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TIMBER HARVESTING

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HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT, SOIL
CONSERVATION, AND FORESTRY

OF THE

COMMITTEE ON AGRICULTURE,
NUTRITION, AND FORESTRY

UNITED STATES SENATE


NINETY-SIXTH CONGRESS

FIRST SESSION

JUNE 22, 1979

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CONTENTS

Melcher, Hon. John, a U.S. Senator from Montana, opening statement--	Page 1
--	-----------

CHRONOLOGICAL LIST OF WITNESSES

Packwood, Hon. Bob, a U.S. Senator from Oregon-----	5
McGuire, John R., Chief, Forest Service, U.S. Department of Agriculture--	8
Lenard, Thomas M., senior economist, Council on Wage and Price Stability-----	15

APPENDIX

Packwood, Hon. Bob, a U.S. Senator from Oregon, prepared statement--	26
Lenard, Thomas M., senior economist, Council on Wage and Price Stabil- ity, prepared statement-----	26
Evans, Brock, director, Sierra Club, statement-----	28
Questions asked by Senator Melcher of John McGuire, Chief, U.S. Forest Service, and his answers thereto-----	29
Questions asked by Senator Melcher of Thomas Lenard, Council on Wage and Price Stability, and his answers thereto-----	31
Hooper, John C., the Wilderness Society, statement-----	32
Response by Forest Service, USDA, to the President's anti-inflation message-----	33
National Forest Products Association, statement-----	55

TIMBER HARVESTING

FRIDAY, JUNE 22, 1979

U.S. SENATE,
SUBCOMMITTEE ON ENVIRONMENT, SOIL
CONSERVATION, AND FORESTRY OF THE
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9 a.m., in room 324, Russell Senate Office Building, Hon. John Melcher (chairman of the subcommittee) presiding.

Present: Senator Melcher.

STATEMENT OF HON. JOHN MELCHER, A U.S. SENATOR FROM MONTANA

Senator MELCHER. The subcommittee will come to order. Today we are holding a hearing to ascertain the meaning, and what will be the result of, a statement by the administration.

On the afternoon of June 11, Mr. Alfred E. Kahn, Chairman of the Council on Wage and Price Stability, called a press conference to announce a decision by President Carter to take steps consistent with law and environmental considerations to increase timber supplies through a limited and temporary departure from the current non-declining, even-flow policy of harvesting timber from Forest Service and Bureau of Land Management lands.

Frankly, the announcement was somewhat confusing to me, especially when the Forest Service budgets for fiscal 1979 and 1980 are taken into account.

The Forest Service budget for fiscal 1979, based on congressional appropriations, provided for 12.4 billion board feet of timber to be sold, which compares to sales in 1978 of 11.5 billion board feet. The average amount of timber sold between 1976 and 1978 was 10.5 billion board feet.

The potential harvest is 16.2 billion board feet annually. Therefore, from 1976 to 1978, sales were at 65 percent of the potential, and in 1978 sales were at 71 percent of the potential.

The proposed 1980 budget calling for sales of 11.7 billion board feet would be 700 million board feet above the 4-year average of 11 billion board feet, but it would be 700 million board feet below the level for 1979.

In setting sales at 12.4 billion board feet in fiscal 1979, the backlog of sales being readied for market was reportedly emptied out, thus requiring a greater effort for sale preparation in the upcoming fiscal year and in 1981 to simply maintain a level of 11.7 billion board feet.

Nevertheless, the 1980 budget request recommended considerably less money than necessary to get this timber into the sales pipeline.

Mr. Kahn says in his June 11 statement that each billion board feet of additional timber sales affects timber prices by 10 percent, lumber prices by 4 percent, and the cost of housing by one-half of 1 percent. If this is true, then the 1980 budget proposal for the Forest Service has an inflationary effect on the order of 7 percent for timber, 2.8 percent for lumber, and about one-third of 1 percent for housing.

To my knowledge, no fiscal 1980 budget amendment has been sent to Congress. Unless Congress, on its own, increases funds for timber sales and sales preparation, the administration's proposal will have no effect, since the administration has already charted an inflationary course.

Further, there is 28 billion board feet of Forest Service timber that has already been sold, and once it is sold, there is no requirement for its orderly marketing. Firms with good alternative supplies will obviously wait for good market conditions before they harvest this timber, while those without such supplies will have problems.

Softwood production in the East is about equal to that in the West. Most of the Eastern softwood comes from private lands, over which the new proposal has no control.

The point I am trying to make here is that Government timber sales are not an independent variable that can be made to manipulate national prices; that is, unless we wish to resort to regulation to manipulate prices, require cutting under contract, require the maintenance of private production, and regulate imports and exports accelerated Federal harvesting alone will not get the job done. And, of course, this regulation will not occur.

If I understand the administration's plan correctly, it proposes to increase sales from the national forests in the Pacific Northwest, where growth is below removals now, rather than increasing sales in the Rockies, the South and the North, where growth substantially exceeds removals.

As I understand it, the Office of Management and Budget believes that removals from these surplus regions are more costly than harvesting in the Pacific Northwest. However, according to the Forest Service's recent "Report to Congress on the Nation's Renewable Resources," the net effect of accelerated harvests in the Northwest may well increase present and future deficits.

The report says that softwood supplies in the South are expected to rise from 18 million board feet in 1976 to 31.4 billion board feet by the year 2030. Large percentage increases are also expected in the Rockies.

The report contrasts this with the expectations from the Northwest, where production in 2030 is expected to be 18.6 billion board feet, as compared to 26.6 billion board feet in 1976.

The proposed departure from even-flow nondeclining yield will have to take place under the provisions of the planning process provided for under the National Forest Management Act.

The final regulations for section 6 of this act will not be final until the end of next month. Then a training program will have to be instituted for Forest Service personnel. Then the forest plans will have to be formulated and submitted for public scrutiny. Then the timber will

have to be put into the pipeline. Then the Forest Service can proceed with sale preparations and sales. And none of these time constraints takes wilderness creation into account.

I may be wrong, but it seems to me that what we are looking at here is an announcement of accelerated timber harvests in the Far West that cannot occur for 3 to 7 years. In that time period, administrations can change, the Congress will certainly change, and the circumstances such as increasing or decreasing imports from Canada might alter the supply picture completely.

At present we have about a billion board feet of mortality on the national forests annually. The trees die and are not recovered because there are no roads to get to them. There are hundreds of thousands of acres of diseased timber, that is either dying or dead because of disease, that is not being harvested. And that is very obvious evidence of lack of prudent management on the part of both Congress and the Forest Service and the administration—all three of us. I separate the Forest Service from the administration in this regard because the Forest Service's professional judgment, I would hope, would have been to take care of it more prudently. I think that is the case. I am relying on that being the case but I think for various reasons, many of which I have touched on in this dissertation this morning, the decisions made by the policymakers in the administrations—I guess I can go back to President Johnson, President Nixon, President Ford, and now President Carter—quite often are made by policy decisions dictated by the Office of Management and Budget that do not have anything done on diseased timber.

Now, that, I would hope, during the next few months we would at least learn that there is something being done on that; that we are going to have a change in policy before the end of the year. We will discuss that a little bit more with Chief McGuire.

Now, again using Mr. Kahn's figures, access to these trees could cut inflation of timber prices by 10 percent. Yet there is no request in this proposal for more road money. We have a lot of hoopla in the press and no substance behind it in terms of how you are going to do it.

The first thing you have to do, if I am not mistaken, would be to ask for some road money and make a change in the administration's request in this year's budget.

Despite the fact that in his first environmental message the President indicated that the private, nonindustrial lands were a major opportunity source for increased timber supplies, there is nothing in the proposal for stimulating the production of trees from this area, from the private sector.

We have huge surpluses of hardwoods across the Nation. These trees, if currently available research were applied, could take a great deal of pressure off of our softwood supplies.

Therefore, as I see it, the administration proposal is flawed badly in several ways: It fails to recognize the private sector influence on supply, including imports and exports; it contains no mechanism for getting the Federal timber on to the market, even if it is sold.

If it is to be at all effective, the proposal must be accompanied by appropriate amendments to the 1980 budget request.

The time that will be required to implement the plan will insure that it has no impact on supply and price structure for 3 to 7 years.

The plan is targeted solely at the Pacific Northwest, overlooking opportunities to increase supply in other regions of the country—including mine, I might add. And I want to again reiterate that in western Montana, as in many inner-mountain forest areas, we have got hundreds of thousands of acres of diseased timber. It is either already dead or it is dying now. And I just do not understand, if we are going to target some areas, why we do not at least have some explanation why we would overlook the diseased—I want to emphasize that. This is either dying timber or it is already dead.

It does not look very nice, that is one thing for the aesthetic value, it does not look nice, and from a practical value of people wondering, myself included, how can we claim to be sensible land managers when we allow this to progress without at least instituting some plans to correct it. And in looking for extra timber, it would seem to me that this would be the place we would look at first.

In addition, the President's announcement, the administration's announcement falls because in parts of these other regions there are local supply problems that the plan ignores completely. Furthermore, the plan ignores the nonindustrial private lands and the large surplus of hardwoods, that could have a vital influence on price and supply.

You can guess that I feel that even treating this proposal in its very gentlest, charitable way, I do not think it really amounts to a plan to reduce inflation at all. I am completely mystified on what the proposal is. I do not know what it is, but I hope that our witnesses here today can enlighten me somewhat. I hope I am wrong in my assessment of its lack of substance. If so, I would like to be corrected. I hope I am wrong, sincerely.

I want to submit for the record at this point the Memorandum for the Secretary of Agriculture, signed by the President, where he directs the Departments of Agriculture and Interior to speed up harvesting.

[The following memorandum was received by the committee:]

MEMORANDUM FOR THE SECRETARY OF AGRICULTURE

I hereby direct the Departments of Agriculture and Interior, consistent with existing legal requirements, to use maximum speed in updating land management plans on selected National Forests with the objective of increasing the harvest of mature timber through departure from the current nondeclining even-flow policy. In updating land management plans, all relevant economic and environmental implications must be taken into account. A schedule for rapid completion of this process on these Forests with substantial inventories of mature timber should be developed with regular progress reports to me.

JIMMY CARTER.

Senator MELCHER. As you know, this subcommittee has no jurisdiction over the Bureau of Land Management, so we are not getting into that part of it.

Our first witness today is Senator Packwood, who comes from the area where the President's proposal says we should get more timber.

Senator PACKWOOD. Is it all right if I testify from here? ¹

Senator MELCHER. Please.

¹ See p. 26 for the prepared statement of Senator Packwood.

STATEMENT OF HON. BOB PACKWOOD, A U.S. SENATOR FROM
OREGON

Senator PACKWOOD. Mr. Chairman, as you know, the President's new policy to increase timber harvest in the national forest would have its greatest impact on the Pacific Northwest and much of this increase would come in my home State of Oregon.

Forests are the center of life in Oregon. They are the mainstay of our economy. They provide jobs directly and indirectly to the majority of our citizens. And while Oregon's industry has been diversified, and successful, timber is still the backbone of our economy.

We are proud of the forests. They provide a setting for a unique quality of life that Oregon is known for nationwide.

The national forests make up a large part of Oregon's forest lands. So it is no surprise that we take a very thorough look at any proposal which could have pronounced and far-reaching effect on these lands.

The President's plan is to attack the inflation of housing costs by increasing sales of timber from the national forests. While this may have merit, I have many questions.

I am concerned about the plan's long-term effect on supply. The immediate benefit of increased timber supply to the region's economy is clear. We are, however, in region VI now harvesting trees at the limit. I want to emphasize that—at the limit. And I emphasize that—at the limit. Oregon and Washington, in region VI, the allowable cut is 5 billion feet and we are cutting 5 billion feet, and the President is planning, apparently, to go above that, on some kind of basis, hopefully making it up later. I am at a loss as you are to know exactly what the policy is that he is planning.

The Forest Service projects that if current policies on Federal, State, and private lands are continued, the region faces an 18-percent reduction in timber supply by the year 2000, and that is not far away.

The President's plan addresses this short-term timber supply problem, but it has a fundamental critical flaw. It would increase timber harvests, but it does nothing to increase the long-term productivity of our national forests.

You and I, Mr. Chairman, are cosponsors of S. 100, a reforestation bill to try to get 100-percent reforestation money to catch up the backlog.

In the budget this year, the President was required to indicate how much money he needed for reforestation. That was an amendment we put in the act in 1976 which corrected the *Monongahela* decision.

The budget this year indicated that the President needed \$122 million for reforestation if we are to fully catch up with the backlog by 1985. The President asked for \$72 million. He has asked for less money for reforestation than we spent last year. Yet, John McGuire, Chief of the Forest Service is here and he has testified both before the Finance Committee and the Budget Committee that if we were to increase the money for reforestation, and if we knew the reforestation took, that the seedlings were growing, he could increase his cut and produce more money than the cost of reforestation. But there is no quid pro quo that I have yet found in the President's program.

As a matter of fact, the administration came before the Finance Committee and testified against not only S. 100 but any further funding for reforestation.

I am also concerned about the environmental impact of this plan, whether any other forest values have to be sacrificed. What effect will it have on the salmon runs? We have been having hearings in Congress on the declining salmon runs in the Northwest. Part of it may be attributed to timbering. Is this going to have any further effect? What about wildlife? What about recreation?

The President's proposal, in my mind, begs the question. If he is really committed to a long-term solution to our timber supply, why has he consistently opposed more funding for our national forests.

Mr. Chairman, I want to emphasize again, this is one of the few Government programs which pays back more money than we put into it. And I am not talking about some ephemeral payback. You often hear people say if you spend more money for education, people will get a higher level of education, because they are higher educated they make more money and, therefore, they pay more taxes, and in the long run you get the money back. That may very well be true in theory. I am not prepared to argue that theory here. As far as reforestation is concerned, it is more than theory—it is fact. Additional money put into reforestation is more than that same additional money out in an increased allowable cut.

I have said it before and I will say it until the White House listens, we can increase the sustainable yield from our national forests if we make the commitment to full reforestation and timber stand improvement.

With adequate funding for the Forest Service, we can produce more timber while maintaining and improving our other forestry resources.

The timber industry knows this and the environmentalists know this. Cutting more timber under the Carter plan may produce some short-term benefits. Without a commitment to improving our forest resources, it is a policy of all take and no give. Without a commitment to full reforestation, it is no more than a hollow effort to solve a very real problem, and it sacrifices tomorrow's economic health for today's political gains.

I might close, Mr. Chairman by recalling what one of John McGuire's predecessors, Ed Cliff, said 10 years ago. He said then he was convinced that we could get one-third more cut, allowable cut, off of the then presently classified commercial forest lands if we made a commitment to full forest bedding.

We have not made that commitment for 10 years. I would like to say that this is just President Carter's shortcoming; but it is not. It has been a shortcoming of President Ford, President Nixon, and President Johnson. Ever since the Anderson-Mansfield Act of 1949, we have been promising that we are going to have full reforestation and we have never accomplished it, and I question how the President can ask for this increased cut, and especially ask for it in region VI, in Oregon and Washington, when we are now cutting what is said to be the allowable cut, and still ask nothing more for reforestation.

Senator MELCHER. I just agree with you completely on the need for reforestation. I just think we are grossly negligent with our national forests in not achieving that goal.

You mentioned the 1949 act, the Mansfield-Anderson Act. I do not know how many times it has been repeated in legislation between that year and—

Senator PACKWOOD. In 1949 we set as a goal 1965 for full reforestation. We have then upped it—obviously, we did not make it in 1964, the Resource Planning Act, we set the year 2000 and in the National Forest Management Act, we said 1985. That was the 1976 act.

John McGuire has testified before that if they could start this year with full funding, they could make it by 1985, but full funding this year is \$122 million and the President is fighting that. And if we do not start this year, we are not going to make it by 1985.

Our history of reforestation is replete with a broken promise.

Senator MELCHER. Were you consulted prior to this announcement?

Senator PACKWOOD. Not only was I not consulted, I was stunned by it when I read it because I could not make heads or tails out of how the President planned to do it, and I am no more out of the dark now than I was then.

Senator MELCHER. Well, I was reminded yesterday by my daughter that June 24—this is June 22—June 24, 10 years ago, I was elected to Congress in a special election. So I am going to have, in effect, a 10-year anniversary here in Congress, and I very naively thought at first—oh, right up until 1978, I very naively thought that perhaps the reason I never heard anything from the administration was because we had a Republican administration and I was a Democrat, and only in the House, and why should they talk to me? And now, after 2 years in the Senate and blessed with a Democratic administration, I find out that I am still not talked to. I am just always amazed how these things are hatched out and you read about it in the newspaper or see it on television news, without any forewarning or opportunity to discuss them in advance.

Senator PACKWOOD. It comes from the same mind that created the Department of Natural Resources.

Senator MELCHER. Yes. Possibly it has nothing to do with politics.

Senator PACKWOOD. I suppose that is true.

Senator MELCHER. Parties have nothing to do with it. I sometimes get the feeling that we in Congress are not managing properly in relation to our forest lands. I view the Constitution as saying Congress has a responsibility of managing public lands.

Perhaps we have delegated too much authority to the executive branch of Government. I do not know why we have to go through this eternal struggle from one administration to another, even if they change parties, with not only naive, but inane judgments—inane judgments made by people who apparently know nothing about how to manage national forests.

Senator PACKWOOD. I asked the Chief who is at the hearing today if he had been given any extra money or if anybody was asking for any extra money, and he said no.

Senator MELCHER. I know that is the case. We have searched vainly to get a little inkling that the administration wants to have a little extra dough to do some sensible things for the national forests or even to implement what the President's announcement said, and what Mr. Kahn has been saying publicly since then, too.

I am reminded that in the 1976 act, the target date of 1985 was my target date, an amendment I put on in the House. I am not even sure,

and I do not want to quarrel with the Chief on this, but I have my doubts whether even \$122 million this year and whatever it figures out next year and from there on to 1985 whether we would actually have completed reforestation by the 1985 date.

I think we need even more money than that. I do not know why we do not spend it.

If we had started 10 years ago, better yet, 1949, if we had started in 1949 with reforestation, proper timber management as we needed it, we would now have plenty of timber from the national forests to satisfy what Mr. Kahn is now saying we should do to fight inflation. I think we are going to have to be much more demanding here in Congress on this, and perhaps some of these judgments should be taken back away from the executive branch. They are amateur judgments, and amateur judgments are overriding professional management.

Senator PACKWOOD. We could still do what Ed Cliff said 10 years ago if we put the money into it, increase the allowable cut, and we can increase it in an environmentally safe and sound way, but I do not see it in this program.

Senator MELCHER. I do not either.

