

ROADLESS AREA REVIEW AND  
EVALUATION  
(RARE II)

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HENRY M. JACKSON, *Chairman*  
COMMITTEE ON ENERGY AND  
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(II)

APR 17 1978

# United States Senate

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## MEMORANDUM

4/17

John:

I have had this report in the office for a few days -- and saving it for you and I have just now got around to dropping it in the mail.

I am sure that if you have already got a hold of one that someone on your staff could use this document.

Also, please let me know if I can get any others for you.

See you at the 2nd annual wilderness lecture.

  
Larry

## MEMORANDUM OF THE CHAIRMAN

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*To Members of the Senate Committee on Energy and Natural Resources:*

On September 21, 1977, Senator Frank Church convened the first in a series of roundtable discussions on the Forest Service's latest roadless area review and evaluation (RARE II).

I share Senator Church's view regarding the importance of this program for all users of our national forests. In response to his request, I have directed that the proceedings of these meetings be printed as a committee print so that they will be readily available to Members of the Senate and others who are interested in the issues raised by the study.

HENRY M. JACKSON, *Chairman.*

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U.S. SENATE,  
COMMITTEE ON ENERGY AND NATURAL RESOURCES,  
*Washington, D.C.*

HON. HENRY M. JACKSON,  
*Chairman, Committee on Energy and Natural Resources, U.S. Senate,  
Washington, D.C.*

DEAR MR. CHAIRMAN: As you know, late in the spring of 1977, the Forest Service and the Department of Agriculture began a comprehensive review of the roadless lands within the national forest system.

This roadless area review and evaluation (often referred to as RARE II) is aimed at identifying all of the remaining roadless areas within the national forests. Once this inventory is complete, the roadless lands would be classified by the Forest Service under one of three categories: (1) areas best suited for inclusion in the national wilderness system; (2) areas to be made available for nonwilderness uses, such as timber harvest and development, and (3) areas for which insufficient data exists to make a final decision.

RARE II is a refinement and expansion of the first roadless area review and evaluation (RARE I) conducted by the Forest Service in 1972-73. That first review process identified 1,449 roadless areas within the national forest system. Of those areas, 274 were selected for further wilderness study. The Forest Service concedes that there were serious problems with the first review. Contiguous roadless areas were arbitrarily subdivided and considered piecemeal rather than as a whole. The boundaries for some areas were not accurate, and thus did not reflect the full extent of the roadless unit. Some roadless areas were completely overlooked. The absence of firm criteria as to what was to be inventoried caused inconsistencies between each Forest Service region.



According to the Forest Service, RARE II is aimed at resolving these problems. It is designed to provide sufficient information for deciding the disposition of millions of acres of roadless lands. The intent of the process, according to Forest Service Chief John McGuire, is to "pursue a determination of just which national forest system areas should be selected to round out our share of the national wilderness preservation system and gain timely release of the remaining roadless areas from further wilderness consideration."

In response to the intense interest being expressed from all quarters in the RARE II process, I have initiated a series of roundtable discussions on the issue bringing together Members of Congress and their staff, representatives of the administration, as well as interested groups and citizens. As the outcome of the RARE II program will undoubtedly have important consequences for everyone concerned with our national forest and wilderness systems, I hope that the proceedings of these roundtable discussions can be printed as a committee print for the use of the public and Members of the Congress.

Sincerely yours,

FRANK CHURCH.

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## ROADLESS AREA REVIEW AND EVALUATION (RARE II)

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WEDNESDAY, SEPTEMBER 21, 1977

WASHINGTON, D.C.

The meeting convened, pursuant to notice, in room 3110, Dirksen Office Building, Hon. Frank Church presiding.

Present: Senators Church, Hatfield, McClure, and Domenici.

Also present: Tom Williams, professional staff member; Tom Imeson, professional staff member for the minority; and Fred Hutchison, legislative assistant to Senator Church.

### OPENING STATEMENT OF HON. FRANK CHURCH, A U.S. SENATOR FROM THE STATE OF IDAHO

Senator CHURCH. This afternoon we are trying an experiment. It is patterned after an experiment this committee conducted some months ago that dealt with geothermal energy, and brought representatives of the geothermal industry and of the Government together to informally discuss the problems of getting on with the development of geothermal energy.

That roundtable discussion turned out to be very productive. It tended to spotlight many of the bottlenecks associated with geothermal development and I think, as a result of that session, some problems were resolved that might never have been identified except for the free flow of discussion and the fact we got all of those groups together to meet with the committee.

That first roundtable discussion was sufficiently successful to encourage us to conduct a similar seminar today in connection with a very perplexing problem; namely, the problem presented by RARE II, a continuation of the effort by the Forest Service to review roadless areas in the national forests and to determine the future management of those roadless lands.

As the size of this problem has grown with a series of court decisions, the complexities have grown as well. The first roadless area review, RARE I, has been supplanted by RARE II, and everyone who has been drawn into this net has become increasingly aware of the need to speed up the process and reach some decisions upon which the wood products industry, and all other citizen groups who are interested in the management of the national forests, can rely.

So we would hope this experiment in a seminar session this afternoon proves as successful as our earlier experiment in the field of geothermal energy.

We have had hearings going late in the evening last night and the night before. I would like to try and get this process started, and

then I hope it will sustain itself. I am sure it will, looking at the number of people present here and their interest in the subject.

At the proper time we are going to ask Assistant Secretary Cutler—who I must say has shown a great deal of leadership on this issue and gives us hope that this Gordian knot may yet be cut, and who is with us today together with his associates—to give us a brief presentation. If his people will reverse their position at the tables so that they are facing the rest of the seminar's participants, I think that will stimulate better interchange between us.

Senator Hatfield is here. I know of no member of the committee who is more conversant with natural resource issues and the nature of the problem we are going to be discussing this afternoon than Senator Hatfield.

I would like to ask him for whatever opening remarks he would like to make at this time.

### STATEMENT OF HON. MARK O. HATFIELD, A U.S. SENATOR FROM THE STATE OF OREGON

Senator HATFIELD. Thank you, Mr. Chairman.

I want to thank the chairman for making this arrangement. I feel it will provide the committee with valuable assistance in making some determinations we are called upon to make. I think the chairman ought to have the staff go out for some fuel.

It seems to me, Mr. Chairman, that we have a number of pressing issues, but one of the most important—and one concern to everyone in this room at this particular time—is what will be the required time necessary to complete RARE II—not only the time factor, but what kind of cooperation can we expect and should we expect from the various interest groups that relate to this particular subject.

