and thereby escape the scrutiny of Congress.

While there are indeed 213 million acres of "other forest land," little if any of this forest land is in need of reforestation. This acreage is, according to the Forest Service,

> "Forest land other than timberland and reserved timberland. It includes available and reserved unproductive forest land, which is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness."

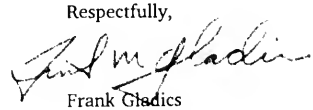
As you can determine from the enclosed excerpts from "Forest statistics of the United States, 1987," more than half of the "other forest land" is in Alaska. Much of the remainder is located in arid states such as Arizona, Nevada, and Utah. Furthermore, most of this area is under the jurisdiction of the Bureau of Land Management and other agencies in the Department of Interior.

What is now called "other forest land" was once termed "unproductive forest land." In either case, this land is not, for the most part, denuded. In the arid West, for example, much of this forest is pinyon-juniper and similar vegetative types. In Alaska, such land supports stagnant stands of slow-growing aspen, cottonwood, black spruce and related taiga species. For certain, most does not require reforestation. Aside from

the fact that the bulk of the "other forest land" is outside the Agency's jurisdiction, I know of no instance when the U.S. Forest Service used this category as a means to hide a reforestation backlog.

Mr. Sampson has leveled a serious and improper charge. For this reason, I hope you will include this letter in the official hearing record. Chief Robertson had left and did not hear Mr. Sampson's testimony. For this reason, I hope also that you will provide Dale a transcript of Mr. Sampson's testimony so that he can properly respond to this serious charge.

Respectfully,



Frank Gladics
Vice President

cc: Robertson, Congressman Smith, Sampson

enclosure

Excerpts

from

FOREST STATISTICS OF THE UNITED STATES, 1987

by

Karen L. Waddell, Daniel D. Oswald, and Douglas S. Powell
U.S. Department of Agriculture - Forest Service
Pacific Northwest Research Station
Portland, Oregon
Resource Bulletin PNW-RB-168
September, 1989

Table 1—Land areas in the United States by major land class, region, and State, 1987

Region and State	Total land area[a]	Total forest land	Land class: Forest land: Timberland	Land class: Forest land: Reserved timberland	Land class: Forest land: Other forest land	Land class: Other land
			Thousand acres			
Northeast:						
Connecticut	3,090	1,815	1,777	21	17	1,275
Delaware	1,206	398	388	3	7	809
Maine	19,732	17,713	17,175	278	262	2,019
Maryland[b]	6,292	2,632	2,461	153	18	3,660
Massachusetts	4,994	3,097	3,010	0	87	1,897
New Hampshire	5,701	5,021	4,803	70	148	681
New Jersey	4,648	1,985	1,914	41	30	2,663
New York	30,273	18,775	15,799	2,549	427	11,498
Pennsylvania	28,601	16,997	16,186	532	278	11,605
Rhode Island	667	399	368	8	22	269
Vermont	5,915	4,479	4,424	25	30	1,435
West Virginia	15,406	11,942	11,799	116	27	3,464
Total	126,526	85,251	80,104	3,794	1,352	41,275
North Central:						
Illinois	35,531	4,265	4,030	236	0	31,265
Indiana	22,895	4,439	4,296	143	0	18,456
Iowa	35,746	1,562	1,459	76	27	34,184
Michigan	36,362	18,220	17,364	623	234	18,141
Minnesota	50,640	16,583	13,571	1,178	1,834	34,056
Missouri	44,123	12,523	11,996	224	303	31,600
Ohio	26,211	7,309	7,141	120	49	18,902
Wisconsin	34,740	15,319	14,727	261	331	19,421
Total	286,247	80,221	74,583	2,860	2,778	206,026
Great Plains:						
Kansas	52,228	1,358	1,207	23	128	50,870
Nebraska	49,005	722	536	23	163	48,283
North Dakota	44,271	460	337	0	123	43,811
South Dakota	48,532	1,690	1,447	22	221	46,843
Total	194,037	4,229	3,527	67	635	189,808
Southeast:						
Florida	34,533	16,721	15,238	461	1,022	17,812
Georgia	36,837	23,907	23,383	505	18	12,930
North Carolina	30,990	18,891	18,359	490	43	12,099
South Carolina	19,077	12,257	12,179	78	0	6,820
Virginia	25,246	15,968	15,436	471	81	9,278
Total	146,682	87,744	84,594	2,005	1,144	58,938

Table 1--Land areas in the United States by major land class, region, and State, 1987, continued

Region and State	Total land area[a]	Total forest land	Land class: Forest land: Timberland	Land class: Forest land: Reserved timberland	Land class: Forest land: Other forest land	Land class: Other land
			Thousand acres			
South Central:						
Alabama	32,466	21,725	21,659	66	0	10,742
Arkansas	33,319	16,987	16,673	91	223	16,332
Kentucky	25,321	12,256	11,908	267	81	13,065
Louisiana	28,482	13,883	13,873	10	0	14,600
Mississippi	30,160	16,693	16,673	9	12	13,467
Oklahoma	43,939	7,283	4,748	23	2,513	36,656
Tennessee	26,339	13,258	12,839	395	24	13,081
Texas	167,685	13,656	12,414	120	1,122	154,029
Total	387,713	115,741	110,787	981	3,974	271,971
Pacific Northwest:						
Alaska	361,887	129,045	15,763	5,292	107,990	232,842
Oregon	61,546	28,057	22,084	1,777	4,196	33,488
Washington	42,483	21,856	16,848	2,765	2,244	20,627
Total	465,916	178,958	54,695	9,834	114,429	286,958
Pacific Southwest:						
California	99,773	39,381	16,712	2,940	19,729	60,392
Hawaii	4,110	1,748	700	113	935	2,362
Total	103,884	41,129	17,412	3,053	20,665	62,754
Rocky Mountains:						
Arizona	72,607	19,384	3,789	1,090	14,505	53,223
Colorado	66,249	21,338	11,739	1,714	7,884	44,911
Idaho	52,692	21,818	14,533	3,051	4,234	30,873
Montana	92,765	21,910	14,736	1,396	5,778	70,855
Nevada	70,112	8,928	221	1	8,705	61,184
New Mexico	77,632	18,526	5,181	1,399	11,947	59,106
Utah	52,502	16,234	3,078	346	12,809	36,269
Wyoming	62,055	9,966	4,332	2,943	2,691	52,089
Total	546,614	138,104	57,610	11,941	68,553	408,510
United States:	2,257,618	731,377	483,311	34,536	213,532	1,526,240

Note: Data may not add to totals because of rounding.

[a]Source: U.S. Department of Commerce. 1983. 1980 census of population. Volume 1: Characteristics of the population. Part 1: United States summary. [Washington, DC].

[b]Includes 40,320 acres of Other Land in Washington DC.

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