Thank you very much, Bob.

Senator PACKWOOD. Thank you, Mr. Chairman.

Senator MELCHER. We only have two witnesses other than Senator Packwood. We have Chief McGuire of the Forest Service, and we have Tom Lenard, economist, with the Council on Wage and Price Stability, I am going to ask the witnesses to appear jointly.

While we have not asked for other witnesses, the hearing record is open to receive prepared statements, and I have in front of me a statement by the Wilderness Society,¹ which will be made part of the record immediately following the statements and the dialog we have with Chief McGuire and Mr. Lenard.

Chief, would you please proceed.

STATEMENT OF JOHN R. MCGUIRE, CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Chief MCGUIRE. Thank you, Mr. Chairman.

The Department of Agriculture welcomes this opportunity to appear before you to discuss the President's direction regarding timber supply.

My testimony is fairly brief. I think I had better go through it all because it might answer some of your questions.

Mr. Kahn's statement of June 11 provides a broad outline of the underlying reasons for this direction and the implications of this limited change in policy toward increasing timber supplies and thus helping reduce inflation in wood prices. I would like to discuss briefly the process that the Forest Service is going to follow.

In his June 11 announcement, the President instructed the Secretaries of Agriculture and the Interior to increase timber supplies from Federal lands consistent with existing law and environmental considerations. This is to be done by a limited and temporary departure from the nondeclining even-flow policy.

¹ See p. 32 for the prepared statement of the Wilderness Society.

Present policy, established in law in 1976, for the national forest system by the National Forest Management Act basically limits each national forest timber sale and harvest in the first 10 years of the planning period to not more than the quantity that can be sustained at that same level in all future decades—this is the base harvest schedule. In other words, the planned level of harvest may increase in the future, but it must not decline.

The 1976 act also provides the Secretary of Agriculture authority to depart from this policy. It is this authority which the President has directed the Secretary of Agriculture to invoke where appropriate. Proposed rules to implement this and the other provisions of the act were published in the Federal Register last May 4. Included in these proposed rules is specific direction describing the process and conditions which must occur before departure from nondeclining flow will be examined as an alternative. A departure, as outlined in the President's direction, means setting a national forest's timber harvest—that is the allowable sale quantity—at a level higher than that which could be sustained in all future decades.

Implicit is the recognition that timber harvest may be temporarily reduced on that forest in the future to compensate. When and how much the reduction might be made can only be determined using detailed data for the individual national forest.

Senator MELCHER. Chief, excuse me for interrupting.

Chief McGUIRE. Sure.

Senator MELCHER. I have glanced through your testimony and I want to clear up one point. I do not want to have to be talking around in circles. We have read statements that this is illegal, and I want to establish that the proposal is not illegal.

Chief McGUIRE. That is correct, Mr. Chairman. The President did not direct us to do anything that is illegal.

Senator MELCHER. And what some people have forgotten to look at is all sections in the 1976 act.

Chief McGUIRE. Exactly.

Senator MELCHER. It is true, however, that not all of the regulations have been approved yet for the section that applies; is that true?

Chief McGUIRE. Right. The regulations are out in draft form, and the comment period will end on July 3, and the final regulations will be published later in July, hopefully.

Senator MELCHER. We can discuss the merits of the proposal in an objective or subjective or even an exact way if we want to, but I just want to make clear that it is not an illegal proposal.

Chief McGUIRE. That is correct, Mr. Chairman. It is not an illegal proposal.

Senator MELCHER. Thank you.

Chief McGUIRE. A departure, as outlined in the President's direction, means setting a national forest's timber harvests that is higher than could be sustained, as I said.

Implementing the President's decision will require that we first examine opportunities for including departure from even flow into the land management planning process required by the National Forest Management Act. We will also begin analyzing environmentally sound and cost effective possibilities for increasing near-term timber harvests on individual forests. I emphasize that these analyses—that

is, determination of the additional volumes of timber that will be harvested under departures from the nondeclining flow policy—can only be made on a forest-by-forest basis, and with full public participation as required by the act. These are the legal requirements of the process. Parallel with these analyses, a regional examination of timber demand will be made to aid us in establishing goals for individual national forests. The goals in turn may trigger the need for considering departures in the national forest plans. In general, this examination would involve those Western national forests that have large inventories of overmature timber where there is a high demand for timber.

The President's direction also bears directly on the 1980 Resources Planning Act assessment and program now in draft form and undergoing public review. The five program alternatives provide a range of timber supply goals. These goals were developed within the requirements of law ordinarily applicable to resource use and development for the National Forest System, including the principles of multiple use and sustained yield. As a general matter, this means limiting timber harvest to that which can be sustained in perpetuity. The timber goals in any one of the alternatives could be achieved through a variety of activities, one of which could be limited and temporary departure from nondeclining flow.

The RPA draft document also contains a number of program issues. One of these issues, entitled "Level of Production of Wood and Wood Products from National Forest System Lands," will be revised to examine the activities that will be necessary to fully comply with the President's direction.

Among the options being analyzed as a part of this issue is a departure from nondeclining flow. Results of this issue analysis will include the direction as issued by the President. These results will be reflected in the recommended program which is to be transmitted to Congress early next year.

Departure from nondeclining flow will not have an immediate impact on the availability of additional timber from the national forests except for the influence it may have on harvesting timber already under contract. Planning and preparation will be needed before additional timber will be available for sale. Initially, some time will be required for completing the regulations, the section 6 regulations establishing the land and resource management planning procedures. These are needed to establish the national direction for preparing national forest plans.

Then, we will need to complete resource inventories, analyses and the national forest plans. This would include an evaluation of environmental impacts and the results of the public involvement process. If the approved forest plans authorize departures—and such plans do require my approval—sale preparation and layout on the ground would then be completed.

I agree with the President's position that a limited and temporary departure from nondeclining flow can have a positive effect on timber prices and thus aid in controlling inflation.

I also believe that as long as departures from nondeclining flow are made through proper land management planning and in accordance with the National Forest Management Act procedures, the President's objective can be attained within the framework of the long-term, multiple-use, and sustained-yield objectives of the National Forest System.

This concludes my prepared remarks.

Senator MELCHER. Chief, what year do you think you could have some timber harvest? You said in those Western national forests that we have large inventories of overmature timber.

Chief McGUIRE. At our present rate of planning and sale preparations, at the very earliest it would probably be about 3 years from July, but we may be able to speed it up in a few forests and perhaps have some timber ready for sale as early as 2 years.

Senator MELCHER. 1981.

Chief McGUIRE. At the very earliest.

Senator MELCHER. At the very earliest. OK. Now, if you had the sales, it would not be harvested in 1981. It would not be harvested for about another year?

Chief McGUIRE. The sale contract ordinarily permits the purchaser 3 to 7 years to remove the timber. On a large sale, the typical purchaser takes the first year to build roads. He would get some timber perhaps in the first year.

Senator MELCHER. In 1982 at best and maybe 1983?

Chief McGUIRE. Very likely.

Senator MELCHER. Now, what impact will Mr. Kahn's announcement have on RPA program for timber in 1980?

Chief McGUIRE. As I—

Senator MELCHER. It is an overlapping question.

Chief McGUIRE. Yes. The main effect on the RPA program will be in the analysis of the issues of timber policy, as I mentioned in my testimony. And perhaps it will have some influence—undoubtedly will have some influence on the statement of policy that the President is required to provide to Congress when the RPA plans are submitted.

Senator MELCHER. Well, even your highest proposed option is not consistent with exceeding nondeclining even flow.

Chief McGUIRE. I do not think it is inconsistent. You see, the departure from nondeclining even flow pertains to individual forests, and the options in RPA talk about the whole system of national forests, all 154 of them. So within any one of the alternatives now undergoing review, we could provide for departures and still meet those particular targets.

Senator MELCHER. What bearing does RARE II have on all of this? You do not have any relief from objections, people who might disagree with the President's recommendations, do you?

Chief McGUIRE. Well, RARE II decisions have been made so that the areas, the roadless areas which we were staying out of until the completion of RARE II, are now largely available for other uses.

Senator MELCHER. Do you have any assurance from the court?

Chief McGUIRE. No, but we feel confident that we have complied with all the requirements of the National Environmental Policy Act. We have complied with the provisions of Judge Conti's order back in 1972, where in RARE I he found that we were not site-specific enough. We have done that in RARE II.

So I do not see litigation as a cause for further delay.

Senator MELCHER. You have not heard of any proposed litigation?

Chief McGUIRE. Not in the case of RARE II. We have had some requests from Congress for delay to allow time for committees to look into some of these things. But we have not had any information that would lead us to worry about delays because of litigation.

Senator MELCHER. Are you thinking of a massive lawsuit or have you heard any rumbling that the attempt to do something in some of these contested areas where there would be a suit?

Chief McGUIRE. There have been some individual areas where we have been challenged through our administrative appeal process, where we want to build roads and cut some timber, but that pertains only to individual projects and not to the RARE II aspect of the whole area.

Senator MELCHER. I had a strong feeling that some of the areas which are disagreed to by various local—I will say local organizations but, they might be chapters of a national group—but they are very serious about insisting that some areas go back into planning and be allowed another evaluation; that Congress pay some attention to it, and until Congress does want to block any Forest Service activity that would be inconsistent to maintaining and having wilderness problems, in their judgments.

Chief McGUIRE. Such groups have two avenues. They can use our administrative appeal process to force higher level consideration of whatever we are proposing to do. Or they can attempt to get their Congressmen to introduce legislation. And if we receive a letter from a committee chairman to delay while Congress considers the legislative proposal, typically, we have been delaying them. But there has not been too much of that.

Senator MELCHER. Is it possible under the 1980 RPA that OMB could say to the Forest Service to cut back sales in Montana by 200 million board feet but increase them in Oregon by 400 million board feet, to get the maximum cut and the maximum revenue with a minimum cost?

Chief McGUIRE. It is possible that the program finally recommended by the administration would be influenced by such recommendations. The final program recommended, of course, will be reviewed widely within the administration.

Senator MELCHER. When do you think that will be?

Chief McGUIRE. The recommended program is due at the beginning of next year. So we will be seeking reviews outside the Department this fall and early winter.

Senator MELCHER. How much influence will the desire have to avoid harvesting timber that will cost quite a bit for a thousand board feet, but spend the money in forests, for instance in Oregon, where the same amount of money will get you more revenue and more board feet of timber?

Chief McGUIRE. It has had quite a bit of influence on the decision reflected in the President's recent budget request. So I would think that situation will probably continue. It may also have a bearing on the kind of statement of policy that the President sends to Congress when he sends up the RPA program.

Senator MELCHER. What is the difference between regulation 1, between the President's sales and budget levels and possible sales up to the current allowable?

Chief McGUIRE. Well, the budget level for 1980 is \$11.7 million.

Senator MELCHER. I said "regulation 1," I meant region I. What is the difference between regions I and II, the plan for possible sales up to the current allowable?

Chief McGUIRE. Let me ask Mr. Gould, who is director of our timber management. In region I, which is Montana and northern Idaho, in 1980, Mr. Chairman, there is very little difference. The budget level would be \$1,190,000,000, and at the maximum level, it would be \$1.2 billion.

[Witness conferring privately with aides.]

Chief McGUIRE. The potential yield in region I is 2,180,000,000 board feet.

Senator MELCHER. What is the present sales?

Chief McGUIRE. 1.2 billion board feet.

Senator MELCHER. Then we are just at 50 percent, are we not? That is not anywhere near the national averages, as I understand the national average to be 70 percent.

Chief McGUIRE. In your region there has been access problems and RARE II. We have had to stay out of the roadless areas until we finished RARE II. Now that we have finished RARE II, our problem is getting into these areas that have been relatively inaccessible.

Senator MELCHER. Well, if RARE II is as rosy as you said it is, and hope it is, I guess, and I do not want to put words in your mouth, but hope and expect that it will be in terms of not being bothered by lawsuits, the real question is how much money you have available for roads.

Chief McGUIRE. Exactly, and time.

Senator MELCHER. Talk about the roads first.

Chief McGUIRE. The roads problem is one of the major problems in region I because we have not laid out the roads in past years while we were going through RARE II. We have also got a time problem. It takes time to lay out roads and estimate what dollars will be required to build them.

Senator MELCHER. Well, can you tell me how much in million board feet per year is access and how much of it is RARE II? Let us separate that out if we can.

Chief McGUIRE. Mr. Chairman, in region I, there was a total of 485 million board feet of sawtimber potential yield in the RARE II areas. Now with the completion of RARE II, 370 million of that has been cleared so that we can now make our plans to go in to tap that inventory.

Senator MELCHER. Then it is really a question of access.

Chief McGUIRE. Access is the big problem, and filling the pipelines. You see the typical sale preparation job takes 2, 3, or 4 years. Timber must be inventoried, appraised; roads must be laid out; costs must be estimated; timber must be advertised for a period of time and so forth. All of that takes time.

Senator MELCHER. Is there money in the budget for what you ought to be doing this year?

Chief McGUIRE. There is money in the budget for region I to offer sales of 1.2 billion.

Senator MELCHER. I understand that, but is there money in the budget for doing whatever you have to do but what you have been delayed in doing because of RARE II?

Chief McGUIRE. There may be a little extra money for advance sale preparation.

Senator MELCHER. Which would include laying out the roads?

Chief McGUIRE. Yes, doing work ahead of the sale for sales to be made in 1981 and 1982.

Senator MELCHER. If we look down the road 10 years, how much additional timber would be developed by getting the roads in?

Chief McGUIRE. Well, looking at the period 10 years ahead, you would come pretty close to 2.2 billion board feet. So, conceivably, we could get as much as another billion board feet annually by the end of the 10-year period.

Senator MELCHER. All right then, what is your best estimate on the actual cost of doing this?

Chief McGUIRE. Our best estimate, and this would vary, of course, with the cost of the road building primarily, it would run about \$90 per thousand, and that would be an additional billion feet, which would be \$90 million.

Senator MELCHER. Which would be spread over 10 years?

Chief McGUIRE. Right.

Senator MELCHER. Well, we are not talking about a great deal of money. I want to ask you one more question before we get to Mr. Lenard, and that is this: We do not have anything going, as far as I know, that makes any sense to me on getting to a proposal of harvesting this diseased timber. I am just turned off completely when I hear the Forest Service tell me this is where we have to use clearcuts in huge 1,000- or 2,000-acre sites.

I guess I am aware of the possibility of having clearcuts of that size because it is diseased and the act of 1976 would allow rather massive clearcutting because of that reason.

I am not advocating that. I feel very strongly that that just compounds all the problems we have in managing our national forests. I guess I am anxious for some pilot project to demonstrate that you can avoid the massive size clearcuts.

Do you have funds available to start this year on a couple pilot projects in at least two of our national forests in Montana or Idaho?

Chief McGUIRE. Mr. Chairman, the 1976 act, you will recall, provided for the establishment of a special salvage fund. We can sell the salvage sales and retain the money to prepare additional salvage sales. And this process is new and it has been provided with some seed money by the Appropriations Committee. It is working quite well, so we do have funds available to make some starts in some forests, as you suggest.

The problem of large clearcuts is particularly bothersome. We have been attempting to hold down the size of the area and spread the salvage over a period of years, so we do not have very large areas disturbed at once.

I do not recall the situation in Montana, but I do know that in Idaho, we studied a couple forests recently and the average clearcuts in these forests were less than 40 acres. There were a few that went up to 100 or 115 acres because of the insect problem.

Mr. Peterson reminds me that our research arm is also conducting a special program in Montana to see if we can achieve better utilization of these dead trees.

Senator MELCHER. Where are you getting the dead trees from; which forest?

Chief McGUIRE. Efforts have been centered on the Flathead and Bitterroot National Forests in Montana.

Senator MELCHER. Our biggest—I think I am correct, our greatest concentration of dead or dying timber is in Gallatin in Montana. And perhaps second to that would be the Beaverhead National Forest area.

I am especially anxious that we have something going this year that looks like we are trying to get on top of this without, you know, without the eternal eyesores that clearcuts cause, and I suspect a lot of erosion problems, too.

Chief McGUIRE. Mr. Chairman, we will look at both of those forests and see if we can make a beginning this year.

Senator MELCHER. I am grateful.

Chief McGUIRE. Some pilot programs are aimed at smaller clearcuts.

Senator MELCHER. I would very much appreciate that.

Now, Mr. Lenard, I have gone through your testimony, not as thoroughly perhaps as I should have. But I noticed some points in it. Are you sure of this—are you sure you want to give this testimony? I am giving you the option—

Mr. LENARD. I am not sure, if you put it that way.

Senator MELCHER [continuing]. Of weeding out some of it, if you want to. But you use your own best judgment.

STATEMENT OF THOMAS M. LENARD, SENIOR ECONOMIST, COUNCIL ON WAGE AND PRICE STABILITY

Mr. LENARD. Mr. Chairman, I would like to submit it for the record, and I will present it in somewhat abbreviated form right now.¹

Mr. Chairman, I am pleased to have this opportunity to present the Council's views on timber policy on Federal lands. That policy, as you know, has been modified by the President's June 11 directive to the Secretaries of Agriculture and Interior. Because timber is in short supply, we believe this is an important anti-inflationary action.

The President's decision does not imply that the Federal forests will be operated so as to maximize the timber supplies that can be produced from these lands. Other resource values will also be taken into account.

Clearly, questions involving the optimal utilization of Federal lands involve difficult tradeoffs. In the current inflationary environment, it will be especially important that these tradeoffs be carefully evaluated.

As you know, the Council has been seriously concerned about rising housing costs. And while many factors are responsible for large home price increases, rising material costs are a substantial element.

The surge in lumber and plywood prices that has occurred over the last several years is the result of the strong recovery of residential housing construction. Total housing starts increased dramatically from their recession low in early 1975, and maintained their high levels longer than expected.

In 1979, new housing construction will be below last year's level. This should ease some of the pressures on lumber and other building material prices.

¹ See p. 26 for the prepared statement of Mr. Lenard.

But, in addition to these shortrun fluctuations in the prices of softwood lumber and plywood resulting from cyclical changes in housing construction activity, we have also been concerned about a long-term pattern of price increases exceeding the general inflation by a significant amount since the late 1960's.

From 1969 to 1978, both years of strong demand, softwood lumber prices increased at an annual rate of 11 percent, as compared with less than 6 percent for the private nonfarm sector as a whole.

Over this period, the relative price of softwood lumber and other wood products used in housing increased by more than 50 percent, after adjustment for the general rate of inflation. An increase of this magnitude adds about 5 percent, or about \$3,000, to the cost of a new single-family house.

This price behavior is in sharp contrast to the earlier postwar period when lumber prices rose at virtually the same rate as other prices.