I think we have some very immediate questions that come to mind, such as relating to the EIS requirements. Will a programmatic EIS be sufficient, or will we have to have unit-by-unit EIS reports?

I think we ought to understand what the relation of NEPA is to this whole process, and obviously the requirements under that law. How much time and money is going to be required, especially as we look at some of the problems we have had where we have added funding to the Appropriations Committee for more intensive forest management practices.

After we have done that, we find the personnel ceiling limitations imposed by OMB.

I would hope, out of this roundtable, we will get some assessment of these particular problems—whether or not we could undertake more contract relationships with institutions of forestry or in other areas where such personnel are available on an ad hoc basis, rather than depending so much upon a permanent employee staff of the Department.

I think we have to consider, too, the broad impact during the study of RARE II on other uses, not only recreational, environmental, and wildlife habitat, but let me illustrate by the impact occurring in one national forest, the Umpqua National Forest in the State of Oregon.

We have a number of roadless areas being studied in this very rich forest, rich in its resources and rich in its potential. Because of this, the Forest Service has had to concentrate timber sales in the remaining part of the forest in other areas.

This has led to clearcut after clearcut after clearcut, instead of the more disbursed type of timber practice that might have otherwise been engaged in.

I think another important issue involves how fast we can free up the controversial areas now. Senator Church has provided us with a very interesting pilot project here in the Gospel-Hump situation where the environmentalists and other interest groups have come to agree to that which is OK for logging and other purposes, and that which would be set aside to be protected from such logging.

I think we ought to find, from the Forest Service, some kind of comment, at least, and hopefully a commitment as to the fact that there will be other designations you will be called upon to make, such as designating some areas administratively for more intensive management.

Where possible, we ought to get some figures from the Forest Service on how management can be intensified to make up for the withdrawals of other areas.

Senator Church, I have been at your side on many occasions as we have taken up important issues from our work on the question of clearcutting, to forest management, and many other problems. I feel, here again, we are breaking new ground, and I appreciate your leadership and welcome the opportunity to work with you during this roundtable.

Senator CHURCH. Thank you very much, Senator Hatfield.

I am told other Senators will be joining us through the afternoon. Senator Wallop, who is not a member of this committee, has nonetheless, indicated his desire to attend. I am sure other members of the committee will be coming in as well.

With us today from the administration in addition to Assistant Secretary Cutler, we have his associates, Mr. Zane Smith who is with the Forest Service, Rex Resler who is the Associate Forest Service Chief, and George Davis who is on the RARE II staff.

First of all, we would ask the Forest Service to make their presentation of where it is with regard to RARE II and where it seeks to go. Then we would ask for a presentation of the particular concerns felt by conservation groups, followed by a presentation of the particular concerns that are felt by the forest products industry and its associations.

I understand that Doug Scott will speak for the conservation groups and Kirk Ewart for the forest products industry. After that, it is kind of free-for-all.

**STATEMENT OF DR. M. RUPERT CUTLER, ASSISTANT SECRETARY FOR CONSERVATION, RESEARCH, AND EDUCATION, DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY JOHN McGUIRE, CHIEF, FOREST SERVICE; GEORGE DAVIS, RARE II STAFF, FOREST SERVICE; REXFORD A. RESLER, ASSOCIATE CHIEF, FOREST SERVICE; AND ZANE G. SMITH, DIRECTOR, RECREATION MANAGEMENT, FOREST SERVICE**

Dr. CUTLER. Thank you, Mr. Chairman.

I think we are having a logistical problem here. Perhaps the members could move to a better location.



I would like to express the Department of Agriculture's and the Forest Services' appreciation for this opportunity to talk to the Members of the Senate and the members of the groups interested in the RARE process and clarify for all concerned the steps we are taking to expedite the allocation of the roadless lands of the national forests to clear up the question of for which values or for which of several multiple uses that roadless country will be designated to be used.

We would at least make the separation, as far as much of that roadless terrain is concerned, between those areas we think would most appropriately be proposed for addition to the National Wilderness Preservation System and whose areas we think have the highest and best use for one or more of the other of the multiple uses.

Mr. Chairman, the Forest Service initiated the wilderness concept in 1924, and began its establishment of primitive areas with the Gila area in New Mexico by then Forest Service employee Aldo Leopold.

The National Forest System's wilderness areas became the initial units of the wilderness preservation system established by the Congress in 1964 with over 9 million acres of wilderness and wild areas identified by the Forest Service being placed in the wilderness system at that point.

The Wilderness Act had a second provision. That was the review provision. It required the Department of the Interior to review all of the roadless areas of 5,000 acres or more and all the roadless islands in the park system and the refuge system for their possible suitability to the wilderness system. The Wilderness Act required the Forest Service only to review those primitive areas on which the Forest Service had not completed its wilderness or wild area administrative review for addition to the wilderness system.

The Forest Service proceeded in its review of the primitive areas, and has completed that review. Many of those areas, with perfected boundaries, have been added by Congress to the wilderness system. The balance are pending before the Congress.

We are now carrying out an administrative review of the primitive area studies and proposals submitted by the previous administration with an eye to reviewing those proposals and making any necessary modification in our recommendations to the Congress. That is what was required by the Wilderness Act. In addition, we found ourselves—and you found yourselves—subject to proposals coming from local citizen groups for additions to the wilderness system of what has been called *de facto* wilderness areas in the National Forest System.

My friend, Clif Merritt, was a proponent for example of the Lincoln Scapegoat area, which ultimately was added by the Congress to the wilderness system. Many other areas followed in a piecemeal unsystematic fashion.

In response to this piecemeal nibbling kind of approach, Forest Service Chief Ed Cliff, in 1971 I believe, authorized, in fact ordered his regional foresters to conduct a review of all of their national forest lands to identify forest areas that might be designated wilderness from the standpoint of their undeveloped status. This was referred to as RARE I—Roadless Area Review and Evaluation.

RARE I was accomplished in a matter of a few months and, as a result, because it did not provide for very much public involvement, it did not provide for complete inventory of the eastern national forests or the grasslands. It did not inventory in much detail the Alaskan wilderness opportunities in the Alaskan forests.

RARE I was found to have some weaknesses.