The secular rise in prices results from a sharp increase in demand, together with a sluggish expansion of supply. The entrance of the children of the postwar baby boom into age brackets with high rates of household formation greatly accelerated the demand for new homes and, thus, lumber. In addition, the shift in the composition of homebuilding toward single-family units that require about three times as much lumber as a unit in a multifamily housing complex has increased lumber demand.

On the supply side, upward pressure on lumber prices was substantially eased during the pre-1969 period by a dramatic increase in public harvests. Since that time, however, national forest harvests have declined somewhat.

The fact that standing timber prices and lumber prices have generally moved together, with increases in stumpage prices often exceeding increases in lumber prices, strongly suggests a scarcity of the basic raw material, timber.

Current projections indicate that pressures on lumber prices will continue, and perhaps get worse, into the 1980's, primarily as a result of increased housing demand due to the continued movement of the children of the postwar baby boom into the home-buying population. In addition, it is expected that the output of timber from significant portions of private lands in the West will decline over the next few decades.

Over the long term, the projected demand cannot be met by the supply of timber that will be forthcoming at current prices and under current policies. The President's action is intended to ease these pressures.

As you noted, a sustained increase in Federal timber sales over a decade or more would have a significant impact on lumber prices. An increase of 1 billion board feet in Federal sales would reduce standing timber prices by about 10 percent, and lumber prices by over 4 percent. This would decrease the price of a new single-family house by about 0.6 percent. This suggests that, if we can increase sales and harvests by a meaningful amount, we can substantially decrease the burden of rising housing costs on the American consumer.

We believe that an increase in Federal harvests will prove to be desirable. The national forests contain over 50 percent of the Nation's

stock of softwood timber, but contribute only about a quarter of the output.

The forest industry, on the other hand, with only 17 percent of the inventory, contributes about 35 percent of the output.

The national forests typically harvest between 1 and 1.5 percent of their inventory each year, while the forest industry harvests between 4 and 5 percent.

While it is clear that the public forest lands should not be operated so as to maximize returns from their timber supplies irrespective of other resource values, there is probably substantial room for improvement in putting these operations on a sounder economic footing, and thereby easing pressures on lumber prices.

The policies currently followed on public lands require that timber production be no greater than the long run sustainable yield.

This nondeclining even-flow requirement prevents the implementation of certain policies that could temporarily increase the harvests without reducing future harvests or the long run sustainable yield.

Largely because there is a substantial amount of old growth on public forest lands, it is possible, on at least some of them, to harvest additional volume for several decades without falling below the harvest dictated by the long run sustainable yield. Such a departure from nondeclining even-flow would clearly be efficient from an economic viewpoint.

The harvest of mature growth would be accelerated, thus making room for rapidly growing new stands. The current policy foregoes consumption of a surplus of timber beyond the volume necessary to maintain the sustained yield level of harvest.

An accelerated harvest program could concentrate on the most productive timberlands and make better use of existing road systems. Therefore, harvests might be accelerated in these areas without incurring major additional road building costs. Such a program would also help to stabilize production and employment and take advantage of existing processing capacity in some of the areas of the West that currently face declines in harvest from private lands.

Environmental advantages might be gained by avoiding the building of new roads in areas which are currently undeveloped and which, on average, are less productive timber areas. It would, however, be necessary to carefully examine environmental impacts of acceleration of harvests in accessible areas.

As Chief McGuire noted, the President's directive will not result in an immediate increase in Federal timber sales. But it is not necessary to increase sales immediately to affect prices, because it is expectations of future supply limitations that are driving up stumpage prices.

There is a substantial inventory of sold but uncut Federal timber which firms are harvesting at a reduced rate because of uncertainties concerning the availability of future supplies. Therefore, a change in policy which reduces these uncertainties can have an immediate impact on supplies and prices.

The President's decision is one of the few actions that can be taken at the Federal level to moderate rising housing costs. But, more generally, it reflects a determination to improve the efficiency and management of our Nation's Federal forest resources wherever possible, with full consideration of all the values these lands represent.

Mr. Chairman, that concludes my prepared statement.

Senator MELCHER. Mr. Lenard, you say that the national forests contain 50 percent of the Nation's stock softwood. Are you including in the national forests 50 percent of the Nation's softwood sawtimber land that is either in the National Wilderness Preservation System included in that system?

Mr. LENARD. Chief McGuire was saying this does not include the wilderness areas but it does include areas that are under study.

Senator MELCHER. That are under study?

Mr. LENARD. Yes.

Senator MELCHER. Which was announced by the President to be how many millions of acres?

Mr. LENARD. About 10 million.

Chief McGUIRE. About 10 million, Mr. Chairman, but not all of that is commercial forest land; roughly about 3.3 million acres within this further planning category under the RARE II decision.

Senator MELCHER. Is it your expectation, Mr. Lenard that part of the land the President has requested be studied for inclusion in the National Wilderness System will make the grade and be included in that?

Mr. LENARD. I am sure that will be the case.

Senator MELCHER. Then the statement about 50 percent of the Nation's stock of softwood in the national forests really does not indicate the President's intentions or desires, does it?

Mr. LENARD. Well, these figures might be modified, but as far as I am aware, these are the most recent numbers—published numbers that give a rough idea of the inventories and the outputs to the various classifications of land.

Senator MELCHER. What do you mean by published numbers?

Mr. LENARD. Well, these numbers are made public by the Foreign Service.

Senator MELCHER. The President is talking about what he intends to do, what he thinks the policy of the country, does that not have to take that into consideration, that the President is recommending that it be the policy of the country?

Mr. LENARD. You are talking about the allocation of study areas?

Senator MELCHER. Yes.

Mr. LENARD. I do not think anybody knows really. I do not know exactly how one would make a judgment as to what portion of those areas would—

Senator MELCHER. On this hand, the right hand, the President is saying this is what I think ought to be done, and on the left hand you have the President saying this is also what I think ought to be done, and neither hand knows what the other is doing.

Mr. LENARD. Well, as I understand it, it is customary to keep these numbers in timber supply base until such time as some final determination is made.

Senator MELCHER. Well, if you would apply your economic criteria, would not the national forest commercial volume drop appreciably?

Mr. LENARD. I am not sure I understand the question.

Senator MELCHER. Well, you are talking about how many roads would be built, and selecting harvest timber where there are already roads built. That is one thing. If you are going to follow that type of policy and avoid getting that timber that is mature or diseased or

already dead—will not your volume drop appreciably? You simply would not have much commercial timber available, would you?

Mr. LENARD. I do not think so. I think if you were to follow a policy of selling timber and harvesting timber where it is cost effective; in other words, where the cost of producing the timber is less than the value of the timber, I think you would probably get more than you are currently getting.

In other words, the current, if I understand the question correctly, the current 11.7 billion for 1978 is based on a determination under existing policy constraints as to what is cost effective. If you relax those constraints, more timber would be cost effective.

Senator MELCHER. It is a bit difficult for me to follow. First of all, the 11.7 you are suggesting is for 1980, is it not?

Mr. LENARD. That is right.

Senator MELCHER. It seems to me that unless you have a policy that the roads are an investment that has to be made to get at that timber that you are going to have a lot less timber available and you will have to change your whole estimate as to what commercial timber is available in the national forests.

Mr. LENARD. Well, some people suggest that road expenditures should be allocated over a larger amount of timber than they currently are, which may very well be correct. That would, presumably make more timber economical. In any event, it seems to me that the President's proposal can do nothing but make more timber commercially feasible.

Senator MELCHER. Let us back up. You made the announcement—you had the President make the announcement that you want to increase the harvest. Now, you have not asked for any money. You have not even mentioned that if you are going to do this it will take more money. How does that follow?

Mr. LENARD. Well, as I understand it, what needs to be done immediately is some additional planning. How much money that takes, I am sure the Chief is more qualified to say than I am. As far as actual preparation of new sales coming as a result of this change in policy, I think that would be relevant for the budgets after the 1980 budget.

Senator MELCHER. Well, returning to your statement, that the national forests contain 50 percent of the Nation's softwood sawtimber; if you cut down with your economic test, then the allowable cut will drop in regions I and II, and other places, and that readjusts the commercial timber that is available for softwood.

Mr. LENARD. I do not think that anything I am saying suggests that the allowable cut would drop in regions I and II.

Senator MELCHER. Well, it seems to me that your economic test would cause it to drop. It seems that way to me.

You are saying that you are going to ease the pressure on lumber prices; what year are you going to ease them in under this announcement?

Mr. LENARD. Well, I think it depends on how quickly the industry that has the timber under contract cares. I believe that this is a credible policy and that, in fact, more timber will be coming on board in a couple of years. If they come to believe that more timber will be coming on board, then I think they will start cutting their current inventory at an increased rate and you will have some effect from that. Obviously, it will take several years to have the full effect of reducing timber by 10 percent.

Senator MELCHER. How many years would it have the effect of reducing timber by 10 percent?

Mr. LENARD. How many years would it take? It depends on how rapidly the plan can be implemented.

Senator MELCHER. What is your best judgment?

Mr. LENARD. Well, I am not responsible for the planning activities, but I think we are talking about a relatively small number of forests that would be prime candidates for evaluation of the opportunities to depart from nondeclining, even flow. We are talking about maybe 20 to 30 forests. And I would hope we would be able to complete some of those relatively shortly and maybe all of them within 3 to 5 or 7 years.

Senator MELCHER. Then it would be 5 or 7 years before the impact of this 10-percent decrease would be felt.

Mr. LENARD. It might be 3 to 7 years before the full impact is felt, but some impact would be felt earlier.

Senator MELCHER. Do you think anything would be felt in 1979?

Mr. LENARD. Well, it really depends, and I have not talked to any industry people about it, but I think it depends really on whether they believe that, in fact, more timber will be forthcoming on the market within the next couple of years.

Senator MELCHER. There could be something in 1979, 1980, and 1981? Do you think as much as 2 percent in 1980?

Mr. LENARD. Two percent on the price?

Senator MELCHER. Price of timber.

Mr. LENARD. I would not be surprised, but I could not say conclusively.

Senator MELCHER. You would not be surprised it could well happen?

Mr. LENARD. Yes.

Senator MELCHER. Now, if it were 2 percent, how would that relate to the costs of building a home?

Mr. LENARD. You would have to factor all of those figures down by one-fifth, so it would probably be about one-tenth of 1 percent.

Senator MELCHER. One-tenth of 1 percent?

Mr. LENARD. Yes; if you had a 2-percent impact on stumpage prices and proportionately lower impact on lumber prices.

Senator MELCHER. We really are not talking about very much then, are we?

Mr. LENARD. Well, you know, if you look at this in the context of the CPI, there are very few individual actions that the Government can take in any area that will have a major impact, but I would suspect that among the actions that the Government could take in any area, this would be one of the larger ones.

Senator MELCHER. You have told us that the sustained yield acts as a ceiling but not a floor.

Mr. LENARD. Perhaps I can add to this. Talking about the 10 percent, 4 percent, six-tenths of a percent figures, we are talking about 1 billion board feet. Secretary Bergland mentioned, in the press briefing, the number 1 to 3 billion.

Senator MELCHER. By what year?

Mr. LENARD. Presumably the same years would apply.

Senator MELCHER. 1980?

Mr. LENARD. Not 3 billion more by 1980.

Senator MELCHER. One billion by 1980?

Mr. LENARD. If you got a billion by 1980, you would get at least 10 percent, and if there are expectations for more, you get more than that.

Senator MELCHER. Well, you do not anticipate though that there would be any modifications in the budget request for 1980?

Mr. LENARD. Not that I am aware of.

Senator MELCHER. I doubt whether you ever get anything that approaches a billion in 1980 without increasing the budget request. I do not think you can separate the two. If you want more, you have to admit you are going to have to spend a little more.

Mr. LENARD. This policy is supposed to put into effect an orderly planning process, which presumably will be started in 1980. I would suspect that subsequent budgets would take that into account.

Senator MELCHER. Well, going back to the sustained yield in your statement, a ceiling, not a floor, the sustained yield level right now is 16 billion board feet. The budget figure is down to 11.7 billion board feet for 1980, which is a drop from this current fiscal year of 700 million. Is it not true that the budget for roads and budget for sales and budget for reforestation is the real ceiling? What are we talking about? The ceiling for sustained yield is 16 billion board feet. That is 4.3 billion board feet more than is in the budget—proposed in the budget. Is not the true ceiling the budget itself, how much you are asking for in these categories?

Mr. LENARD. Yes; I guess that is true, obviously for the coming year.

Senator MELCHER. If you want to increase that ceiling—I asked before if you want to increase that ceiling—are you not going to have to admit that you are going to have to increase the budget?

Mr. LENARD. I agree, but not necessarily in 1980.

Senator MELCHER. You want to get closer to the ceiling of the sustained yield. It seems like one goes with the other. I do not see how you separate them.

Returning to what Federal Government can do, advise me of this: What about exports? Cannot the Federal Government do something about exports? Do you not have enough authority?

Mr. LENARD. Well, I do not know what the authority is. I think it has generally been the position of this administration to eliminate rather than erect barriers to free international trade. So I do not think that putting on export controls would be consistent with the philosophy of the administration. In addition, I doubt they would really be very effective in terms of our total timber supply. I suspect that if we export less, Canada would export more, and export less to us, and our total supplies would probably remain about the same.

Senator MELCHER. Well, exports are about 10 percent of the harvest.

Mr. LENARD. You know, we are basically a net importer of lumber. Our imports from Canada are very helpful, especially in times of high demand in alleviating price pressures. I think if we exported—

Senator MELCHER. Wait a minute, you are begging the point. If you are trying to tell us that what we get from Canada has some relationship to what we export to another—

Mr. LENARD. Yes, I believe that is true.

Senator MELCHER. Why?

Mr. LENARD. I believe we have a North American market, that if we decided to export less to Japan, that slack would be taken up by greater exports from Canada and we would get less here. It is not clear at all that total supplies available for domestic consumption would be increased.

Senator MELCHER. Are you of the opinion, Mr. Lenard, that one triggers the other; that if we decrease our exports that that triggers the additional export, or triggers a decrease in imports from Canada?

Mr. LENARD. Yes, you know, if you are just stopping one aspect of international trade.

Senator MELCHER. What are we importing from Canada? What kind of timber are we importing from Canada?

Mr. LENARD. We are importing lumber.

Senator MELCHER. Plywood?

Mr. LENARD. Plywood too.

Senator MELCHER. And pulpwood?

Mr. LENARD. I suspect so. I have never looked at the pulpwood situation.

Chief McGUIRE. Some pulpwood, but mostly newsprint and paper.

Senator MELCHER. We are importing from Canada. What are we exporting to Japan? You brought it up. What are we exporting to Japan, pulpwood?

Mr. LENARD. And logs.

Senator MELCHER. Of greater dimension than would ordinarily go in pulpwood?

Mr. LENARD. A greater dimension? I do not know what the relations are.

Senator MELCHER. What I am getting at is that I do not think that one follows the other or one triggers the other as you have just told us.

The logs go out; we get some pulpwood back—logs go to Japan and we get pulpwood from Canada. Does that mean that instead of buying logs from the United States that Japan will be looking for pulpwood from Canada?

Mr. LENARD. I think lumber or logs from Canada.

Senator MELCHER. I just find it very difficult to pursue or to follow and accept your logic that you cannot do anything, first of all, at the the Federal level; and, second, if you even look at the reduction of exports from the United States that that would automatically trigger a decrease in available imports from Canada for our paper industry. Surely there is one thing that we could do in the United States to decrease inflation—it would probably start here in Washington and that is to use less paper. There is a great feeling throughout the country that if we had less paper flowing out of the Nation's Capital, it would be a great stroke of business and help stabilize our inflation rate.

Mr. LENARD. We are all in favor of that.

Senator MELCHER. I am glad to hear that.

Now, to pursue your logic, if we curb exports, will it reduce Canadian imports then? Why could we not accomplish that by increasing national forest timber to decrease Canadian imports? Would that not—

Mr. LENARD. Well, increasing national forest output by itself would have some negative effect on Canadian imports.

Senator MELCHER. Would you recommend to the President that we get rid of some of this diseased timber which might make pulp? Would that make pulp?

Chief McGUIRE. Yes, it would.

Senator MELCHER. Would you recommend to the President then that we increase this harvesting of diseased timber? I think maybe some people think this is sort of a benign disease, it localizes and stabilizes and that is the end of it. It is far from that. It is an ever-spreading disease. It is a slowly contagious type of operation. It is like an epidemic, a fast spreading epidemic. It is like a very slow cancer growth. It does not remain one size. A 50,000 acre size disease, say in Gallatin, is going to be 60,000; and another year after that it is going to be 75,000. It is going to continue to get larger.

Would you recommend to the President that he pursue a policy of getting that diseased timber to make up for some of the stuff we are not getting out of California? They are coming up to Montana looking for small diameter stuff to replace the redwood supplies that are no longer available.

Mr. LENARD. We have not looked at this particular problem. I think we would look at it again in terms of the costs of getting the timber as opposed to the value of it. Clearly if the existence of this diseased timber presented a hazard to other timber that, obviously, should be taken into account.

Senator MELCHER. Chief, did you not submit some material from the Forest Service 1 year ago when the President asked the Council on Wage and Price Stability and the Forest Service to do a study of timber supply and inflation, did you not provide some material for that?

Chief McGUIRE. Yes, we did, Mr. Chairman. The result of the President's direction last year, a task force was set up, chaired by the Agriculture Department and we provided to the Agriculture representative various analyses of possibilities in the national forests and in State and private forests.

Senator MELCHER. Can you provide us with the Forest Service response to the President's request? We would like to contrast it with the final product.

Chief McGUIRE. We can provide the material. We can submit it.

Senator MELCHER. Did you have any role in helping to draft that Kahn proposal while submitting that material?

Chief McGUIRE. I had an opportunity to comment on the wording of Mr. Kahn's statement a few days before it was delivered.

Senator MELCHER. Did you ever advise the White House staff that it would be advisable to exceed the policy of even flow?

Chief McGUIRE. No, we did not make a Forest Service recommendation, but we did attempt to analyze this as one alternative of many that were considered last year. This is one of the ways of going to get additional timber. We also pointed out the possibility of coming closer to the potential yield you already mentioned. We looked at what might be done to improve utilization of trees in the woods and the log in the mill. And we looked into some of the possibilities of using substitute materials, such as panel board in lieu of 2 by 4's.

Senator MELCHER. Mr. Lenard, I understand the recommendation of the Forest Service with respect to timber supply and inflation was very modest—very, very modest. Why were none of those recommen-

dations adopted as part of the Kahn statement? You know, Mr. Kahn came to the conclusion that each additional billion board feet of timber harvested would reduce inflation on timber by 10 percent.

Mr. LENARD. Well, I guess it was our view of the three alternatives that were considered: One, increasing the public harvest within the nondeclining even flow constraint; two, increasing the public harvest by departing from that constraint; and three, increasing the various programs directed at the private sector, that the one that was best from the point of view of having a significant impact on the timber supply in an economically sound way was the one that was chosen.

Senator MELCHER. The Forest Service recommendation really showed that available timber supply would really have very little effect on inflation, very modest. I do not think any of them were adopted as part of the Kahn statement.

Mr. LENARD. I am not sure what the final recommendations of the Forest Service were.

Chief McGUIRE. There were no recommendations per se, Mr. Chairman, what we were asked to do was analyze the possibilities and we provided these analyses. And the task force involved the President's Economic Adviser, the Interior Department, and so on. They got together and prepared a report for the White House, in which the Forest Service was not involved. They might have had some recommendations, although I think it was primarily analysis of alternatives.

Senator MELCHER. Well in this analysis of alternatives, the result of it was a statement by Mr. Kahn that it would reduce inflation on timber by 10 percent.

How did Mr. Kahn reach that conclusion on each additional billion board feet? Can you tell us? How does he come up with 10 percent per billion board feet additional?

Mr. LENARD. This was the result of an analysis that we contracted for about a year ago, done by Data Resources Inc., an economic consulting firm that has a lumber model. We felt it was important to get a reliable figure of what the price impact of timber supply increases would be and we contracted with them for that purpose. This is the result of their analysis.

Senator MELCHER. Who did you contact?

Mr. LENARD. Data Resources Inc.

Senator MELCHER. Data Resources Inc.

I do not know what you spent on that study with Data Resources Inc., but there are 22,000 employees in the Forest Service. Could they not come up with something acceptable to the Council on this question?

Mr. LENARD. I am not sure that an attempt was made to do that. I suspect that given the fact we only paid—I may be wrong on this—\$3,000, or something like that for the study, I tend to suspect that it might have cost more to have the Forest Service do it.

Senator MELCHER. Well, I do not know what Data Resources Inc. produces for \$3,000 or even double that amount, but I suspect you get about as much as you pay for.

I have some additional questions for both you, Chief and you, Mr. Lenard, that I would like to submit for further answers, and have them made part of the record, if you will oblige us that way.¹

¹ See p. 29 for questions asked Chief McGuire and his answers thereto, and p. 31 for the questions asked Mr. Lenard and his answers thereto.

Chief McGUIRE. I will be happy to do that.

Mr. LENARD. Likewise.

Senator MELCHER. The hearing record will remain open for another 10 days and anyone who cares to may submit a statement for the record. I have already mentioned the Wilderness Society's statement that was submitted for the record. Any other statements will be accepted.

The subcommittee is adjourned.

[Whereupon, at 11:50 a.m., the subcommittee adjourned, subject to call of the Chair.]

APPENDIX

STATEMENT OF HON. BOB PACKWOOD, A U.S. SENATOR FROM OREGON

Mr. Chairman, as you know, the President's new policy to increase timber harvests on the National Forests would have its greatest impact on the Pacific Northwest. Much of this increase would come from my home State of Oregon.

Forests are the center of life in Oregon. They are the mainstay of our economy, providing jobs, directly and indirectly, for the majority of our citizens. We are proud of our forests. They provide the setting for the unique quality of life Oregon is known for nationwide.

The National Forests make up a large part of Oregon's forest lands. So it is no surprise that we take a very thorough look at any proposals which could have pronounced and far-reaching effects on these lands.

The President's plan is to attack the inflation of housing costs by increasing sales of timber from the National Forests. While this may prove to have merit, many questions need to be answered.

I'm concerned about the plan's long-term effect on timber supplies. The immediate benefits of an increased timber supply to the region's economy are clear. We are now harvesting trees at the limit. The Forest Service projects that if current policies on federal, state, and private lands are continued, the region will face an 18% reduction in timber supplies by the year 2000.

The President's plan addresses this short-term timber supply problem, but it has a critical flaw. It would increase timber harvests, but it does nothing to increase the long-term productivity of our National Forests. Thus, we could be facing an even more significant shortage of timber in the future, along with the inflationary problems it would bring. A boom could be followed by a bust.

I'm also concerned about the environmental impact of this plan. How much will other forest values have to be sacrificed? What effect will it have on our salmon runs? On our recreational resources? On wildlife?

The President's proposal really begs the question: If he is really committed to a long-term solution to our timber supply and inflation problems, why has he consistently opposed more funding for our National Forests?

I've said it before and I'll keep saying it until the White House listens: We can increase the sustainable yield from our National Forests if we make the commitment to full reforestation and timber stand improvement. With adequate funding for the Forest Service, we can produce more timber while maintaining and improving other forest resources so important to the Northwest. The timber industry knows this, and so do environmentalists.

Cutting more timber under the Carter plan may produce some short-term benefits. But without a commitment to improving our forest resources, it is a policy of all take and no give. Without a commitment to full reforestation, it is no more than a hollow effort to solve a very real problem, one that sacrifices tomorrow's economic health for today's political gain.

STATEMENT OF THOMAS M. LENARD, SENIOR ECONOMIST, COUNCIL ON WAGE AND PRICE STABILITY

Mr. Chairman and members of the Subcommittee. I am pleased to have this opportunity to present the Council's views on timber policy on Federal lands. That policy has been modified by the President's June 11 directive to the Secretaries of Agriculture and Interior to take steps, consistent with existing law, to increase timber supplies from National Forest and Bureau of Land Management lands through a departure from the current nondeclining even-flow policy. Because timber is in short supply, this is an important anti-inflationary action.

The President's directive provides for an orderly evaluation and decision process; land management plans on selected forests are to be updated as rapidly as possible, taking into account all relevant economic and environmental considerations.

This decision does not imply that the Federal forests will be operated so as to maximize the timber supplies that can be produced from these lands. Other resource values will also be taken into account. Clearly, questions concerning the optimal utilization of Federal lands involve difficult tradeoffs. In the current inflationary environment, it is especially important that these tradeoffs be carefully evaluated.

As you know, the Council has been seriously concerned about rising housing costs. While many factors are responsible for large home price increases, rising materials costs are a substantial element. Over the last three years, prices of softwood lumber and plywood—products used extensively in new home construction—increased at average annual rates of 16 and 10 percent, respectively. Price increases of this magnitude for a major building material significantly add to the spiraling cost of new housing.

The surge in lumber and plywood prices that has occurred over the last several years is the result of the strong recovery of residential housing construction. Total housing starts increased dramatically from their recession low in early 1975, and maintained their high levels longer than expected. Since homebuilding accounts for about 40 percent of the consumption of softwood timber products, the level and composition of new home construction is the single most important influence on the price of lumber products.

In 1979, new housing construction will be below last year's level. This should ease pressures on lumber and other building-material prices.

But, in addition to these short run fluctuations in the prices of softwood lumber and plywood resulting from cyclical changes in housing construction activity, there has also been a long term pattern of price increases exceeding the general inflation by a significant amount since the late 1960s. From 1969 to 1978 (both years of strong demand) softwood lumber prices increased at an annual rate of 11.0 percent, compared with almost 6.0 percent for the private nonfarm sector as a whole. Over this period, the relative price of softwood lumber and other wood products used in housing increased by more than 50 percent, after adjustment for the general rate of inflation. An increase of this magnitude adds about 5 percent, or over \$3,000, to the cost of a new single family house. (Lumber accounts for about 15 percent of the final price of a new single family home.) This price behavior is in sharp contrast to the earlier post-war period when lumber prices rose at virtually the same rate as other prices.

The secular rise in prices results from a sharp increase in demand, together with a sluggish expansion of supply. The entrance of the children of the post-war baby boom into age brackets with high rates of household formation greatly accelerated the demand for new homes and, thus, lumber. In addition, the shift in the composition of homebuilding toward single family units require about three times as much lumber as a unit in a multi-family housing complex has increased lumber demand.

On the supply side, upward pressure on lumber prices was substantially eased during the pre-1969 period by a dramatic increase in public harvests. Since that time, however, National Forest harvests have declined somewhat. The variations in public harvests have been partially offset by changes in private harvests, as rapid price increases since 1969 strengthened incentives to harvest at a more rapid rate.

The fact that standing timber prices and lumber prices have generally moved together, with increases in stumpage prices often exceeding increases in lumber prices, strongly suggests a scarcity of the basic raw material, timber. If the cause of lumber price increases was a lack of sawmill capacity, or efforts of producers to hold back supplies, we would expect that the increase in lumber prices would outpace the increase in standing timber prices.

Current projections indicate that pressures on lumber prices will continue, and perhaps worsen, into the 1980s, primarily as a result of increased housing demand due to the continued movement of the children of the post-war baby boom into the home buying population. In addition, it is expected that the output of timber from significant portions of private lands in the West will decline over the next few decades.

Over the long term, the projected demand cannot be met by the supply of timber that will be forthcoming at current relative prices and under current management policies. The President's action is intended to ease these pressures.

A sustained increase in Federal timber sales (over a decade or more) would have a significant impact on lumber prices. An increase of a billion board feet in Federal

sales would reduce standing timber prices by about 10 percent, and lumber prices by over 4 percent. This would decrease the price of a new single family house by about 0.6 percent. This suggests that, if we can increase sales and harvests by a meaningful amount, we can substantially decrease the burden of rising housing costs on the American consumer.

We believe that an increase in Federal harvests will prove to be desirable. The National Forests contain over 50 percent of the nation's stock of softwood saw-timber, but contribute only about 27 percent of the output. The forest industry, on the other hand, with only 17 percent of the inventory, contributes about 35 percent of the output. The National Forests typically harvest between 1 and 1.5 percent of their inventory each year, while the forest industry harvests between 4 and 5 percent. While it is clear that the public forest lands should not be operated so as to maximize returns from their timber supplies irrespective of other resource values, there is probably substantial room for improvement in putting these operations on a sounder economic footing, and thereby easing pressures on lumber prices.

The policies currently followed on public lands require that timber production be no greater than the long run sustainable yield. The long run sustainable yield acts as a ceiling rather than a floor. While increases in the output of the National Forests within this nondeclining even-flow constraint may be possible, several factors should be borne in mind. In the most productive regions (for example, the Pacific Northwest), actual timber sales are already close to or at the maximum allowed levels and competition for available supplies is fierce. Other areas, which are either less productive or more expensive to harvest, may require a subsidy or a higher price to be profitable.

The policy requirement that there never be a decline in the timber harvest (i.e., the nondeclining even-flow requirement) prevents the implementation of certain policies that could temporarily increase the harvest without reducing future harvests or the long run sustainable yield. Largely because there is a substantial amount of old growth on public forest lands, it is possible, on at least some of them, to harvest additional volume for several decades without falling below the harvest dictated by the long run sustainable yield consistent with present planned management practices. Such a departure from nondeclining even-flow would clearly be efficient from an economic viewpoint. The harvest of mature growth would be accelerated, thus making room for rapidly growing new stands. The current policy foregoes consumption of a surplus of timber beyond the volume necessary to maintain the sustained yield level of harvest.

An accelerated harvest program could concentrate on the most productive timberlands and make better use of existing road systems. Therefore, harvests might be accelerated in these areas without incurring major additional road building costs. Such a program would also help to stabilize production and employment and take advantage of existing processing capacity in some of the areas of the West that currently face declines in harvest from private lands. Environmental advantages might be gained by avoiding the building of new roads in areas which are currently undeveloped and which, on average, are less productive timber areas. It would, however, be necessary to carefully examine environmental impacts of acceleration of harvests in accessible areas.

The President's directive will not result in an immediate increase in Federal timber sales. But it is not necessary to increase sales immediately to affect prices, because it is expectations of future supply limitations that are driving up stumpage prices. There is a substantial inventory of sold but uncut Federal timber which firms are harvesting at a reduced rate because of uncertainties concerning the availability of future supplies. Therefore, a change in policy which reduces these uncertainties can have an immediate impact on supplies and prices.

The President's decision is one of the few actions that can be taken at the Federal level to moderate rising housing costs. But, more generally, it reflects a determination to improve the efficiency and management of our nation's Federal forest resources wherever possible, with full consideration of all the values these lands represent.

STATEMENT OF BROCK EVANS, DIRECTOR, SIERRA CLUB

The Sierra Club is deeply disturbed about the President's recent decision, announced by Mr. Alfred Kahn on June 11, to increase timber supplies by departing from even-flow sustained yield timber management. Even though the decision is couched in language which seems to require conformance with existing law and environmental principles, all the circumstances surrounding it seem very much reminiscent of President Nixon's ill-fated attempts to do the same thing during his term in office.

The Sierra Club believes that the effects of the President's decision, if fully implemented, could be potentially devastating on many of our national forests, particularly those in Washington, Oregon, northern California, northern Idaho, and western Montana. This is because the clear intent of his decision is to accelerate the liquidation of the remaining stands of old growth timber, at such a pace, and in such a manner, that the maximum volume of timber will be quickly produced, all for the alleged purpose of "reducing housing costs."

The national forests in these states are the ones which have the largest remaining stands of old growth timber. At the same time, it is the same national forests that have much of the finest unprotected wilderness, wildlife habitat, and pure watersheds remaining on our national forest system.

If the President's decision is implemented, and departure from nondeclining yield becomes a reality in these or other forests, the practical result will be as we see it an unwise acceleration of roading and logging into areas with high values for other resources. A great deal of the remaining uncut stands of old timber are on the steepest valleys, at the highest altitudes, where the soils are poorest. The environmental costs of extracting this timber, in the name of "fighting inflation" will be overwhelming, and permanent.

It is for these reasons that the Sierra Club will resist efforts to implement the President's decision; the environmental consequences are simply too great. Further, because of the fact that the Forest Service estimates it will take at least two or three years before any extra timber comes on the market because of the decision, and because the final effect will be to reduce the cost of a finished house by only 0.05%, we fail to see the real value in curbing the rate of inflation.

Certain segments of the timber industry are maintaining that such a departure from non-declining yield policies is necessary in order for timber in the federal forests to take up the slack created because private industries in the states named above have overcut their own lands. We emphatically reject this reasoning. We insist that the wilderness, wildlife, scenery, watersheds, and recreational values not be sacrificed because the private timber companies in the Pacific Northwest did not find it profitable to follow a sustained yield policy themselves. Now they are asking that the national forests overcut their own lands, the same as they did. Perhaps what is truly in order here is comprehensive national legislation requiring private timber owners across the country to follow meaningful sustained yield policies, or have their lands subject to federal acquisition if they do not.

The Sierra Club has long advocated a concentration of federal timber investments onto the more productive lands, a policy which might even produce some increases in the present allowable cut. We have always felt that this policy would be the best way of meeting the many resource demands on our national forests. We view the President's decision as a step backwards and in the other direction, in the direction of increased roading and cutting in environmentally sensitive lands which cannot sustain it.

Thank you.

[Questions asked by Senator Melcher of John McGuire, Chief, U.S. Forest Service, and his responses thereto:]

Question. You have always been a strong supporter of the concept of evenflow nondeclining yield, isn't that correct?

Yet certain studies by a Dr. Buter in Oregon indicates that the best way to soften the blow of reduced timber supplies that we see coming in Oregon is for the Forest Service to accelerate cutting in that State.

Another researcher named Adams at Oregon State University concluded in 1976 that if harvest in the Douglas-fir region were increased to hold timber price trends to their traditional rate of increase, then stumpage prices would increase but at a reduced rate; the loss of Northwest markets would be slowed; and import increases would be slowed down.

Chief, is evenflow nondeclining yield good policy for the Pacific Northwest economy, or isn't it?

Answer. The Forest Service has long been a strong supporter of the evenflow concept. Since 1963, we have had a Secretary's Regulation that provided for an even-flow of National Forest timber. However, I did point out during the Senate markup of S. 3091, which later became the National Forest Management Act, the need for some flexibility in the policy to provide for overall multiple use objectives.

In the long run nondeclining yield is the best policy for the Pacific Northwest economy and for other regions of the country. The history of the timber industry in this country has been one of movement from one section of the country to another.

Due to problems between existing mill capacity and the local supply of timber, departures from nondeclining yield may be good policy in the short-run. However, the policy does need further study on a comprehensive basis. Dr. Buter's study was technically correct, but he combined the National Forests to determine the allowable sale quantity. We can't combine National Forests for this purpose, nor do we have assurance State or private ownerships will furnish supplies at the levels forecast in the Study. In addition, the Study did not examine the effect of increased harvesting on to protect and enhance these values.

Question. In my opening statement, I am afraid I drew some very harsh conclusions about Mr. Kahn's proposal. But, I also said I hoped I was wrong. I would be pleased if both of you would take this opportunity to point out any fallacies in my statement, beginning with you Mr. Lenard.

Answer. None.

Question. If you accelerate harvesting in the Pacific Northwest, will you have to reduce harvesting in Montana, Arkansas, Georgia, and other States in order to balance things out somewhat?

Answer. Only if additional funding is not available. If additional funding is available, thus, current level of sale offering could be maintained as increased in the balance of the country.

Question. Can you provide for the record those National Forests in each State where current growth is in excess of removals, and where removals are in excess of growth? We'd like you to show totals for each State if possible.

Again, on a State-by-State basis, we'd like you to show annual mortality by National Forest. This is so we can get an idea of where the losses are as a result of not having the roads in place to get the timber.

Answer. We have here the information you have requested, as of January 1977, on a State-by-State basis. We would not be able to furnish comparable information on a Forest-by-Forest basis as our National Forest inventories were made at various points in time and under varying units of measure and utilization assumption.