Then we moved into the implementation of all of the laws and related procedures we have adopted over the last few years that combine to make up the land use planning process. These include the Multiple Use Sustained Yield Act, the National Environmental Policy Act, the Forest and Rangeland Renewable Resource Planning Act, the National Forest Management Act, and all of the procedures that have been adopted by the Executive Office, the Council on Environmental Quality, and the Department of Agriculture.

Ultimately we came to the so-called *Conti* decision which was an out-of-court settlement between the Chief of the Forest Service and the Sierra Club that an environmental impact statement would be filed before authorizing future contracts for development within a roadless area except for statutory rights.

We found ourselves with a morass, a tangled web of procedural complications, and we are having a hard time fighting our way out of it to arrive at decisions as to how this roadless land would be allocated.

Years and years have gone by and decisions have not been made. When Secretary Bob Bergland and I were appointed to our jobs in this new administration, the forest products industry made it clear to us that this tangle, this web, this delay in the allocation of that roadless back country of the national forest, which ultimately obviously was to be used for many different uses, was creating major economic hardships in parts of this country; particularly in your region.

Therefore, we resolved to try to do something about that. The result, Mr. Chairman, is RARE II.

We are very pleased to have this opportunity to talk about it with all of the groups concerned because without the support of the Congress and without the cooperation of all of the interest groups that have something at stake in this process, we may not succeed in accomplishing our very important objectives.

I hope that, among the results of this meeting, will be at least a tentative consensus, and that we can proceed this afternoon in an open fashion to resolve some of the unresolved procedures of timing.

I think it is up to us in this room to work on some of these unresolved details and resolve, among ourselves if we can, that this process is going to work to the benefit of all of us.

We have begun the process. We have held over 200 public meetings. We have had over 17,000 citizens attend these meetings.

This has to be one of the great public-involvement exercises of all time as far as the Federal Government is concerned. This is just the first stage. We are just setting the inventory, the criteria review, and information-gathering process now, and there will be two more opportunities for public involvement—as we develop the inventory and as we propose the disposition of these inventoried lands.

I have asked Zane Smith—former Supervisor of the Willamette National Forest in Oregon and the Director of the Forest Service Recreation Management Staff to take over leadership on RARE II because we needed a good man in charge of that program, and I think he is a good man.

He is widely respected. We are pleased to have him in charge. Zane has been able to conceptualize this program, I am glad to note, to tie it in in a very logical way to the Resources Planning Act, the National Forest Management Act, and to make it clear how it is a part of our statutory requirement to do a certain kind of planning.

I would like, with your permission, to turn the meeting over to Zane and have him describe the process.

Senator СHURCH. Before we do that, let me ask you to include in your remarks some indication of how you visualize bringing all of this to an end.

In other words, after the evaluation has taken place what approach do you anticipate taking that will finally lay the whole roadless areas question to rest?

Under the original Wilderness Act, as you correctly pointed out, Congress did provide a mechanism that identified the areas that were to be studied for wilderness, and restricted those areas to national parks and wildlife areas and to the established primitive areas of the national forest system at the time of the enactment of the legislation.

Back in 1964, we knew what the wilderness system contemplated by the act would be, and we gave the Forest Service a period of time in which to review the existing primitive areas, exclude commercial timber lands, recommend redefinition of the boundaries, and come up to Congress with a set of recommendations.

So the process was complete as envisioned by the original Wilderness Act. We knew where we were going and we knew what the approximate size of the wilderness system would be.

Then, as you have very ably described, subsequent events, most notably the court decisions, fuzzed things up.

I know everyone here would be particularly interested in knowing how you intend to proceed once the assessment has been completed, the public hearings are over, and the Forest Service has reached the point where it has recommendations to make about how we are going to get this thing finished.

Dr. CUTLER. That is exactly what Zane will address, Mr. Chairman.

#### **STATEMENT OF ZANE G. SMITH, DIRECTOR, RECREATION MANAGEMENT, FOREST SERVICE**

Mr. SMITH. I appreciate Doctor Cutler's endorsement.

This RARE II is a special planning effort. I want to emphasize that. It is within the context of our land management planning that has been ongoing in the National Forest System and within the general guidelines of the RPA program and assessment prepared in 1975, and that will be updated in 1980.

The RARE II project's purpose, of course, is to accelerate the resolution of as many of the roadless properties of the National Forests as possible, acknowledging that we are not satisfied with the speed with



which we are able to do that job through our regular unit planning Process at the National Forest level.

As Dr. Cutler pointed out, we did become engaged in a morass that was resulting in no decision. In fact, it was resulting in a series of fragmented decisions resulting from litigation and legislation in an attempt to calibrate and perfect our planning system.

In many instances, these represented a less than comprehensive approach, so RARE II's purpose is to resolve as much of that particular land management issue as possible: the final disposition of the roadless properties.

We do not expect that we can do it all within a year's period of time, for which RARE II is scheduled, but at least a good headstart can be made on the decisions and the data collection for what remains.

The planning effort itself can be categorized into three basic elements: Inventory, which we are in the process of completing leading to a two-step evaluation and analysis; and finally, Mr. Chairman, the formulation of recommendations and the decision itself.

In a chart form in back of us, we have sort of a conceptual model beginning with the inventory and leading to a decision, partially within the Congress and possibly at a high level of the executive branch for a portion of it.

Inasmuch as many of you have seen this model, I think I will step up there and attempt to summarize it again for the sake of getting back to the full discussion.

The National Wilderness Preservation System is made up of public lands in several jurisdictions: The national forest system, the national park system; fish and wildlife refuges; and more recently public lands administered by the Bureau of Land Management.

It is in the rounding out this national system that we are concerned about a final disposition of roadless properties.

In the national forest, we have 187 million acres, some of which we know contain wilderness that could be considered in rounding out this national system of wilderness. In this first step, we, then, are attempting to perfect our inventory of the possible candidates for rounding out this system.

That is the relatively undeveloped inventory that was brought before the public in a series of some 200 workshops nationwide. As Doctor Cutler pointed out, over 17,000 attended those workshops. We will probably receive double that amount of comment; those comments will be collected by forest supervisors and regional foresters. They will be transmitted to the Chief late this month.

The Chief hopes to issue a final Forest Service inventory of roadless areas by mid-October.

At the same time, we asked the public to comment on the roadless area inventory. We asked them to give us a sense of the relative priorities and values of certain criteria that could be applied to the inventory in an effort to round out the National Wilderness Preservation System.

We will probably issue a set of final criteria sometime in mid-November which will then be used as a first step in the evaluation. After the inventory is finalized and we know what the universe of the properties is, we will move into an evaluation and analysis phase.

We designed that in two steps. The first, to be applied nationally, will examine the national wants or needs in rounding out what we believe to be a desirable and ultimate wilderness system.

This will give us a notion of where our best candidates are, and how the national forests can best contribute to the final wilderness product.

The second phase will then be done more locally because basically wilderness occurs near communities and in States where there are publics that are dependent on these kinds of lands for other purposes, as well. That is not to say that there are not national implications as we select the areas for wilderness, but usually those costs are more heavily felt at the local level.

Therefore, we will be conducting the tradeoff analysis, as we refer to it, at the State and community levels.

Once that is done, we would expect to array all of the inventoried lands into one or more alternatives, and those alternatives into categories such as immediate wilderness designation. In other words, we will have discovered enough through this special planning effort that we would be willing to sign off without any further study a proposal for wilderness legislation. That is depicted by the blue on this chart.

Equally important in the resolution of the roadless area dispositions is to determine what areas require no further consideration for wilderness purposes and can, in fact, be remanded back to a planning process that will establish what that use might be other than wilderness. That is depicted by the yellow.

Certainly in an accelerated planning effort of this type we do not expect to resolve all of the issues. We would then have a third category, depicted by the green, in which we would say that we cannot decide. We have inadequate data. We cannot reach agreement. We do not know the relationship between other jurisdictions, such as the BLM, et cetera.

We would place those back into our more lengthy and systematic land management planning process. It is our hope, however, that there will be a significant number of properties that will fall in the blue, a significant number that will fall in the yellow, so that as this thing is brought up to a decision point much of the planning will have been accomplished.

At that time, the forest supervisors will have this additional guidance from the national perspective as they proceed with their planning process.

Once this is done, we would most likely package it into some sort of environmental statement process. There are several alternatives we are examining here. We are looking at the State level, regional geographic level—environmental statements—and at the national level.

Most likely when it reaches the national level the Secretary of Agriculture would become the deciding official. He would be prepared to select one of these alternatives and propose to Congress, certainly, legislation for immediate designation of certain areas as a part of the wilderness system—helping round out the wilderness system.

He could also propose that the Congress, through statute, provide planning guidance back to the Department through RPA and land management planning for unit planning at the local level.

Of course, there are other possible approaches. The Secretary or the President could issue the planning advice contained in these two categories. Congress, of course, must ultimately designate wilderness.

Senator CHURCH. May I interrupt? I did not quite understand what the yellow represented. Would you explain that again?

Mr. SMITH. The yellow represents those areas which we could include as a part of the RARE II planning effort that require no further consideration for wilderness purposes. Those would be available for other multiple uses depending on the character, nature, and relative value of those uses.

These properties would then be available for appropriate timber harvests, for off-road vehicles, and other multiple uses except wilderness.

Senator CHURCH. Are you considering submitting that to Congress for ratification so that can be as definite, permanent, and reliable a classification, and as resistant to further appeals and designation as the wilderness would be once enacted?

That would be highly desirable. It would provide Congress with a complete legislative package which would propose not only the wilderness, but the planning guidance as proposed in these two categories.

Dr. CUTLER. Mr. Chairman, I think we ought not reach the point at which we have made up our minds—and you may help us make up our minds—as to how we should proceed.

What I have in mind here is the desirability of not changing our traditional procedures with respect to the role of the executive branch in what you might call administrative zoning of the multiple uses on the national forests, other than wilderness.

Traditionally you have decided, under the Wilderness Act, to make the decision on wilderness designations. This congressional designation is important in the lives of the sponsors of the Wilderness Act because the decision to make an area something other than wilderness is an irreversible decision, at least for a generation or two. Because of that it is important that we have a permanent statutory kind of zoning for wilderness.

From the standpoint of the Department, I think we would like to reserve our recommendation for the moment on how our ultimate recommendations of RARE II will come as recommendations to you for statutory action as to what should become of the areas not proposed for wilderness, or whether we should continue our traditional pattern of recommending wilderness areas and proceeding administratively to zone and plan the balance of the national forests for other multiple uses.

Senator CHURCH. You understand my concern, Mr. Secretary. I speak as one of the floor managers of the National Wilderness Act of 1964. I am a strong believer in the need for a wilderness system in this country.

On the other hand, I am also mindful of the fact that, although RARE II may give us some notion of how large the ultimate system of wilderness is to be, which in my opinion, would be very helpful, once Congress legislates land into wilderness, it is there. It is written into the law.

Although there are possible new discoveries or new national needs which will cause Congress to change the law in the future, wilderness is as permanent as we can make it, as permanent as the law can make it.

On the other hand, the remaining areas are still susceptible to a continuing controversy, and you get to the point where wilderness advo-



cates are in a position to say, "This is ours because the Congress has said so; now let's take a closer look at what is yours over here." That process keeps bubbling along year after year.

What we are looking for is some way to resolve this so industry can depend upon the allocation of the land and make its investments for the future, and so that every group can have some confidence in what is going to happen.

Dr. CUTLER. We have no objection to that route. We would like to be able to offer you a set of options, including a Presidential order for nonwilderness areas that may have status beyond the departmental decision level.

I appreciate what you are saying. We are as anxious as anyone to resolve the total land allocation question. Therefore, we are open—very much so—on that—whether or not there should be legislation on the nonwilderness decisions, too.

Senator McCURE. As I look at the chart and as I listen to your presentation, I have one concern. That is about the second box on the left, the "National Needs Criteria."

I understood you to imply that the "National Needs" related to wilderness. Does that include "National Needs Criteria" for the conflicting resource uses on the public lands?

Mr. SMITH. If I may, I will get right into that question. That is an important point.

We are attempting to resolve the issue of wilderness of these roadless lands within the constraints of other parts of the national forests' purposes. We are relying a great deal on the RPA goals to provide broad planning guidance that will keep us within that box.

The needs criteria we are talking about in this first screen are, indeed, wilderness, but they are within the context and the restraints of goals. This is what we have envisioned this process to be.

We have an existing wilderness system of 14½ million acres, most of which is national forest. I have illustrated this as a circle with missing gaps.

Since we are adding to the wilderness system, we presume that there must be some reasons why we would like to add to it.

We think these gaps or niches should be filled in to arrive at what we consider to be the desired system. We cannot precisely say what that is, but we believe—for this planning purpose—we can come close.