NET ANNUAL GROWTH, ANNUAL REMOVALS, AND ANNUAL MORTALITY OF SOFTWOOD AND HARDWOOD STOCK ON COMMERCIAL FOREST LANDS IN THE NATIONAL FOREST SYSTEM 1976 BY STATE

[In thousand cubic feet]

State	Net growth	Removals	Mortality
Alabama	36,297	16,456	3,331
Alaska	22,642	99,130	148,335
Arizona	55,029	53,134	7,773
Arkansas	109,047	54,989	9,514
California	379,600	364,974	83,100
Colorado	162,401	35,542	57,243
Florida	48,372	30,355	4,133
Georgia	55,797	12,273	9,029
Idaho	382,599	202,710	81,565
Illinois	6,266	1,375	803
Indiana	4,981	1,085	447
Kentucky	27,172	9,225	2,823
Louisiana	40,437	44,661	3,278
Maine	1,893	1,411	244
Michigan	104,138	31,668	34,566
Minnesota	50,903	16,423	14,272
Mississippi	78,500	30,800	9,100
Missouri	26,129	9,682	1,661
Montana	321,834	104,869	68,963
Nebraska	617	0	35
Nevada	1,019	75	627
New Hampshire	29,823	9,154	1,723
New Mexico	45,311	25,014	11,627
North Carolina	60,931	10,593	11,631
Ohio	4,728	845	645
Oklahoma	9,800	7,611	300
Oregon	395,400	638,527	234,700
Utah	40,352	15,283	3,264
Pennsylvania	48,235	25,410	7,081
South Carolina	31,139	15,214	3,491
South Dakota	43,946	13,146	3,186
Tennessee	44,205	13,575	2,734
Texas	42,124	10,844	27,626
Utah	2,456	1,426	763
Vermont	55,405	8,842	8,171
Virginia	158,100	240,638	98,600
Washington	60,834	2,584	6,575
West Virginia	59,257	22,090	5,453
Wisconsin	68,577	17,795	32,955
Wyoming			
Total	3,116,303	2,219,428	1,001,344

[Questions asked by Senator Melcher of Thomas Lenard, Council on Wage and Price Stability, and his answers thereto:]

Question. The President asked that the timber and inflation report be submitted to him within 30 days. Since Mr. Kahn's announcement came more than a year after the request, I assume that there was a lot of agonizing about the final product by the White House. Could you describe for us how the decision announced June 11 was arrived at?

Answer. The decision announced on June 11 was made by the President after receiving the views of the agencies involved in the timber inflation study—the Domestic Policy Staff, the Council on Wage and Price Stability, the Council of Economic Advisors, the Council on Environmental Quality, the Department of Agriculture and the Department of Interior. Since the subject of timber policy on Federal lands is difficult and controversial, and since related issues such as RARE II and the new Forest Service planning regulations were being studied simultaneously, more than the originally allotted 30 days were required to complete the study.

Question. The inferences drawn from Mr. Kahn's statement are that the accelerated cutting will generally come from National Forests west of the Cascade Mountains. Where are they, and how much additional timber does the Council expect to be cut from each one? On a forest-by-forest basis, or even in general, how much extra timber are we talking about over the next three years?

Answer. The President's directive sets in motion an orderly evaluation and decision-making process to be completed over the next several years to determine where, and by how much, a departure from nondeclining even-flow is desirable. Thus, at this time it is impossible to give a precise answer to this question. However, we do expect, based on the inventories of surplus mature timber, that much of the extra timber will come from the Pacific States. But there will undoubtedly be forests in other States where a departure will prove to be desirable.

Question. In my opening statement I am afraid I drew some very harsh conclusions about Mr. Kahn's proposal. But I also said I hoped I was wrong. I would be pleased if both of you would take this opportunity to point out any fallacies in my statement, beginning with you, Mr. Lenard.

Answer. When I received your questions, Mr. Chairman, I asked that your opening statement be sent to me. Unfortunately, at this time I have not yet received it. Once I do, I'll be glad to answer your question.

Question. Assuming the Administration's plan is under operation, and timber sales are increased, explain what would happen if a number of purchasers of Federal timber decided to "bank" additional sales under contract; or curb cutting from their industrial lands; or curb imports, while increasing exports? In other words, since you cannot control these factors, how do you expect the Administration's plan to work in the real world?

Answer. The Administration's plan should lead to increased harvesting of Federal timber under contract; there would be no incentive to "bank" additional sales.

Increased Federal timber harvests, by lowering prices, will result in a reduction in private harvests and imports, but the net effect on total lumber supplies will still be positive. Our estimates of the impact on prices of additional Federal sales take into account all these factors.

Question. Let's say that for a five-year period you accelerate the harvest in certain States beyond the nondeclining yield principle. What will happen to the timber economy in those States when you have to adjust harvesting sharply downward in order to reach the legally required average of even flow nondeclining yield over a ten-year period?

Answer. The Departments of Agriculture and Interior have the authority to depart from nondeclining even-flow over a decade. The President has directed that this authority be used. In fact, it may prove desirable to accelerate harvests over several decades before returning to the nondeclining even-flow level.

Clearly, a decision to depart should take into account the impact on the local timber economy. In some areas where a departure might prove desirable, there is currently sufficient capacity to make for fierce competition for available timber supplies. In some of these areas, supplies from private lands are expected to decline sharply. Unless this decline is offset by an increase in public supplies, the local timber economies will be forced to contract. The President's program can help to stabilize production and employment in these areas and to be advantage of existing processing capacity.

Question. Does the Administration plan to submit a budget amendment for the Forest Service and BLM for fiscal 1980 in order to accelerate timber harvests?

Answer. No. Increased funding for accelerated timber sales will, however, be necessary after fiscal year 1980.

Question. Mr. Kahn made the point in his statement that one of the reasons timber is being used up so quickly is a result of the fact that Americans are buying bigger homes. It seems to me that the capital gain tax encourages people to buy bigger homes. Was there any consideration given to influencing the demand side of timber inflation in any way?

Answer. The President's request for a timber inflation study focused on the best ways to expand timber harvests and utilize existing timber supplies. Thus, changes in the tax structure, or other ways of reducing the demand for housing, were not considered in any detail. The President's request was aimed at developing policies which would result in satisfying housing demand at lower cost, not in cutting off that demand.

Question. Based on projected inflation and higher energy costs, what does the Council expect to be the net effect of this plan?

Answer. The net effect of the President's action will depend on the amount by which timber sales are increased. Each billion board foot increase will decrease standing timber prices by about ten percent, lumber prices by about four percent, and the price of a new single-family home by about 0.6 percent.

Question. The Office of Management and Budget currently uses a discount rate of 10 percent for Forest Service investments like roads and reforestation. This high rate "proves" that these investments are really a subsidy for the timber industry. Was any consideration given to reducing this discount rate to a more realistic level in order to eliminate this ridiculous conclusion, and to provide for more orderly front-end development of the forest resources?

Answer. This issue was not studied by the timber inflation study group.

STATEMENT OF JOHN C. HOOPER, THE WILDERNESS SOCIETY

Mr. Chairman, members of the Committee, I am John Hooper, Washington Representative for The Wilderness Society, a national conservation organization concerned with the wise stewardship of our public lands.

The Wilderness Society has held for many years that our national timber needs could be amply met through more intensive management of a smaller land base, concentrating logging and reforestation on those lands best suited for timber production. Such an approach would permit greater attention to be paid to the other purposes for which the National Forests are managed.

The President's recent decision, announced by Mr. Alfred Kahn, on June 11th, to increase timber supplies by departing from even-flow sustained yield timber management, represents a shocking step backward in terms of sound timber management. Increasing timber harvests in the National Forests may reduce the cost of a new house by a miniscule amount (less than 1 percent). However, the costs of road construction and maintenance into many areas from which the "mature" timber under consideration will be extracted far exceed the value of the timber itself. Most of the uncut stands of old timber are in remote places in steep valleys, at high altitudes, where regeneration is slow or improbable. These costs, underwritten by the federal government, are passed on to the taxpayer and will themselves be inflationary, offsetting any minor reduction in housing costs. This fact, plus a minimum time lag of 3 years before this timber would be cut, negate the main rationale of the President's move. Rather than reducing inflation, the new policy may very well aggravate it.

Furthermore, the Administration's timber management decision creates an anti-inflation policy containing mutually contradictory elements. On the one hand, interest rates are allowed to rise in order to cut consumer spending. On the other hand, the recent decision is intended to place more timber on the market in order to lower construction costs so that people will buy homes.

The President's decision may not, in fact, mean our timber supplies will increase. Private timber companies, many of which overcut their own forests during the

1950's and 1960's, may very well choose to reduce production on their own lands and reduce imports, thereby keeping the overall timber supply at present levels with no reduction in price.

Although the President's decision may help timber-dependent communities in the short term, it will ultimately damage their prospects. Sustained yield management translates into sustained jobs. An increase in the cut now will mean a commensurately lower timber supply in the future with greater hardships for dependent communities.

Furthermore, under the Forest Service's RARE II program, the Administration made a commitment to careful, considered development of its developable timber lands. This recent directive is a departure from that commitment and indicates that we may expect rapid and reckless development of these fragile roadless lands.

Only slightly more than 20 percent of our total timber supply comes from the national forests and we need to rely increasingly upon the wise management of private and corporate timber lands to meet future timber needs. This new Administration policy will have the effect of dumping cheap, subsidized lumber on the market, making it difficult for private companies to maintain adequate rotation cycles and sound management practices.

Furthermore, the Forest Service is in the middle of a Congressionally mandated study of various management alternatives under the Forest and Rangeland Renewable Resources Planning Act of 1974 (1980 RPA Goals). The President's initiative circumvents clear guidelines established by Congress by which the National Forests are to be managed. It may also violate the National Forest Management Act which prescribes only limited circumstances under which departure from sustained yield management may be authorized.

Finally, this decision mortgages our future timber supplies without even an indication of a clear gain in the present. Forest Service Chief McGuire has conceded that increasing the cut at this time will necessitate a future reduction. The real tragedy is that our national timber need can be met through intensive management of a smaller land base, using the most productive lands rather than engaging in a policy of more extensive logging of our less productive and more fragile forest lands.

[The following information was inserted in the record at the request of Senator Melcher:]

OPTIONS TO INCREASE SOFTWOOD SAWTIMBER SALE OFFERINGS ON THE
NATIONAL FORESTS

(Submitted in Response to the President's Anti-Inflation Message by USDA,
Forest Service, Policy Analysis Staff, May 10, 1978)

PREFACE

The enclosed broad planning estimates were developed from readily available data. They are not appropriate for program or budget formulation for a particular year. The key implicit assumptions are:

The (pre-RARE II) commercial forest land base will remain constant; and average costs and returns realized in 1977-1978 are appropriate for real dollar projections, that is, the mix and level of activities required to produce average softwood sawtimber (in the 1978 base) within each Region will be the mix and level required to produce increments (to the base) through 1990—this assumption is particularly troublesome when considering the accelerated harvest options in particular and, more generally, in projecting costs of roading.

Regardless of the appropriateness of the assumptions, the volumes of timber that will be offered for sale are directly dependent upon the resources available to the agency and upon the results of the land use planning process (including public participation and preparation of an Environmental Impact Statement) on each Forest.

TABLE 1.—TOTAL PROGRAM FOR ALL SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies	1,086	1,020	1,084	1,251	1,410	1,674	1,762
East Central Rockies	300	324	318	370	430	491	513
Southern Rockies	315	408	311	311	320	400	400
West Central Rockies	446	403	474	488	520	574	602
California:	(1,757)	(2,075)	(1,845)	(1,980)	(2,029)	(2,125)	(2,270)
a. CAH forests ¹	966	1,141	1,015	1,089	1,116	1,169	1,249
b. Other forests	791	934	830	891	913	956	1,021
Oregon, Washington:	(4,278)	(4,657)	(4,658)	(4,667)	(4,712)	(4,756)	(4,934)
a. CAH forests ²	2,053	2,235	2,235	2,240	2,262	2,283	2,368
b. Other forests	2,225	2,422	2,423	2,427	2,450	2,473	2,566
Southeast	531	514	562	585	609	738	825
Northeast	43	50	48	48	48	67	71
Alaska	659	556	670	689	719	1,048	1,048
Total	* 9,415	* 10,007	9,970	10,389	10,797	11,873	12,425

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

³ Equivalent to 11,500 mmbf wood fibre including hardwoods and products.

⁴ Equivalent to 12,200 mmbf wood fibre including hardwoods and products.

TABLE 2.—TOTAL PROGRAM FOR GREEN SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies	1,031	923	987	1,141	1,234	1,322	1,360
East Central Rockies	283	267	234	294	339	370	380
Southern Rockies	300	387	311	311	311	382	382
West Central Rockies	326	275	320	349	383	411	431
California:	(1,627)	(1,447)	(1,527)	(1,690)	(1,720)	(1,756)	(1,801)
a. CAH forests ¹	895	796	840	930	946	966	991
b. Other forests	732	651	687	760	774	790	810
Oregon, Washington:	(4,159)	(4,361)	(4,299)	(4,316)	(4,321)	(4,341)	(4,419)
a. CAH forests ²	1,995	2,093	2,064	2,072	2,074	2,084	2,121
b. Other forests	2,163	2,268	2,235	2,244	2,247	2,257	2,298
Southeast	525	508	562	585	604	733	820
Northeast	42	49	48	48	48	65	69
Alaska	645	518	649	659	659	928	928
Total	8,938	8,735	8,937	9,393	9,619	10,308	10,590

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

TABLE 3.—TOTAL PROGRAM FOR SALVAGE SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies.....	55	97	97	110	176	352	402
East Central Rockies.....	17	57	84	78	91	121	133
Southern Rockies.....	15	21			9	18	18
West Central Rockies.....	120	128	154	139	143	163	171
California:	(130)	(628)	(318)	(290)	(309)	(369)	(469)
a. CAH forests ¹	72	345	175	160	170	203	258
b. Other forests.....	58	283	143	130	139	166	211
Oregon, Washington:	(119)	(296)	(359)	(351)	(391)	(415)	(515)
a. CAH forests ²	57	142	172	168	188	199	247
b. Other forests.....	62	154	187	183	203	216	268
Southeast.....	6	6			5	5	5
Northeast.....	1	1				2	2
Alaska.....	14	38	21	30	60	120	120
Total.....	477	1,272	1,033	998	1,184	1,585	1,835

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

TABLE 4.—INCREASES IN ALL SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies.....	0	-66	-2	165	324	588	676
East Central Rockies.....	0	24	18	70	130	191	213
Southern Rockies.....	0	93	-4	-4	5	85	85
West Central Rockies.....	0	-43	28	42	74	128	156
California:	(0)	(318)	(88)	(223)	(272)	(368)	(513)
a. CAH forests ¹	0	175	49	123	150	203	283
b. Other forests.....	0	143	39	100	122	165	230
Oregon, Washington:	(0)	(379)	(380)	(389)	(434)	(478)	(656)
a. CAH forests ²	0	182	182	187	209	230	315
b. Other forests.....	0	197	198	202	225	248	341
Southeast.....	0	-17	31	54	78	207	294
Northeast.....	0	7	5	5	5	24	28
Alaska.....	0	-103	11	30	60	389	389
Total.....	0	592	555	974	1,382	2,458	3,010

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

TABLE 5.—INCREASES IN GREEN SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies.....	0	-108	-44	110	203	291	329
East Central Rockies.....	0	-16	-49	11	56	87	97
Southern Rockies.....	0	87	11	11	11	82	82
West Central Rockies.....	0	-51	-6	23	57	85	105
California:	(0)	(-180)	(-100)	(63)	(93)	(129)	(174)
a. CAH forests ¹	0	-99	-55	35	51	71	96
b. Other forests.....	0	-81	-45	28	42	58	78
Oregon, Washington:	(0)	(202)	(140)	(157)	(162)	(182)	(260)
a. CAH forests ²	0	97	68	76	78	88	125
b. Other forests.....	0	105	72	81	84	94	135
Southeast.....	0	-17	37	60	79	208	295
Northeast.....	0	7	6	6	6	23	27
Alaska.....	0	-127	4	14	14	283	283
Total.....	0	-203	-1	455	681	1,370	1,652

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

TABLE 6.—INCREASES IN SALVAGE SOFTWOOD SAWTIMBER SALE OFFERINGS TO REACH RPA PROGRAM LEVEL BY 1985

[Volumes in million board feet, local-scale log rule]

Region	President's budget— base 1978	Increased program 1978	Proposed budget 1979	RPA option			
				1980	1981	1985	1990
Northern Rockies.....	0	42	42	55	121	297	347
East Central Rockies.....	0	40	67	61	74	104	116
Southern Rockies.....	0	6	-15	-15	-6	3	3
West Central Rockies.....	0	8	34	19	23	43	51
California:	(0)	(498)	(188)	(160)	(179)	(239)	(339)
a. CAH forests ¹	0	273	103	88	98	131	186
b. Other forests.....	0	225	85	72	81	108	153
Oregon, Washington:	(0)	(177)	(240)	(232)	(272)	(296)	(396)
a. CAH forests ²	0	85	115	111	131	142	190
b. Other forests.....	0	92	125	121	141	154	206
Southeast.....	0	0	-6	-6	-1	-1	-1
Northeast.....	0	0	-1	-1	-1	1	1
Alaska.....	0	24	7	16	46	106	106
Total.....	0	795	556	521	707	1,088	1,358

¹ Forests considered for accelerated harvest in region 5; region total apportioned by potential yield on marginal lands: 55 percent to CAH forests, 45 percent to others.

² Forests considered for accelerated harvest in region 6; region total apportioned by fiscal year 1975-77 average harvest: 48 percent to CAH forests, 52 percent to others.

TABLE 7.—AVERAGE COSTS AND RECEIPTS OF SOFTWOOD SAWTIMBER
[Dollars per thousand board feet]

Region	Sales administration		reforestation and TSI ¹		Mitigation	Rooding		Receipts (including KV) plus road credits	Appropriated costs (KV+PFC)	Total costs	R ÷ C
	Appropriated	KV ²	Appropriated ³	Purchaser credit ⁴							
Northern Rockies.....	12.75	10.32	8.44	3.09	20.83	34.01	87.42	46.99	89.44	1.0	
East Central Rockies.....	11.37	16.12	3.98	3.98	26.11	22.37	53.41	57.58	93.14	4.4	
Southern Rockies.....	10.18	10.55	8.63	2.73	13.98	11.34	17.35	39.44	59.41	1.5	
West Central Rockies.....	13.48	10.68	8.74	2.60	23.33	17.42	19.24	50.09	76.25	1.5	
California:											
a. CAH forests ⁵	6.72	3.39	2.78	7.16	8.64	17.00	133.26	20.41	19.78	3.7	
b. Other forests.....	9.70	5.64	4.62	1.66	20.62	32.66	108.67	37.62	74.90	1.9	
Oregon, Washington:											
a. CAH forests ⁶	4.46	2.41	1.98	7.27	4.31	25.21	165.79	13.88	41.07	4.7	
b. Other forests.....	10.34	6.56	5.37	2.70	7.94	13.09	134.86	27.54	45.99	3.8	
Southeast.....	10.56	9.21	7.53	3.22	19.73	23.97	97.69	42.72	74.22	1.6	
Northeast.....	9.60	6.62	5.42	1.82	16.33	9.14	34.14	34.37	48.93	1.9	
Alaska.....	11.54	11.33	9.27	2.98	21.42	56.50	11.48	47.27	113.04	6	

¹ Total reforestation plus TSI costs assumed 55 percent appropriated and 45 percent purchaser deposit funds.