These needs or wants relate to moving from the existing system to the desired system and selecting candidates from the various roadless properties on the national forests and other jurisdictions.

Senator McCURE. Let me stop you there—and I apologize for doing it.

How can you evaluate a system without looking at other national needs? How can you look only at what is desirable for wilderness without also looking at what is necessary for other resource use?

Mr. SMITH. This is kind of a first step. This would, in a sense, refine and specify the national RPA goal for wilderness. We need to be doing—and we have to some extent done—the same thing for the other RPA goals—water, wildlife, recreation, timber, and so forth.

Where we would get into that analysis is at a more local level.

In order to round out the wilderness system, maybe we should be looking at a better representation of ecosystems—a better system of

providing accessibility of these properties to the American people, a better presence of certain kinds of wildlife not because they need to be protected in wilderness but because they are associated with a desirable wilderness system, and certain land forms that would be desirable to have within the system.

These, of course, do not talk to acreages. They talk to the characteristics, the scope of the wilderness system.

We would then ask our regional foresters to examine the areas to meet these missing gaps without telling them they must add them or not, or how many acres. This would be in the form of planning guidance.

We might ask the regional forester in Ogden or Portland to attempt to find a candidate that would fill in the ecosystem gap. He would then examine those areas, along with the other areas, in terms of their tradeoffs, the cost involved in actually moving it into the system. That would be in the context of the present RPA goals.

In that way a regional forester who has a 1.5-million-board-foot timber goal would not be reaching outside of that. He would not be breaking that bank or getting out of that ball park. He would be examining it in that context.

As he begins to examine the relative wilderness values or needs and compares them to the tradeoffs, he could probably come up with a simple matrix that would indicate areas of high wilderness value, medium wilderness value, or low wilderness value—low, medium, and high tradeoff costs.

If he categorized the area as being of high wilderness value and low in tradeoff costs, he probably has a prime candidate for the blue area, an immediate candidate for wilderness.

On the other hand, if he discovers, through his analysis of these tradeoffs, constraints, and so forth, that he has an area of low wilderness value or need and high tradeoff costs, he may have a candidate for no further consideration.

RARE II has tried to establish those outer bounds—not to try to precisely determine the use for every single area, but to resolve as much of the wilderness issue as possible.

Therefore, we think that a combination of this kind of need criteria with the RPA goals is the way; a hard-hitting payoff analysis that boils down to jobs, consumer interests, and economic interests to the State, and he can categorize the lands into these various groups.

Dr. CUTLER. I would like Rex to address the relationship to the Resources Planning Act.

#### **STATEMENT OF REXFORD A. RESLER, ASSOCIATE CHIEF, FOREST SERVICE**

Mr. RESLER. Mr. Chairman, to keep on in this process, we had to define—under the requirements of the Resources Planning Act—an array of options, different alternative levels of production, of that whole mix of resource uses for the National Forest System.

Obviously, there is a cost associated with selection of one given alternative that is high in wilderness, for instance, and lower in production.

The administrations proposal is for certain levels under the Resource Planning Act requirements, and Congress can bless us or not as it sees fit. The next update of the renewable resource program will be coming up in 1980.

When we go through this analytical process we are going to have to look at the tradeoffs as they relate to those goals established in the Resource Planning Act—in that context.

If we elect, as a Nation, to put as high a value on commodity use as we do on wilderness use, then the conclusion would be, obviously, a very low level of increase in wilderness or vice versa, as the case may be.

However, as we see our responsibility it is where we can display those tradeoffs so a decision within the executive branch and the Congress may be made.

What Mr. Smith is describing here is an evaluation process that will be all part of the same overall evaluation effort. The needs or the criteria we have identified is a starting place, but as we go through that evaluation process we will also come to the local level and look at all kinds of commodity tradeoffs to try to identify those tradeoffs as well as wilderness quality.

We will try to display those before we make any kind of judgment ourselves so Congress can, itself, make its judgments.

Mr. SMITH. I would make one other point here. That is that we must consider roadless areas of other jurisdictions.

The roadless area of the national forests appears to be in the neighborhood of 67 million acres. The Bureau of Land Management, although they have not conducted their inventory, estimate 80 to 90 million acres outside Alaska. The National Park Service and Fish and Wildlife Service have inventoried and proposed for the most part all their roadless areas for wilderness classification.

It is important that we keep in mind all of these jurisdictions as we begin to move our analysis forward.

Doctor Cutler has worked with the Assistant Secretary in Interior and the agencies in the Department of the Interior. They are all helping us in using the criteria to inventory lands.

Senator CHURCH. Give me the total acreage, of the National Forest System.

Mr. SMITH. 187 million acres.

Senator CHURCH. Of which there 14½ million acres is now in wilderness?

Mr. SMITH. It is a little under 12½ million.

Senator McCLURE. Is that excluding or including Alaska?

Mr. SMITH. Including Alaska.

Senator CHURCH. What is the total acreage of the roadless areas outside the wilderness system?

Mr. SMITH. Sixty-seven million acres, tentatively. We have not finalized that.

Senator CHURCH. About a third?

Mr. SMITH. Yes, sir.

Senator CHURCH. Of the total national forest area.

Now, can you give those same figures for Alaska?



Mr. SMITH. I think it is 18 million acres of roadless in Alaska and 20 million total. There is 20 million total acres in Alaska and 18 million of that is roadless.

Senator McCLURE. Would you give me the first figures? I will do the mathematics.

Mr. SMITH. 187 million acres in the National Forests System, 67 million acres roadless; 12½ million acre in the wilderness system; and, in Alaska, 20 million acres of national forest land, 18 million of which is roadless. There is no presently classified wilderness in Alaska in the national forests.

Senator McCLURE. So the figures would be 167, 49, and 12½, excluding Alaska.

Mr. SMITH. Yes.

You asked about planning. We have a critical path chart which I do not think will be very readable for you.

We are designing this to reach decisions in late 1978. Our inventory is being completed in late October of this year. We will be developing the data necessary for evaluation to occur in the winter of 1978; the draft environmental statement—at whatever level that might be—in the spring of 1978.

This is to allow a full field season for people to look at our work and get on the ground if they wish. We can then wrap it up in an environmental statement at the end of the year.

Senator McCLURE. Where in this process is the public involved in the assessment of the needs?

Mr. SMITH. The public was involved during the 227 workshops looking at suggested criteria and volunteering other criteria of their own. That is being analyzed by regions and at the national level. We will develop the national need criteria, as well as the RPA guidance.

Senator McCLURE. The RPA process does that, but the RPA process is circumvented by the entire RARE II flow chart. It is not involved in this.

Dr. CUTLER. This is a subset of the RPA process.

Senator McCLURE. I ask that because if all you are doing is assessing wilderness needs in a vacuum somebody has to make a determination of how you assess that need.

You have suggested that that goes back to the statement of goals in the RPA, but there are a number of other laws also that have some statement—presumably a public statement—of national needs.

It is not all embedded in the RPA.

Mr. SMITH. That is correct. In fact, our planning effort deals with that every day.

Of course, we have our 1980 RPA goals. We do not expect that RARE II is going to resolve those. This may be one of the reasons we have to keep some in the green.

Mr. RESLER. The particular area of public opportunity for expressing their views on the evaluation process will come in May or thereabouts when we issue some form of environmental statement. In that process, we will have to display this evaluation system.

Senator McCLURE. But the evaluation has already been guided by the national needs criteria, and the public has not been involved in the development of the national needs criteria.

Mr. RESLER. We use criteria as only one element in the whole evaluation. We will display that along with all of the other resource tradeoffs. We will display the rationale behind each of these alternative levels.

We will go out to the public with that, with a full display of those. They can add to them, critique them—

Senator McCLURE. Let me see if my understanding is correct of the national needs criteria as you define it there.

Within the Forest Service planning process you will make that decision. You will not be subject to critical public review until you get into the evaluation of the net tradeoffs, and the public will be involved at that stage.

Mr. RESLER. That is correct if I can modify one word.

We are using these criteria in a refined way. They are mainly a screening device, but we will display that and the rationale behind it, as well as these other resource tradeoffs to the public.

A review of the draft environmental statement will have an opportunity to critique it, including our assessment of tradeoffs. Then, in the final part of the process, the executive branch will have to make a decision on the basis of all that input and recommend certain levels of lands for inclusion in the wilderness system.

The public will have an extended period of time, through this draft environmental statement, to fully critique and respond to our complete evaluation on a site-specific basis, area by area. This is the way we envision it now.

Mr. SMITH. I do not want to mislead you. We did subject these national criteria to very extensive public involvement. We have a great deal of feedback on these criteria.

I should have prefaced my remarks about the ecosystem and so forth with what appears to us to be a fairly certain public endorsement based on the preliminary look, the public involvement comments we have.

Not only did they comment on those things, but they also told us what they felt was important in the area of tradeoffs—whether an area should be considered if it had a high timber yield potential, for example.

I think the public has had a hand in developing these criteria. We will not finalize them until we fully look at everything they have given us. Then they will have another opportunity to look at the way we applied them.

As Dr. Cutler pointed out, we have several alternatives here—the various weights we might place on them.

Senator CHURCH. When you get to this process, that will be the end of next year?

Mr. SMITH. Yes, sir.

Senator CHURCH. If you put that all together in one big package with the blue, the yellow, and the green and say, "Here is the way we are going to manage the national forests; here is the grand blueprint." you are going to get into a lawsuit that will last from now until the end of the next ice age.

Senator McCLURE. I suspect, in most old fashioned of all inputs, you and I, and many others, will hear from these groups.

Senator CHURCH. If you come up to Congress and say you have it all settled, you are going to find us elsewhere. [Laughter.]



Mr. SMITH. We agree that the success of any alternative will hinge on our ability to find agreement. This band in the middle may be much, much wider than we like, but if we could resolve 10 to 40 percent on either side, if there is such a consensus, that is what we want to identify in RARE II; not to try to solve all the controversies in this middle area.

There will be areas on which there will not be consensus. We will have further study of those areas, and I think that Dr. Cutler has acknowledged that we may do that.

Dr. CUTLER. Mr. Chairman, unless you want further detail from us we would just as soon conclude our initial presentation, respond to questions, and get into some of the more detailed alternatives in response to questions.

Senator McCURE. Could I make one comment?

Mr. Secretary, as I have stated at more than one public meeting—one at which I was with you at Coeur d'Alene, Idaho—I applaud the effort and I support what you are trying to do.

However, I suspect when we get to the end, the areas of blue and yellow will be smaller and the area of green larger than we like. I hope that is not correct.

That leads us to the question that we must address, now. What about the effects of a lack of decision if, as a matter of fact, all you can do is identify 10 percent of the land on one extreme or the other of that chart, and 80 percent is left in the middle unresolved?

Then you have 80 percent of our problem remaining. Right now, we have 20 percent of it cleared up which is probably more than we would have otherwise.

A 20-percent solution is no solution at all that will satisfy the kind of problems that are confronting us in regard to the maintenance of viable industries.

Dr. CUTLER. Senator, our response to that is that the standard operating procedure with respect to land use planning is continuing and, as the land use plans mature which are underway now, the inventory will change.

It is our advice, it is our recommendation that that land use planning process be continued to run through this period of time in order to resolve questions of land availability for uses other than wilderness, and particularly in areas which are short of raw material.

We hope the diverse groups involved in this process will allow the process to run and participate in it, parallel thereto, so we can address particularly difficult supply situations in parts of the country where mills are running short of material and where the land use process is pretty well along.

We also hope the final environmental statement, on a particular unit plan, can be adopted, and that land use allocations can be made prior to the conclusion of RARE II.

We have recommended that, when the final environmental statement is filed, a unit plan, based on our regular planning process—that at that point the roadless areas in that unit drop out of RARE II, except in those instances where a roadless tract within that planning unit might be contiguous with roadless lands being in RARE II. This is the Gospel-Hump type of situation.

We think the roadless area should be addressed as a unit. Otherwise, it is our recommendation that the decision embodied in that unit plan, which has gone through all of the public involvement, all of the other EIS processes, be implemented, and be dropped out of the RARE II inventory.

SENATOR CHURCH. Mr. Secretary, we will move on to the next two speakers; but, since we are all here to give our advice to you and to question you, my advice to you is to "Think Small." Have you read that book?

Dr. CUTLER. Yes, sir.

SENATOR CHURCH. The national evaluation is fine. I hope you can keep within your target date and complete it by the end of next year.

However, when it comes to the implementation of the program I think you are going to have to break it into pieces. My suggestion to you is that you break it into politically palatable pieces that will enable the Congress to take action, and that will bring various groups together.