² Projected KV expenditures differ from historical KV component of receipts per unit area.

³ Seriously oversimplified; to support accelerated levels of harvest will require rapid increases of advanced roading. Near-term costs per unit volume overstated and later costs understated.

⁴ Historical purchaser credits adjusted to reflect redefinitions of timber extraction costs (deducted in appraisal) and capital investments (basis for purchaser credits).

⁵ Forests considered for accelerated harvest include Klamath, Shasta-Trinity, Lassen, and Plumas.

⁶ Forests considered for accelerated harvest include Gifford Pinchot in Washington and Mt. Hood, Willamette, and Umpqua in Oregon.

⁷ Doubled for accelerated harvest option 1, tripled for accelerated harvest option 2 to finance mitigation of increased environmental impacts.

TABLE 8.—INCREASES IN GREEN AND SALVAGE SOFTWOOD SAWTIMBER SALE OFFERINGS FROM ACCELERATED SALE OPTIONS ABOVE BASE, RPA PROGRAM, AND CURRENT HARVESTS
[Volumes in million board feet, local-scale log rule]

	Total sales—1985		Total	Total sales—1990		Total	Increment above RPA (green and salvage)		1990	Increment above base (green and salvage)		1985	1990	Increment above current sales (green and salvage) ¹			
	Green	Salvage		Green	Salvage		1985	1990		1985	1990			1985	1990	1985	1990
California—CAH forests:																	
1978 base.....	895	72	967														
RPA program.....	866	203	1,169	258	258	1,249	25	0	227	283	309	364					
AH-1.....	991	203	1,194	258	258	1,249	194	169	396	451	478	533					
AH-2.....	1,160	203	1,363	258	258	1,418											
Oregon, Washington—CAH forests:																	
1978 base.....	1,996	57	2,053	247	247	2,368											
RPA program.....	2,084	199	2,283	247	247	2,561	230	193	460	508	447	495					
AH-1.....	2,314	199	2,513	247	247	2,952	621	584	851	899	838	886					
AH-2.....	2,705	199	2,904	247	247	3,200											
All CAH forests:																	
1978 base.....	2,891	129	3,020	505	505	3,617	255	193	687	791	756	859					
RPA program.....	3,050	402	3,452	505	505	3,810	815	753	1,247	1,350	1,316	1,419					
AH-1.....	3,305	402	3,707	505	505	4,370											
AH-2.....	3,856	402	4,257	505	505	4,762											

¹ CAH forests: Average sales, 1975-77: California, 885; Oregon, Washington 2,066; total, 2,951.

TABLE 9.—INCREASES OVER BASE-LEVEL SALE OFFERINGS, APPROPRIATED FUNDS AND DOLLAR RECEIPTS UNDER ALTERNATIVE SOFTWARE SAWTIMBER SALE OFFERING PROGRAMS ON THE NATIONAL FORESTS

Region 1	1980				1985				1990			
	Volume (mmbf)	Appropriated costs (millions)	Dollar ^a receipts (millions)	(C) ²	Volume (mmbf)	Appropriated costs (millions)	Dollar ^a receipts (millions)		Volume (mmbf)	Appropriated costs (millions)	Dollar ^a receipts (millions)	
Northern Rockies (R/C=1.0)	110	\$5.2	\$5.9		291	\$13.7	\$15.5		329	\$15.5	\$17.6	
East Central Rockies (R/C=0.4)	55	2.6	2.9		297	4.7	5.9		347	16.3	18.5	
Southern Rockies (R/C=1.5)	165	7.8	8.8		588	27.7	31.4		676	31.8	36.1	
West Central Rockies (R/C=0.5)	11	.6	1.0		87	3.0	3.5		97	5.6	6.7	
California except CAH forests (R/C=1.9)	60	3.5	4.1		104	6.0	6.2		116	12.3	12.3	
Oregon, Washington except CAH forests (R/C=3.8)	71	4.1	4.8		191	13.0	13.2		213	3.7	6.2	
Southeast (R/C=1.6)	15	-.6	-.1		82	3.1	3.2		82	3.2	3.2	
Northeast (R/C=0.9)	4	-.2	-.3		85	3.3	6.4		85	3.3	6.4	
Alaska (R/C=0.6)	23	1.2	1.4		85	4.3	1.8		105	5.3	2.0	
CAH forests in California (R/C=3.7)	19	1.0	.8		43	2.2	2.4		51	2.6	1.0	
CAH forests in Oregon, Washington (R/C=4.7)	42	2.2	3.0		128	6.5	2.4		196	7.9	3.0	
National totals by alternative	28	1.1	1.7		108	4.1	6.7		178	2.9	8.5	
	100	3.8	10.8		166	6.3	11.7		231	8.7	16.6	
	81	2.2	10.9		231	18.7	18.9		206	5.7	25.1	
	121	3.3	16.3		154	4.2	20.2		341	9.4	46.0	
	60	2.6	5.9		208	8.9	20.3		295	12.6	28.8	
	54	2.3	5.3		207	8.9	20.3		294	12.6	28.8	
	6	0	0		23	0	0		27	0	0	
	5	.2	.2		24	0	0		28	0	0	
	14	.7	.2		283	13.4	3.2		283	13.4	3.2	
	16	.8	.2		106	5.0	4.2		106	5.0	4.2	
	30	1.5	.4		389	18.4	18.4		389	18.4	18.4	
	35	0.7	4.7		71	2.7	9.5		196	2.0	12.8	
	18	1.8	11.7		131	4.1	27.5		186	3.8	24.8	
	123	2.5	16.4		203	5.0	20.9		283	3.8	37.6	
					227	5.0	4.4		283	3.8	37.6	
					396	6.4	59.6		461	6.2	60.7	
					88	1.2	17.8		126	10.7	20.7	
					142	2.0	21.9		176	1.7	20.1	
					230	3.2	38.1		315	4.9	31.5	
					460	7.2	76.3		508	6.3	32.2	
					851	16.4	141.1		899	17.3	149.0	
					455	15.9	92.2		1,370	66.8	120.6	
					521	16.3	48.6		1,388	48.6	123.9	
					976	32.2	185.6		3,010	115.4	219.2	
							106.5			14.6	121.8	
							193.9			28.0	209.1	

¹ R/C=(dollar receipts plus capital investment costs of purchaser) divided by (all costs).
² G=increases in green softwood sawtimber sale offerings to reach RPA program level by 1985.
³ S=increases in salvage softwood sawtimber sale offerings to reach RPA program level by 1985.
⁴ T=G+S. AH-1 is accelerated harvest option 1 (decelerate to long-run sustained yield), AH-2 is accelerated harvest option 2 (decelerate to 98 percent of long-run sustained yield). AH-1 and AH-2 include green and salvage (see table 8). AH-1 and AH-2 assumed to begin in 1982.
⁵ All dollar receipts include KV funds.

TABLE 10.—CEILINGS REQUIRED TO SUPPORT SALE OFFERINGS OF 1,000 MILLION BOARD FEET OF SOFTWOOD SAWTIMBER

Region	PFT ceilings				Other ceilings			
	Timber sale administration	Reforestation and TSI	Mitigation	Roading				
Northern Rockies.....	0.34	0.22	0.13	0.40	0.37	0.35	0.09	0.38
East Central Rockies.....	.30	.30	.26	.47	.31	.35	.09	.45
Southern Rockies.....	.29	.17	.18	.47	.35	.35	.09	.45
West Central Rockies.....	.39	.33	.14	.48	.34	.47	.05	.46
California.....	.21	.13	.08	.37	.27	.19	.05	.35
Oregon, Washington.....	.21	.11	.09	.18	.15	.15	.04	.17
Southeast.....	.30	.30	.18	.39	.21	.49	.07	.37
Northeast.....	.35	.30	.12	.28	.12	.22	.04	.27
Alaska.....	.19	.14	.09	.46	.05	.12	.03	.44

TABLE 11.—CEILINGS REQUIRED IN 1985 TO SUPPORT ALTERNATIVE PROGRAMS TO INCREASE SOFTWOOD SAWTIMBER SALES ON THE NATIONAL FORESTS

Region	(1)	Type of ceiling		
		PFT	Other	All
Northern Rockies.....	G	317	346	663
	S	324	353	677
	T	641	699	1,340
East Central Rockies.....	G	116	104	220
	S	138	125	263
	T	254	229	483
Southern Rockies.....	G	91	102	193
	S	3	4	7
	T	94	106	200
West Central Rockies.....	G	114	112	226
	S	58	57	115
	T	172	169	341
California, except CAH forests.....	G	46	50	96
	S	85	93	178
	T	131	143	274
Oregon, Washington except CAH forests.....	G	55	48	103
	S	91	79	170
	T	146	127	273
Southeast.....	G	243	237	480
	S	-1	-1	-2
	T	242	236	478
Northeast.....	G	24	15	39
	S	1	1	2
	T	25	16	41
Alaska.....	G	249	181	430
	S	93	68	161
	T	342	249	591
CAH forests in California.....	G	56	61	117
	S	103	113	216
	T	159	174	333
CAH forests in Oregon, Washington.....	AH-1	179	195	374
	AH-2	313	341	654
	G	52	45	97
	S	84	72	156
	T	136	117	253
National total by alternative.....	AH-1	271	235	506
	AH-2	502	434	936
	G	1,363	1,301	2,664
	S	979	964	1,943
	T	2,342	2,265	4,607
	AH-1	450	430	880
	AH-2	815	775	1,590

1 G=increases in green softwood sawtimber sale offerings to reach RPA program level by 1985. S=increases in salvage softwood sawtimber sale offerings to reach RPA program level by 1985. T=G+S. AH-1=accelerated harvest option 1 (decelerate to long-run sustained yield). AH-2=accelerated harvest option 2 (decelerate to 98 percent of long-run sustained yield).

TABLE 12.—INCREASES IN CAPITAL INVESTMENTS FINANCED BY TIMBER SALE RECEIPTS IN NATIONAL FORESTS TO SUPPORT ALTERNATIVE INCREASES IN SOFTWOOD SAWTIMBER SALE¹ OFFERING PROGRAMS

[Millions of dollars]

Region	(2)	Year		
		1980	1985	1990
Northern Rockies.....	G	4.7	12.4	14.0
	T	2.3	12.6	14.7
	S	7.0	25.0	28.7
East Central Rockies.....	G	.4	3.1	3.4
	T	2.1	3.7	4.1
	S	2.5	6.8	7.5
Southern Rockies.....	G	.2	1.6	1.6
	T	-.3	0	0
	S	-.1	1.6	1.6
West Central Rockies.....	G	.6	2.2	2.7
	T	.5	1.1	1.3
	S	1.1	3.3	4.0
California except CAH forests.....	G	1.0	2.2	2.9
	T	2.7	4.0	5.7
	S	3.7	6.2	8.6
Oregon, Washington except CAH forests.....	G	1.5	1.7	2.5
	T	2.2	2.8	3.8
	S	3.7	4.5	6.3
Southeast.....	G	1.9	6.6	9.3
	T	-.2	0	0
	S	1.7	6.6	9.3
Northeast.....	G	.1	.3	.4
	T	0	0	0
	S	.1	.3	.4
Alaska.....	G	.9	18.6	18.6
	T	1.1	7.0	7.0
	S	2.0	25.6	25.6
CAH forests in California.....	G	.7	1.4	1.9
	T	1.7	2.6	3.7
	S	2.4	4.0	5.6
CAH forests in Oregon, Washington.....	AH-1	-----	4.5	5.6
	AH-2	-----	7.8	10.0
	G	2.1	2.4	3.4
	S	3.0	3.9	5.2
	T	5.1	6.3	8.6
	AH-1	-----	17.1	18.9
National totals by alternative.....	AH-2	-----	31.7	33.5
	G	14.1	52.5	60.7
	S	15.1	37.7	45.5
	T	29.2	90.2	106.2
	AH-1	-----	21.6	24.5
	AH-2	-----	39.5	43.5

¹ Capital investments included here are sum of KV costs plus purchaser road credits.

² G=increases in green softwood sawtimber under RPA program. S=increases in salvage softwood sawtimber under RPA program. T=G+S. AH-1=accelerated harvest option 1 (decelerate to long-run sustained yield level). AH-2=accelerated harvest option 2 (decelerate to 98 percent of long-run sustained yield level).

ACCELERATED HARVEST OPTIONS

The following options are centered on accelerating sale offerings of old-growth timber on selected National Forests on the West Coast. The harvested volumes are taken from a published study¹ and subsequent discussions with the senior author. At this time, the Forest Service has not independently verified that study.

Premise of study

On at least 3 and on no more than 8 National Forests, it is believed there is adequate old-growth timber to permit an immediate acceleration in harvest above the long-run sustained yield level with an eventual deceleration to that level and beyond that time harvesting need never fall below that level under (essentially) current planning assumptions.

¹ "Long-run Sustainable Timber Yield—Floor or Ceiling?" by K. N. Johnson and J. H. Beuter. *Journal of Forestry* 75 (11) pp. 707-709, Nov. 1977.

Assumption of options

1. Present commercial forest land base of all forests will remain constant and will be accessible as needed (from study).
2. Instantaneous acceleration (i.e. no phase-in required) to 10-year average is possible (from study).
3. Because planned accelerated harvests would require new EIS statements, that acceleration would be delayed at least until 1982.
4. A 12 percent reduction in the land base will compensate for non-timber constraints (from study); further modified below.
5. Deceleration will occur at a rate of no more than 5 percent per year (from study).

Within the above assumptions:

Option 1 is defined as an increase in sales offerings for 3 decades with deceleration to long-run sustained yield level.

Option 2 is defined as an increase in sales offerings for 6 decades with deceleration to 98 percent of the long-run sustained yield level.

The Umpqua National Forest was studied as a case example. The following possible sale increases were identified for that Forest:

[In percent]					
Decade	Option 1	Option 2	Decade	Option 1	Option 2
1-----	12	31	5-----	0	10
2-----	7	26	6-----	0	5
3-----	2	21	7-----	0	0
4-----	0	16			

The total list of Forests where increases are judged possible are:

Forest	Average harvest, last 3 years (million board feet)	Potential yield (million board feet)	Harvest as percent of potential
(R6) Gifford Pinchot-----	482	554	87
(R6) Mount Hood-----	385	357	108
(R6) Willamette-----	783	776	102
(R6) Umpqua-----	411	414	99
(R5) Klamath-----	242	298	81
(R5) Shasta-Trinity-----	244	331	74
(R5) Lassen-----	192	179	107
(R5) Plumas-----	207	250	83
Total-----	2,951	3,279	

The Umpqua Forest is (essentially) harvesting all of its potential yield. The varying proportions between harvest and potential yields reflect unquantified constraints on harvesting or sales. These proportions are applicable to defining possible harvest levels under the present options. That is, by assumption, possible increases in harvest on each Forest should be calculated on the basis of the average actual harvest, rather than on the basis of potential yield.

Calculations of possible accelerated yields

The total harvests under these options from the eight forests would then be as follows :

[In million board feet]

Forest	Current harvest	DECADE								
		Accelerated harvest under option 1			Accelerated harvest under option 2					
		1	2	3	1	2	3	4	5	6
Gifford Pinchot.....	482	540	516	492	631	607	583	559	530	506
Mt. Hood.....	385	431	412	393	504	485	466	467	424	404
Willamette.....	788	883	843	804	1,032	993	953	914	867	827
Umpqua.....	411	460	440	419	538	518	497	477	452	432
Region 6.....	2,066	2,314	2,211	2,108	2,705	2,603	2,499	2,417	2,273	2,169
Klamath.....	242	271	259	247	317	305	293	281	266	254
Shasta-Trinity.....	244	273	261	249	320	307	295	283	268	256
Lassen.....	192	215	205	196	252	242	232	223	211	202
Plumas.....	207	232	221	211	271	261	250	240	228	217
Region 5.....	885	991	946	903	1,160	1,115	1,070	1,027	973	929
Grand total.....	2,951	3,305	3,157	3,011	3,865	3,718	3,569	3,444	3,246	3,098

ASSUMED COSTS AND RECEIPTS

[Dollars per thousand board feet]

	California forests	Oregon Washington forests
Option 1:		
Appropriated costs.....	22.07	16.58
Other costs.....	19.78	27.19
Total costs.....	41.85	43.77
Cash plus KV.....	133.26	165.79
Road credits.....	17.00	25.21
Total receipts.....	150.26	191.00
Receipts divided by costs.....	3.6	4.4
Option 2:		
Appropriated costs.....	23.73	19.28
Other costs.....	19.78	27.19
Total costs.....	43.51	46.47
Cash plus KV.....	133.26	165.79
Road credits.....	17.00	25.21
Total receipts.....	150.26	191.00
Receipts divided by costs.....	3.5	4.1

¹ See table 7 for details.

A caution

The accelerated harvest options are intended as a preliminary estimate of what is physically possible when the focus is essentially on timber allowable harvest calculations. Because either option would represent a significant deviation from present policy, the actual increases in yield (for any assumption concerning the land base) will necessarily be determined through the land management planning process on each individual Forest.

SAVED AND ADDITIONAL WOOD THAT COULD BE MADE AVAILABLE FOR HOUSING CONSTRUCTION THROUGH RESEARCH AND TECHNICAL ASSISTANCE ACTIVITIES AND NECESSARY COSTS, FISCAL YEAR 1979-80¹

	Fiscal year 1979			Fiscal year 1980
	Low market	Average market	Mid-1977 market	Mid-1977 market
Saved and additional wood (billion board feet):				
Implementation.....	0.40	0.53	0.79	2.3
New potential.....		1.32		3.0
Total cost (dollars per million):				
Implementation.....		6.25		6.79
New potential.....		2.90		2.90
Cost per unit (dollars per thousand board feet):				
Implementation.....	16	12	8	3
New potential.....		2		1

¹ New potential development necessary to provide basis for implementation in following years.

SAVED AND ADDITIONAL WOOD THAT COULD BE MADE AVAILABLE FOR HOUSING CONSTRUCTION THROUGH RESEARCH, TECHNICAL ASSISTANCE, AND EXTENSION ACTIVITIES
DURING FISCAL YEAR 1979 AND FISCAL YEAR 1980

	Opportunity ¹		Costs						Manpower in PFT's					
			Saved or additional volume (million board feet)		Total (thousand)		Per unit (dollars per million)		FS		Extension		State	
			1979 ²	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
1. Accelerated fellng and bucking improvement.....	120	240	\$650	\$650	5	3	3	3	0	0	0	0	20	20
2. Accelerated sawmill processing improvement.....	150	320	700	850	6	2	3	3	10	5	0	5	20	20
3. Development of industrial fuelwood and firewood markets.....	50	200	750	800	15	4	1	2	10	10	0	10	20	20
4. Accelerated soil bank thinnings.....	30-50-100	400	1,200	1,200	40-24-12	3	4	4	0	0	0	0	50	50
5. Lumber saving techniques in construction:														
a. Implement now.....	0-100-200	500	890	890	9-4	2	7	7	10	5	0	5	10	12
b. Develop new potential.....	(1,000)	600	600	600	1	2	8	8	0	0	0	0	0	0
6. Stimulate investments in improved sawmill equipment.....	0-0-100	300	350	550	4	2	5	5	3	3	0	3	0	10
7. Use of reconstituted wood products:														
a. Implement now.....	0-10-10	60	150	350	15	6	1	7	0	0	0	0	5	15
b. Develop new potential.....	(100)	(500)	600	600	6	1	7	7	0	0	0	0	0	0
8. Improved logging systems:														
a. Implement now.....	40	140	650	750	16	5	3	3	10	10	0	10	15	15
b. Develop new potential.....	(300)	(500)	600	600	2	1	8	8	0	0	0	0	0	0
9. Hardwood substitution:														
a. Implement now.....	0-0-10	100	500	500	50	5	3	3	5	5	0	5	10	10
b. Develop new potential.....	(300)	(750)	900	900	3	1	16	16	0	0	0	0	0	0
10. Recycling used wood:														
a. Implement now.....	10	40	300	400	30	10	1	1	1	1	1	1	10	15
b. Develop new potential.....	(120)	(250)	200	200	2	1	4	4	0	0	0	0	0	0
Totals:														
Implement now.....	400-530-790	2,300	6,250	6,790	16-12-8	3	31	32	49	39	32	43	155	187
Develop new potential.....	(1,320)	(3,000)	2,900	2,900	2	1	43	43	0	0	0	0	0	0

¹ Must "develop new potential" of some opportunities as basis for implementation in following years.

² Where 3 estimates for fiscal year 1979 are given, they correspond to low-average, mid-1977 market conditions; all fiscal year 1980 estimates based on mid-1977 market conditions.

1. Accelerated felling and bucking improvement

The Felling and Bucking Improvement Program reduces waste of valuable softwood lumber through better quality control in log production. Experience to date from remeasurements shows average increases in lumber from better felling and bucking practices is 5 percent. Case studies of 320 loggers led to changes in felling and bucking that have resulted in 60 million board feet more softwood lumber annually without an increase in timber cut. To date only 10 percent of the Nation's loggers have been reached. Tripling the current effort in analyzing felling and bucking procedures and providing recommendations for improvements would increase softwood lumber volumes from logging operations by 240 million board feet in 1980.

	Increased softwood (million board feet)	PY's		Cost (millions)	Dollars per million
		FS	State		
1979	120	3	20	\$650	3
1980	240	3	20	650	3

2. Accelerated sawmill processing improvement program

The Sawmill Improvement Program has, over the past four years, increased yields of softwood lumber by 280 million board feet without increasing the harvest of logs. This has been accomplished through 100-150 sawmill case studies and adoption of study recommendations per year. Increasing the number of case studies to 300 per year and supplementing them with an extension program would increase lumber yields by 150 million board feet in 1979 and 170 million in 1980.

	Increased softwood (million board feet)	PY's			Cost (millions)	Dollars per million
		FS	Ext.	State		
1979	150	3	10	20	\$850	6
1980	320	3	5	20	700	5

3. Development of industrial fuelwood and firewood markets (wood for energy program)

Development of markets to utilize wood for fuel would greatly increase the opportunity to harvest stands now considered marginal or not commercially operable and to salvage dead and dying timber. Fuelwood harvests will generate as byproducts many thousands of feet of sawlogs which can be processed into softwood lumber. Usable chips for production of lumber substitutes such as particle and flakeboards will also be generated. A conservative estimate of softwood logs generated as a byproduct of a wood for energy program is 200 million board feet annually by 1980.

	Increased log volume (million board feet)	PY's			Cost (millions)	Total (dollars/ thousand board feet)
		FS	Ext.	State		
1979	50	1	10	20	\$750	15
1980	200	2	10	20	800	8

4. Accelerated soil bank thinnings

Harvest on private lands could be increased by some 0.4 billion board feet by 1980, primarily in the South, from thinnings on soil bank plantations and from increased harvest of other softwood stands on private lands. As accelerated technical assistance and extension effort is needed.

Analysis of the soil bank plantations show that 60 percent of these plantations need thinning of at least 4,000 board feet or equivalent volume per acre. Some of the material is too small for sawtimber, but the pulp industry in the South is

currently using some 1 billion board feet of sawlogs for pulp. About one-half of the soil bank thinnings would probably be used for pulp, but this would free the same amount of material for use as lumber.

	Volume (million board feet)	PY's			Cost (millions)	Dollars per million
		FS	State			
1979.....	30-50-100	4	50	\$1,200	12	
1980.....	400	4	50	1,200	6	

5. Lumber saving techniques in construction

A research, extension, and technical assistance program in construction would introduce builders, code writers, loan agencies, and others to lumber saving concepts in building. The concepts developed through research and already accepted by national building codes have the potential for reducing lumber used in home construction by 10 percent or 2.5 billion board feet annually. By concentrating efforts on larger builders and developers this program could achieve a saving of 0.5 billion board feet by 1980 which would be available for additional buildings. Since construction is the largest single consumer of softwoods, an ongoing research program to extend the wood supply through better building concepts promises large dividends.

	FS	Ext.	State	Cost (millions)		Annual savings (million board feet)
				Annual	Dollars per million	
1979.....	7	10	10	\$850	5	0-100-200
1980.....	7	5	12	890	4	500
Supportive research:						Potential
1979.....				\$600	1	500
1980.....				600	1	1,000
						Million board feet

6. Stimulation of investment in improved sawmill equipment

Through capital investment in new equipment and wood processing systems, the sawmill industry could increase softwood yields to a much greater extent than is possible through the current sawmill improvement program. Although there is now much unused technical information, an extension and technical assistance effort, perhaps supplemented by a guaranteed loan program, is needed to encourage private investment in improved equipment. Such investments could increase softwood yields by more than 20 percent from a given quantity of logs.

	Increased yields (million board feet)	PY's			Cost (millions)	Dollars per million
		FS	Ext.	State		
1979.....	0-0-100	5	3	0	\$350	4
1980.....	300	5	3	10	550	3

7. Use of reconstituted wood products

A research and technical assistance program could lead to a new generation of wood products made of reconstituted wood. Demolition wood, crates, dunnage, and pallets that are currently being destroyed, and urban trees that are cut down can be used as the raw material for joints, studs, sheathing, structural flakeboard, and laminated veneers. Research is needed in processing these materials, in separating foreign matter from wood fiber, and in product development. Technical assistance is needed to develop collection, concentration handling techniques, and to develop market for the raw materials and products.

	PY's		Cost (millions)	Dollars per million	Reclaimed volume (million board feet)
	FS	State			
1979	1	5	\$150	15	0-10-0 60
1980	1	15	350	8	
					Potential volume
Supportive research:					
1979	7		600	6	100
1980	7		600	2	500

8. Improved logging systems

A research, extension, and technical assistance program in logging systems could make it feasible to log small tracts, steep slopes, and low-volume stands and to remove residues, small and defective trees, and material from thinnings. The present major opportunities to apply improved logging systems are in the mountainous West. Short-term gains would include softwood sawlogs that otherwise would not be economical to log; long-term gains include accelerated growth of the remaining timber. A strong research program in logging systems must be maintained to insure that economic, social, and environmental values will not be adversely affected.

	PY's			Cost (millions)	Dollars per million	Increased log volumes (million board feet)
	FS	Ext.	State			
1979	3	10	10	\$650	16	40
1980	3	10	15	750	10	140
						Potential volume (million board feet)
Supportive research:						
1979	8			600	2	300
1980	8			600	2	500

9. Hardwood substitution

Aspen has been accepted under softwood standards for structural lumber. There is every indication cottonwood, tulip poplar, red alder, and other hardwoods can also be used. Flakeboard and other structural members can be made from hardwood residues and chips. Sheathing grade plywood from low grade hardwood can be substituted for softwood sheathing. Use of hardwood moldings and sash and door construction can be increased. Most of these can be made from trees that are not now merchantable or from harvested wood that is now wasted. A combined research and technical assistance program concentrating on developing technology and establishing markets could achieve substantial results by 1980. Research is needed to increase the opportunities to substitute hardwoods for softwood lumber.

	PY's			Cost (millions)	Dollars per million	Substitute volume (million board feet)
	FS	Ext.	State			
1979	3	5	10	\$500	50	0-0-10
1980	3	5	10	500	10	100
						Potential volume
Supportive research:						
1979	16			900	3	300
1980	16			900	3	750

10. Recycling used wood

In rural areas where labor is relatively cheap structural members are generally salvaged for use elsewhere when buildings are demolished. Research is needed to develop systems of salvage which are economical in urban areas where labor costs are higher. There are also opportunities to salvage and reuse crates, pallets, and other softwood products. YACC or other federally-sponsored employment programs could be used to test systems and to develop a labor pool for such a salvage-and-reuse industry. A technical assistance and extension program to implement available technology and to develop distribution systems would produce some usable lumber. Major gains in this area would require research and development of new techniques.

	PY's			Cost (millions)	Dollars per million	Lumber saved (million board feet)
	FS	Ext.	State			
1979.....	1	1	10	\$300	30	10
1980.....	1	1	15	400	18	40
						Potential reclaimed (million board feet)
Supportive research:						
1979.....	4			200	2	120
1980.....	4			200	2	250

ANTI-INFLATION RESEARCH PROGRAM

A. Funding

1. Minimum level: no new effort possible, current work reduced in some activities.
2. Reduced level: +\$200,000.
3. Current level: +\$200,000 or \$400,000 total.
4. Current Performance: +\$800,000 or \$1,200,000 total.
5. Increased level: +\$1,500,000 or \$2,700,000 total.
6. RPA level: +\$1,000,000 or \$3,700,000 total.

The above funds are included in the fiscal year 1980 proposal except for \$300,000 in Forest Products Utilization Research at the increased and RPA level.

B. Program activities

Forest Service Research can ease the inflationary pressures resulting from construction materials shortages by increasing our wood harvesting, processing, and construction efficiency. Our program activities are included in the fiscal year 1980 budget levels, but the activities are regrouped into fine categories and described here as a separate set of initiatives that will help in the Presidents' Anti-inflation program.

1. *Improved harvesting systems.*—Improved logging systems could make it feasible to log small tracts, steep slopes, and low-volume stands and to remove residues, small and defective trees, and material from thinnings. The present opportunities to apply improved logging systems are in the mountainous West, and the small hardwood ownerships in the East. Short-term gains would include softwood sawlogs that otherwise would not be economical to log hardwood thinnings, and residues; long-term gains include accelerated growth of the remaining timber. A strong logging systems program will insure that economic, social, and environmental values will not be adversely affected and has the potential to provide an additional 500 million feet of wood annually.

2. *Lumber saving techniques in construction.*—Since construction is the largest single consumer of softwoods a research program to extend the wood supply through more efficient construction methods promises large dividends. At the minimum level research on single-member properties of dimension and large timbers would be diminished.

At the reduced current and increased levels incremental increases will allow accelerated development of grading technology, properties and design for dimension lumber uses and the composite performance of light frame construction. Potential savings of one billion board feet annually could be realized from expected greater efficiencies.

3. *Use of reconstituted wood products.*—A research program could lead to a new generation of wood products made of reconstituted wood. Demolition wood, crates, dunnage, and pallets that are currently being destroyed, and urban trees that are cut down can be used as the raw material for joists, studs, sheathing, structural flakeboard, and laminated veneers. Research is needed in processing these materials, in separating foreign matter from wood fiber, and in product development. The potential volume equivalent in construction products is 500 million feet per year that could be made available through recycling and reconstitution. Our program calls for increases at the adjusted current level to convert residues into fiber products. To fully address this program activity requires an additional \$300,000 for studies on the processing of reclaimed products. No such initiative is presently included in our budget.

4. *Hardwood substitution.*—Aspen has been accepted under softwood standards for structural lumber. There is every indication cottonwood, tulip poplar, red alder, and other hardwoods can also be used. Flakeboard and other structural members can be made from hardwood residues and chips. Sheathing grade plywood from low grade hardwood can be substituted for softwood sheathing. Use of hardwood moldings and sash and door construction can be increased. Most of these can be made from trees that are not now merchantable or from harvested wood that is now wasted. A research program on developing the technology to substitute available hardwoods where softwoods are now used would provide the opportunity to increase construction products by an equivalent of 750 million feet annually.

ANTI-INFLATION RESEARCH INITIATIVES, FISCAL YEAR 1980

Activity	Incremental costs, \$1,000, and outputs					
	Minimum	Reduced	Current	Current performance	Increased	RPA level
Improved harvesting systems.	No new work.	Maintain current.	Maintain current.	Increase 200..	Increase 300..	Increase 200 to full program.
Lumber saving techniques in construction.	Reduced current work.	Increase 200..	Same as reduced.	-----do-----	Increase 300 to full program.	Same as increased level.
Use of reconstituted wood products.	Reduced current work.	Reduced current work.	Maintain current.	Increase 300..	Increase ¹ 300 to reach full program.	
Hardwood substitution...	No new work.	Maintain current.	-----do-----	Increase 100..	Increase 600..	Increase 800.

Cost by line item	Increment					
Forest products utilization.....		200	200	600	1,000	400 ¹
Forest engineering.....				200	300	200
Forest economics.....					200	400
Total increment.....		200	200	800	1,500	1,000 ¹
Total program.....		200	400	1,200	2,700	3,700 ¹

¹ Not included in fiscal year 1980 proposal.

REFORESTATION ON PRIVATE LANDS

Present program

In 1977, Federal programs for CFM, FIP, and ACP accomplished reforestation on 305,000 acres for a Federal cost of \$10,000,000, State cost of \$1,528,000, and private cost of \$10,961,000.

Based on the 1974 FIP evaluation, outputs in the first rotation including pulpwood and hardwood volumes would exceed 2 billion cubic feet. Softwood sawtimber output would be 8.200 billion board feet during the first rotation with 450 million board feet produced prior to the year 2025. The programs were not specifically designed to produce softwood sawtimber.

Description of accelerated program

There is a problem now with reforestation on private lands. Between the last two 10-year forest surveys in the Southeastern 13 States, 7,000,000 acres of harvested pine forests have not been reforested and are now occupied by brush or lower value, slow growing species. State programs, State reforestation laws,

higher stumpage prices, and industry efforts will continue to assist with reforestation efforts; however, the buildup of reforestation needs on private lands is expected to continue.

Reforestation of additional acres can be achieved by increasing the current FIP, ACP, and CFM programs. Additional funds would also be needed (CM-4) to provide seedlings. The program would be targeted to better sites and would be coordinated with existing programs. The accelerated program would reforest 45,000 acres in 1979 and 100,000 acres per year during the decade 1980-1990.

Region

About 60 percent of the reforestation work would be done in 10 Southeastern States. The remainder would be in the Northwest Pacific coast area and in Northeastern States.

ANTICIPATED OUTPUT FROM THE ACCELERATED PROGRAM

	Acres	Softwood saw-timber (million board feet)
1979.....	45,000	0
1980 to 1990.....	1,100,000	0
1990 to 2000.....		430
2001 to 2025.....		14,000
After 2025.....		12,400

¹ Acres per year.

ANTICIPATED REQUIRED BUDGET FOR ACCELERATED PROGRAM

[Costs are shown in 1978 dollars]

	Acres	Federal	State	Private
1979.....	45,000	\$2,600,000	\$100,000	\$800,000
1980 to 1990 (annual costs).....	1,100,000	5,400,000	250,000	1,700,000

¹ Acres per year.

Cost effectiveness

The total costs per acre, in 1978 dollars, of the accelerated program are: Federal, \$54.00; State, \$2.50; private, \$17.03; total, \$73.53.

A Federal investment of \$4.00 will produce 1,000 additional board feet. Internal rate of return for total investment costs, based on the FIP analysis, is 10 percent in real return in constant dollars.

Federal positions required.—Three.

Public acceptability.—Very good.

Environmentally sound.—This initiative is environmentally sound. Funding and technical assistance would be available for reforestation and for enhancing non-timber resources of water, wildlife, recreation, and aesthetics.

Consistent with present law.—Yes.

NOTE.—100,000 acres reforested annually in perpetuity would sustain an annual harvest of 1.4 billion board feet of Softwood Sawtimber.

UTILIZATION PROPOSALS

Present program

In 1977, the State and Private Cooperative programs of improved harvesting, processing assistance to sawmill operators, and improved wood drying programs extended the supply of wood by 1.4 billion board feet for a Federal cost of 2.7 million and State costs of approximately 1.3 million. The costs of this extended supply of wood was \$3.00 per 1,000 board feet. Past investments in research are not included in these costs.

Description of accelerated, improved utilization program

A 4-year initiative, beginning in 1979 to improve the utilization of existing timber supplies through programs designed to improve felling and bucking practices, improve existing sawmill equipment and operating systems, improve build-

ing concepts to reduce the amount of lumber used in construction, replace existing sawmill equipment with modern equipment and wood processing systems, increase use of wood products reconstituted from demolition wood, crates, pallets, etc., improve logging systems to make harvesting on submarginal areas economically feasible, accelerate substitution of hardwood for softwood, and salvage and re-use structural timbers, crates, pallets, etc. Research is required to develop new techniques to fully implement some programs.

Region

These programs would be implemented primarily in the Pacific Northwest, Northeast, and the South.

Anticipated output

From existing programs: 1,400 MMBF.

From new initiatives: 1979 through 1982: 6-9 billion board feet

Anticipated required budget

For existing programs: Federal and state costs: 4,000,000 (past research costs are not included).

For new initiatives: 1979 through 1982: \$30,000,000.

Federal costs for new initiatives are FS and SEA research and applied technical assistance.

Cost effectiveness

Of new initiatives: \$3-\$5 per MBF.

Federal positions required

For new initiatives—28.

Public acceptability.—Good.

Consistent with present laws.—Yes.

Environmentally sound.—Yes.

INCREASED TIMBER HARVEST ON PRIVATE LANDS

Present program

The current Cooperative Forestry Program (CFM) is funded with \$17 million State funds and \$5 million Federal funds. In 1977 program outputs included reforestation of 139,000 acres and timber stand improvement on 151,505 acres; and harvest of 0.9 billion board feet of timber on 206,034 acres of private non-industrial forest lands.