In Idaho, for example, we have tried to do that in the Gospel-Hump area. I have hopes that we might legislate the management plan there which will do two things: create wilderness and, by statute, designate the other land as multiple-use land which will be restored to the working forests.

Now, when you come to the end of the study, it seems to me that you are not going to be able to be in a position to break it into pieces that the Congress can masticate and digest. If you break it into pieces that have balance so each interest gets its entitlement, then you will be asking the Congress not only to create a wilderness, but also, in the process, to solve the problem for the industry—to designate parts of that package that are going to be restored to the working forests.

I believe that is about the only way we will ever get everybody's interests considered in the decisionmaking process. You cannot leave the whole national forest for the Congress at one time, nor can you make the kind of assessments that are necessary except on a less grandiose scale.

You could come with individual national forests, as Senator Hatfield and I were discussing, on a forest-by-forest basis. Then we can get all of this settled at the same time for each forest.

That is not so different from what we have done in the past as you have brought individual recommendations for wilderness areas to the Congress. I am suggesting you extend yourself beyond that—bring the whole forest and say, "We have completed our plan for the forest. This part should be multiple use. This should be wilderness. Here are the reasons. Here are the witnesses." Then we could have an ultimate plan with the congressional stamp of approval on it enacted into law.

That would be my advice.

SENATOR HATFIELD. I would like to add to that statement.

I think the Gospel-Hump is, indeed, a good example of what Senator Church and I have been discussing. I think this all has to be done in a comprehensive approach by pieces for the simple reason that you do not only recognize the tradeoffs for values.

I am of the opinion that when we undertake a wilderness designation, when the wilderness people are very attentive, very solicitous,

that is the time when we ought to get their commitments as they relate to other multiple-use areas.

If we take it one piece at a time, they turn off their hearing aids, whether it is the lumber people on one hand or the environmentalists on the other. However, when they have to sit down together and they have come to consider a comprehensive plan—perhaps we ought to expand this present comprehensive bill vis-a-vis the Gospel-Hump approach for those areas that are under study.

We would exclude them from the existing wilderness area for the proposed wilderness area, and the remainder would be attached as instant return to multiple use.

We have the attention of all of the interest groups at this particular moment. I think whatever plan we come up with here is going to have to be done in the open arena where all the interest groups have a real stake, and where they are much more willing and attentive to the proposition that there are tradeoffs.

This is better than to come up with wilderness one day and come up with instant return to multiple use in a separate action.

I think Senator Church has broken ground here, perhaps. On Gospel-Hump, he got all the parties together.

I would only remind you of our problem with Bull Run in the State of Oregon. One person going to court can get an injunction.

This is what has created the problems in the State that we have had up to this point in trying to resolve the question of Bull Run. Therefore, whatever plan you do come up with, we have potential litigation whether it is forest by forest, State by State, or region by region.

I think the best possibility is to tie it into one legislative act as it relates to the wilderness and multiple use.

Dr. CUTLER. Mr. Chairman, may I respond?

Senator CHURCH. Yes, of course.

Dr. CUTLER. I would like to suggest that I think our current thinking with respect to the disaggregation of this information for the purposes of environmental impact statements is tending to indicate that we must have a national programmatic statement that covers the tradeoffs nationwide and addresses the national needs question, and we need to have a State-by-State package, as well, because that is about as much as anybody can masticate in terms of getting a really good idea in your head of what the tradeoffs are in a geographical region that you can conceptualize.

We can probably do a program that can do it on a State-by-State basis. That is the way I am beginning to think about it.

With respect to the legislative output, it seems to me that what Senator Hatfield is describing is somewhat similar to a city council adopting a zoning plan for an entire city that encompasses all the uses.

That seems logical because you do have all of the interest and attention at one time, but I plead that decision by the Congress be limited to wilderness or nonwilderness.

Senator CHURCH. I do not think any of us have any intention of trying to usurp the responsibility of the Forest Service to manage the forests, and we do not want to get into the detailed decisionmaking the Forest Service has to confront every day.

I think the main problem is, how do we dispose of the roadless areas? How do we decide what type of national wilderness system we want,



and what parts we want restored to the national forests for multiple use under the joint principles of management.

Senator McCLURE. I support both statements you made. Even if you break it down so that we can politically cope with the size of the problem presented at the end, still some of the pieces have to be in the context of the whole or we will miss the whole.

Certainly I agree with you; Congress should not attempt to be the public land managers. We ought to be the policymakers and set the guidelines. Somebody has to do the day-to-day management. We cannot do that.

I do not think there is a person in this room who would say that the Congress is doing too well what we are trying to undertake now without trying to undertake other responsibilities.

Senator CHURCH. Let us go on to Doug Scott.

#### **STATEMENT OF DOUGLAS SCOTT, NORTHWEST REPRESENTATIVE, THE SIERRA CLUB**

Mr. SCOTT. My name is Douglas Scott. I am an employee of the Sierra Club. I am speaking today only loosely on behalf of my colleagues. I would like to summarize a broad picture of concerns for the roadless areas on the national forests, which is a slightly broader topic than RARE II.

In the national forests of the United States in the East, in Alaska and in the West, there exists a significant acreage of potential wilderness which has never been adequately considered for possible preservation by the Forest Service.

Many of these roadless areas, amounting to millions of acres, undoubtedly have such important wilderness values—once we come to know them and know the tradeoffs—that we will want wilderness preservation for these areas.

Other areas will be found to be best dedicated to other multiple uses as the overall land allocation pattern of our national forests is resolved. We should bear in mind that people care about these national forest wilderness areas that are not yet preserved as wilderness.

In virtually every city and every small town across this land there are citizens who know each of these areas individually and intimately, and who seek to perpetuate these areas as a part of their lives. In fact, these roadless lands are widely used today as wilderness.

The fact that they do not have a formal boundary sign in front of them does not, for a moment, detract from the fact that the people who use them have been able to have a wilderness experience there.

The land base for wilderness recreation is shrinking. More and more of America's de facto wilderness is being developed, shifting to use where it had been previously preserved as wilderness.

This afternoon we will speak for the concerns of those who wish to see a reasonable portion of the roadless lands of our national forests preserved for the future as wilderness. It is important for all to understand, however, that we merely represent a much broader spectrum of wilderness supporters who are not at this table today.

We represent citizens who have a great wealth of experience with the roadless area issue, and with the history of efforts by the Forest

Service to deal with those roadless areas. We know, in great detail, the serious shortcomings and fatal flaws that attended the first RARE program; that its exceedingly haphazard inventory was grossly inadequate.