Description of accelerated program

Harvest on private lands could be increased by 0.3 billion board feet for the first year of an accelerated program and by 0.5 billion by the second year if market conditions and demand continue at 1976 and 1977 levels. The increase would be in addition (a marginal increase in volume harvested) to the volume that would be harvested without the program. Consultant foresters would be utilized by the State foresters to the fullest, feasible extent. Many landowners will sell timber from their lands if technical assistance is provided to insure protection of other resource values, water, soil, and recreation aesthetics. Funds should be at least 50 percent GFA because many States could not match additional CFM funds on the required 50/50 matching basis. The accelerated program would be directed toward better sites and harvest opportunities to increase the harvest on an additional 90,000 acres of private lands (45,000 acres the first year). This program would provide for reforestation of all areas harvested. A system of timber price reporting with pertinent marketing information would be included in the initiative.

Region

The accelerated harvest on private lands would be targeted to States and inventory areas where substantial volumes of softwood sawtimber can be harvested—primary regions are the South, Pacific Coast, and selected Northeast States.

Anticipated output

From existing program: 900 MMBF.

From new initiatives: Harvest increase on private lands: 1979-300 MMBF; 1980-500 MMBF; 1990-700 MMBF.

Anticipated Federal budget

No State funds are included; if additional State funds are provided by State Legislatures for this purpose, output would be increased above the levels shown:

For existing programs: \$5,000,000.

Cost effectiveness.—Of new initiatives (in constant 1977 dollars): 1979—\$15 mmbf; 1980—\$15 mmbf; 1990—\$15 mmbf.

Federal positions required.—For new initiatives: 4.

Public acceptability.—Good.

Consistent with present laws.—Yes.

Environmentally sound.—This initiative is environmentally sound. Funding and technical assistance would be available for reforestation and for enhancing non-timber resources of water, wildlife, recreation, and aesthetics.

OPTIONS FOR UTILIZATION AND RESEARCH

The Anti-Inflation Paper contained programs designed to increase the utilization of existing timber supplies by expanding the current program for improving wood product recovery at sawmills and harvesting operations and providing new technical assistance for the following new initiatives:

Accelerate investment in new processing systems; introduce new logging systems; use more wood for energy production; accelerate hardwood substitution for softwoods; reduce consumption through construction improvements.

The technology is available for the new initiatives. No new research is required. Projected Federal and State cost increases for the existing programs, expansions, and the new initiatives for a 4-year period are 6.9 million dollars in 1979 and 7.4 million dollars for 1982. These programs are expected to produce 6–9 billion board feet during this 4-year period. The apparent cost-effectiveness of the total proposed 4-year program is about \$2.00 of Federal expenditures per MBF of increased yield. However, the information on the net aggregate impact of such assistance on timber market prices and quantities supplied in the short run or the long run are imprecise. This makes it difficult to quantify the cost effectiveness of efforts designed to increase aggregate timber supplies and dampening prices through these measures.

Improvements realized through these utilization proposals will be reflected almost immediately in extending the supply of sawtimber and the construction practice program will have a direct impact on construction costs as soon as implemented.

New initiatives by Forest Research can ease the inflationary pressures resulting from construction materials shortages. These initiatives include the following proposals to increase wood harvesting, processing, and construction efficiency.

1. *Improved harvesting systems.*—Improved logging systems could make it feasible to log small tracts, steep slopes, and low-volume stands and to remove residues, small and defective trees, and material from thinnings. The present opportunities to apply improved logging systems are in the mountainous West, and the small hardwood ownerships in the East. Short-term gains would include softwood sawlogs that otherwise would not be economical to log, hardwood thinnings, and residues; long-term gains include accelerated growth of the remaining timber. The estimated cost of this proposal for fiscal year 1980 is \$500,000. The program has potential to provide an additional 500 million board feet of wood annually.

2. *Lumber Saving Techniques in Construction.*—Since construction is the largest single consumer of softwoods, a research program to extend the wood supply through more efficient construction methods promises large dividends. Increased funding will allow accelerated development of grading technology, properties and design for dimension lumber uses, and the composite performance of light frame construction. An additional \$700,000 would be required. Potential savings of one billion board feet annually could be realized from expected greater efficiencies.

3. *Use of Reconstituted Wood Products.*—A research program could lead to a new generation of wood products made of reconstituted wood. Demolition wood, crates, dunnage, and pallets that are currently being destroyed, and urban trees that are cut down can be used as the raw material for joists, studs, sheathing, structural flakeboard, and laminated veneers. Research is needed in processing these materials, in separating foreign matter from wood fiber, and in product development. An additional \$600,000 would be needed for studies on processing reclaimed products. The potential volume equivalent in construction products is 500 million board feet per year that could be made available through recycling and reconstitution.

4. *Hardwood Substitution.*—Aspen has been accepted under softwood standards for structural lumber. There is every indication cottonwood, tulip, poplar, red alder, and other hardwoods can also be used. Flakeboard and other structural members can be made from hardwood residues and chips. Sheathing grade plywood from low grade hardwood can be substituted for softwood sheathing. Use of

hardwood moldings and sash and door construction can be increased. Most of these can be made from trees that are not now merchantable or from harvested wood that is now wasted. This program would cost an additional \$700,000 for fiscal year 1980. A research program on developing the technology to substitute available hardwoods where softwoods are now used would provide the opportunity to increase construction products by an equivalent of 750 million board feet annually.

The amount and timing of outputs estimated for the four new initiatives would depend on how rapidly the new technology is adopted. The net impacts of successful new technology transfer on actual market supplies have not been estimated.

S&PF UTILIZATION PROPOSAL

1. Program specifications—where and how they apply

A. *Softwood sawmill industry.*—Increase supply of wood through improved utilization of existing timber supply by making sawmills more efficient in their conversion process.

B. *Logging industry.*—Increase supply of wood through improved utilization of existing timber supply by making logging operators more efficient in felling and bucking trees.

C. *Energy production.*—Increase the supply of wood fuel for energy production by utilizing wood fiber that is presently being left in the woods after a logging operation.

D. *Wood construction industry.*—Increase the supply of wood through improved construction techniques and substituting under utilized hardwood species for traditionally softwood uses.

2. Inventory of possibilities—how many there are and what the condition is

A. *Sawmill improvement program.*—An on-going Forest Service program that is currently analyzing about 125 softwood mills per year. Since the program's inception in 1973, approximately 1.5 billion board feet of additional lumber has been put on the market without an increase in log input. The gross value of this additional lumber is about \$300 million.

B. *Improved processing systems.*—Much new technology has been completed in recent years in improving sawmill recovery efficiency. In many cases this technology has resulted in machinery and equipment that is high in lumber recovery efficiency. The present Forest Service organization is not geared to provide this kind of technical service to any large degree.

C. *Improved harvesting program.*—An on-going Forest Service program that is currently analyzing about 175 loggers per year. Since its inception in 1975, approximately 160 million board feet of additional logs have been delivered to sawmills. The gross value of these logs is approximately \$16,000,000.

D. *Improved logging systems.*—New technology is currently available that if implemented will help to more efficiently remove logs from heretofore uneconomical logging situations. More research is currently being done in this area and will be available for implementation as it's completed.

E. *Wood for energy.*—This is an entirely new initiative that primarily will involve providing assistance to producers in finding viable markets. Initially, feasibility studies will have to be made to determine the potential of using wood fiber for the economical production of energy.

F. *Hardwood substitutes.*—This is an entirely new initiative that will involve providing technical assistance to prospective producers in processing and drying. Under utilized hardwood species for construction purposes. New research will be required before this initiative can be fully carried out.

G. *Construction improvement program.*—This is a new initiative that will involve convincing the general public, builders, and financing agencies that buildings using wood can be constructed with material savings and still meet building codes and construction integrity. New research is needed to develop more effective building techniques.

3. Estimate of physical responses—physical benefits from implementing the procedure

The following tabulation is an estimate of the additional board footage to be derived through 1982 by implementing the programs listed in question 2.

	<i>Additional board footage in millions</i>
Sawmill improvement program ¹	570
Improved processing systems.....	1, 100
Improved harvesting program.....	1, 960
Improved logging systems.....	920
Wood for energy.....	910
Hardwood substitutes.....	1, 160
Construction improvement program.....	2, 500

¹ Estimate for this program is through 1980 only.

4. & 5. Measure of national advantage and Federal costs ³

[In millions of dollars]

	Federal costs	Value of the additional footage ¹
Sawmill improvement program.....	1.55	² 114
Improved processing systems.....	1.05	220
Improved harvesting program.....	2.35	392
Improved logging systems.....	3.12	184
Wood for energy.....	2.1	182
Hardwood substitutes.....	4.65	232
Construction improvement program.....	3.475	500
Total.....	18.295	1, 824

¹ Value of this additional footage is conservatively figured at \$200 per million board feet.

² Estimate for this program is through 1980 only.

An investment of \$18,000,000 would result in \$1.8 billion worth of additional footage by 1982 which will help to conserve our natural resources, extend the timber supplies, and help to dampen softwood lumber prices.

STATEMENT OF NATIONAL FOREST PRODUCTS ASSOCIATION

Mr. Chairman and Members of the Committee, the National Forest Products Association, headquartered in Washington, D.C., is a federation of twenty-nine regional, product and species associations and fifteen direct member companies. NFPA represents the growers, manufacturers, and wholesale distributors of solid wood products throughout the United States.

BACKGROUND

Last week President Carter directed the Secretaries of Agriculture and the Interior to take steps to increase timber supplies through limited and temporary departure from the current even-flow non-declining Timber Harvest policy. In announcing the President's action, Alfred E. Kahn, chairman of the Council on Wage and Price Stability, said it provides an opportunity to obtain substantially

³ Very strong, well documented results, from past SIP and IHP assists provide the basis for expanded program estimates.

The estimates for the Improved Processing System have been devised from earlier research results and later supported by SIP analysis which, in many cases, presented this potential as one of the elements. A large consulting firm has further supported the evidence of the great potential and need in this area of technology transfer.

Estimates of potential achievements for Improved Logging Systems, Energy from Wood, and Hardwoods Substitutes for Conventional Softwood Uses are less documented from past activity in broad, on-the-ground activity. However, each has strong supportive information contained in research results from Federal and industrial sources. "Wood for Energy" has a very positive indirect benefit by the fact that thousands of acres will be put into good shape when the low value trees (undesirable growing stock and culls) are removed for production of energy. Future yields will be increased in both quality and quantity. This will surely combat inflation in future years.

increased timber supplies from federal forests in the West. Because supplies are short, Kahn said, the decision promises to make an "important contribution to reducing inflation," since wood accounts for about 14 percent of the total cost of the average new house.

This decision by the Administration is a constructive step towards fighting inflation while reducing unnecessary waste of the public's major renewable resource. Relaxing the present conservative policy of even-flow, non-declining yield is an important move towards a number of opportunities available to the Administration to increase the timber productivity of the National Forests.

AUTHORITY FROM THE 1976 ACT

The National Forest Management Act of 1976 provides the Forest Service with authority to depart from the even-flow policy for a number of purposes, including, but not limited to, improving the age class distribution of forests, reducing high mortality losses, and providing for community stability and economic objectives. Under the law, any such departures must, of course, be compatible with multiple-use standards.

The real import of the 1976 Act was to reject the Forest Service policy of applying non-declining yield ceilings in all situations and on all forests without evaluating reasonable alternatives. The law requires the Forest Service, in effect, to weigh the merits of various harvest approaches—something the Service seldom did in the past.

EFFECT OF THE PRESIDENT'S ORDER

The effect of the President's order is to direct the Forest Service to utilize the flexibility provided to it by law. The President's announcement is a significant break from traditional practices. It has great value in conveying the message to the Forest Service that a forest plan providing for a departure will be considered feasible and acceptable. Without this message, alternatives providing for departures would likely be considered by the agency, if at all, merely as "throw-aways"—evaluated for legal or public relations purposes, but never given serious consideration or objective evaluation. Past agency actions have demonstrated a strong bias against departures.

The effect of the Presidential announcement will be to force the Forest Service to evaluate comprehensively forest management approaches at variance with those the agency has traditionally and uncritically followed.

OTHER ACTIONS ARE NECESSARY TO ASSURE AN ADEQUATE TIMBER SUPPLY

The decision to evaluate alternatives to current Forest Service harvest policy is only one step in what must be a comprehensive program to meet the anticipated needs of the nation for wood products. Such demands are expected to more than double in the next 40 years.

The National Forests contain over half the softwood sawtimber inventory in the nation and they must play a major role in meeting that projected demand. The President's decision is a significant first step in what will likely be a long process aimed at assuring that the Forest Service objectively and comprehensively evaluates those harvest policies and management systems which hold promise of yielding greater social and economic benefits than those to which it has traditionally adhered. Other actions must also be taken—some of which are summarized as follows:

1. Modification of the draft 1980 RPA Assessment and Program to broaden the range of alternative Program output levels. These alternatives must be evaluated in a way that will more fully describe the full opportunities available for timber management on the National Forests.
2. Commitment by the Administration to Forest Service budget and manpower levels which will allow realization of the resource output levels recommended in the 1975 RPA Program.
3. Commitment by the Administration to early resolution of the RARE II Wilderness and Non-Wilderness issue. The Administration should submit recommended legislation to implement its RARE II recommendations. It should also commit itself to early implementation of normal multiple use activities on those areas it recommends for non-Wilderness use and give priority to early development of resource plans for those areas placed in the "further planning" category. The majority of these areas should be recommended for non-Wilderness use.

NON-DECLINING YIELD IS NOT THE SAME AS SUSTAINED YIELD

There are probably few government policies more misunderstood by the public than the Forest Service's even-flow non-declining yield policy. It is often referred to as a "sustained yield" policy.

Non-declining yield is not synonymous with sustained yield. On many National Forests having significant volumes of old-growth timber, the non-declining yield policy creates a situation under which timber harvest levels must be set far below levels which could be removed without ever risking a drop below the long term sustained yield level or those levels which the Forest Service is planning for under non-declining yield constraints.

In other words, considerably more can be harvested from many National Forests without ever harvesting less than levels currently planned by the Forest Service. Two conditions will permit this:

(1) Very old and decadent timber may be safely harvested at a more rapid rate than currently planned, allowing utilization of sizable volumes of timber otherwise doomed to die and rot on the forest floor. Some current National Forest plans will delay harvest of old-growth timber until the year 2100 and beyond.

(2) Timber growing sites currently occupied by slow growing and decadent old-growth timber—yet which are highly productive—will be converted to thrifty, young stands growing many times the rate of the old stands which they replace.

THE CONTROVERSY OVER NON-DECLINING YIELD IS EXAGGERATED

The intensity of the controversy that the non-declining yield policy has generated is unfortunate. To focus on the issue of National Forest harvest levels alone, as has often been done, is inappropriate. It must be recognized that harvest scheduling is not an end in itself but merely a means to an end. The purpose of timber harvesting is to attain desirable goals and objectives for society. These are what should be focused on.

The Forest Service should be required to describe the condition of the forest which management is striving to achieve in terms of its physical, biological, and economic characteristics: These should include vegetation types, species relationships, wildlife habitat characteristics, locations and description of areas which will be managed to achieve non-timber objectives, projected growth rates, revenue flows, and other characteristics. There are other important objectives of a harvest schedule which are not related to the forest itself. It provides jobs, community stability, economically and environmentally acceptable building materials, and other wood products which are used by virtually everyone in society.

More emphasis needs to be placed on describing the objectives of management including the "target forest". Once this is done, the planning process should describe and analyze various alternative ways of achieving these objectives within a reasonable time schedule. If this happens, debates over the merits of non-declining yield versus other harvest schedules would be reduced in importance.

One of the arguments frequently put forward in support of non-declining yield is that it contributes to community stability. This is not valid due to the fact that under the policy there is no consideration given to non-National Forest land in the forest land base used to calculate National Forest harvest levels.

A recent study by John Beuter of Oregon State University analyzed the timber supply situation in Oregon and discussed the implications of various assumed alternatives to timber supply in that state (OSU Research Bull. 19, January 1976). All ownerships, including federal, state, forest industry, and small private, were analyzed. This study projected that if present landowner policies continue there will be a 22 percent decline in timber supply in Oregon between 1980 and the year 2000. However, if certain policies were changed (including the present federal non-declining yield policies), there is no reason for any decline in harvest levels at all.

The Forest Service admittedly cannot control timber harvest on lands it does not administer. However, relatively reliable estimates of removals from these lands can be made based upon forest inventory characteristics, projected market prices and other criteria. Failure to consider these lands, in many cases, runs counter to the agency's community stability objectives since it ignores the significant contributions these lands will make when combined with National Forest lands.

ENVIRONMENTAL VALUES ARE PROTECTED BY LAW AND PRACTICE

The President's decision to evaluate alternatives to nondeclining yield is now being attacked by environmental groups as being in conflict with environmental values. This is not so.

Harvest levels should be established as a result of objectives developed through the RPA planning process. Such a process must consider national demand for timber, the cost associated with meeting that demand, and the implications of various harvest levels on appropriate multiple use values and environmental standards.

The current Forest Service even-flow, non-declining yield policy runs counter to this process. In a very real sense it is an artificial and irrational prescriptive requirement, the effects of which—both economically and environmentally—vary widely on individual National Forests.

The President's decision should encourage evaluation of alternatives to Forest Service management policies which might be environmentally preferable and yet still achieve timber output goals. Specialists in harvest scheduling and timber modeling validly point out that there are now harvest scheduling techniques and models which, if utilized, will schedule timber for harvest more efficiently and with fewer adverse environmental effects than those procedures currently used by the Forest Service. They do so by taking into consideration both the economic and environmental costs and benefits of managing certain areas, and by scheduling timber management investments and harvest operations in locations that are of the highest productivity for growing timber while involving the lowest environmental costs.

These techniques do not use the assumptions and allowable cut effect implications inherent in current non-declining yield harvest models. These techniques should be given full consideration. The proper place where this consideration should be given is at the National Forest level where the implications of their application in a specific area can be identified and described in detail. The proper time for this evaluation is during the normal planning process when other alternatives are under consideration.

CONCLUSION

In announcing the President's decision, Alfred Kahn said: "The President's decision is likely to be interpreted by some as anti-environmental. Others will see it as a guarantee that the National Forests will be opened up to rapid harvest. It is neither. It is a determination to improve the efficiency and management of our nation's federal forest resources wherever possible, with full consideration of all the values these lands represent. The President's policy decision reflects a carefully balanced approach to the management of these resource values. It is also very good anti-inflation policy."

We agree with this statement by Mr. Kahn and we appreciate this opportunity to submit our views for the record. Thank you.