It was applied using widely varying criteria from one region to another, leaving out millions of acres of land qualified by the Wilderness Act, and upon criteria more strict than Congress has often used in making decisions.

There was enormous bias and inconsistency in the evaluation of those roadless areas inventoried in RARE I through a whole series of problems, fragmentations, of the areas into subunits or into artificial bases, piecemeal evaluation, gerrymandering, and so forth.

The upshot of that is that RARE I did not work. It did not accomplish the purpose of making decisions that would stick, that the American people would accept.

It did identify some wilderness study areas, but many of those were too small and prejudiced from the outside by the Forest Service selecting a portion of the total wilderness tract. Then the remainder of that tract, the margin where the conflict where other uses might be the most serious, would receive the least study.

Most important, however, were the 44 million acres of roadless lands identified in that first RARE process that were not selected for any further wilderness study.

In 1972, a lawsuit, to which Dr. Cutler made reference to, in turn led to an order by the Chief of the Forest Service guaranteeing that each of those nonselected roadless areas, 44 million acres in total, would receive further wilderness evaluation as a specific alternative in an environmental impact statement.

The people we represent today also have an enormous amount of experience with these Forest Service environmental impact statements affecting roadless areas. These are almost entirely on land use or unit plans that the Forest Service issues, and are required to include evaluation of the wilderness alternative for the roadless areas involved.

We think it was a wise choice of the Forest Service to use the land use mechanism as a place to apply NEPA to the major decisions affecting the allocation of lands of the national forests. We have a great deal of experience with those unit plans, 200 of which conservationists, after review, have responded to over the past 4 years.

The quality of national forests land use planning has been improving—I will be the first to acknowledge that—but the standard of Forest Service planning as it regards roadless areas or other areas is still far too low.

Here, again, citizens simply do not believe the decisions proposed in many of these plans have been fairly reached on the basis of sufficiently thorough and objective analysis of the data.

Flaws in the structure of the planning approach and the enormous range of quality in the planning job itself have led us to reach our conclusion. The land use planning process is not giving roadless areas sufficient, acceptable, or adequate evaluation as it reaches decisions which seal the tombs of those roadless areas.

No one should be surprised if inadequate planning is about the clearest controversy over decisions reached. I think all of us are aware of the controversy about those plans.

The controversy exists because people do not believe things they care deeply about have been adequately treated in those land use plans.

If the quality of planning can be significantly improved, not only would we see better decisions but we would see far greater public acceptance—even of the decisions the public does not like—because they would have more faith in the planning process.

Against the background of this continued inadequacy of forest land use planning, controversy has grown—not diminished. Controversy has been reflected in some administrative appeals, one or two lawsuits about this process, and an increasing number of citizen requests to their Members of Congress for congressional action where administrative action has failed.

Many of the proposals embodied in the Endangered American Wilderness Act represent results of citizen petitions to their elected representatives to overrule decisions which are simply not adequately made at the administrative level.

The inadequacies of the land use planning process have been extensively documented during the course of hearings on the Endangered American Wilderness Act and elsewhere.

I wish to submit testimony prepared by environmentalists with great experience in this matter before earlier hearings on some of this legislation.

One is a statement by Richard Fiddler, of Seattle, Wash., which represents a summary of environmentalists' problems with the flaws in RARE I. The second is a statement by Dennis W. Baird, of Moscow, Idaho, which represents a national overview of some samples of the gross inadequacies of current land use plans as regards the wilderness areas on the national forests.

Senator CHURCH. We will be happy to have these statements.

[The statements follow; the exhibits to the statements have been retained in Committee files:]

STATEMENT OF RICHARD FIDDLER, CITIZENS FOR AMERICA'S ENDANGERED WILDERNESS

ON H.R. 3454, THE "ENDANGERED AMERICAN WILDERNESS ACT OF 1977" BY HON. MORRIS K. UDALL BEFORE THE SUBCOMMITTEE ON INDIAN AFFAIRS AND PUBLIC LANDS, COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, D.C.—FEBRUARY 28, 1977

Mr. Chairman and Members of the Subcommittee, my name is Richard Fiddler. I reside in Seattle, Washington. By training, I am a mechanical engineer. However, over the past six years I have devoted a major portion of my time, as a volunteer, to work with a number of Washington State and Pacific Northwest conservation groups. I have been closely involved in work with the U.S. Forest Service regarding wilderness matters.

Today, I and my colleagues are here on behalf of "Citizens for America's Endangered Wilderness," an informal coordinating committee we have formed to work with many local, State, and nationwide citizen groups in support of this bill. The leadership of "Citizens for America's Endangered Wilderness" involves many of the most knowledgeable citizen-experts in this field. We deeply appreciate the opportunity to make this presentation today, to lay out for you the "big picture" on America's Endangered Wilderness, and to explain what de facto wilderness it, why it is so valuable and important to us, and why citizens are coming to the Congress to seek your help in giving this category of important wildlands proper protection and management.



We would not be here before you today if the Forest Service was doing a good job of understanding the immense value of the wildlands under their management to the Nation and its citizens, and was doing a responsible job of protecting them. After a long period of neglect, planning for wilderness lands has become respectable if not very popular within the Forest Service. (It came about in large part as a result of a citizen lawsuit.) Now, elaborate-looking, thick, and very expensive documents are coming forth which purport to be the results of a thorough, professional planning effort. Decisions to road and log much of our remaining wildland heritage, including several of the areas included in H.R. 3454, are being based on these national and local "plans."

We are sorry to have to report to you that behind the handsomely printed covers on the reports lies, in almost every case, little or nothing of substance. Often there are serious misrepresentations. Resource allocations are being made on the basis of habit, prejudice, and industry pressure rather than on sound economic principles.

The areas to be designated as parts of the Wilderness System or as study areas by HR 3454 include many of the most immediately endangered wildland areas of the Nation. They are endangered, and we must come to the Congress seeking relief, primarily because the Forest Service processes are inadequate to yield informed or fair treatment for them. Officers assigned to planning teams frequently have a very thin background in land use planning, and overall the Forest Service is permeated with a sense of haste and urgency to wrap up roadless area decisions in the next few years. The consequences for roadless areas which are unwisely developed clearly last for lifetimes.

We should like to begin by briefly outlining what "de facto wilderness" is, and then go on to discuss the crippling problems which lie beneath the surface of Forest Service planning efforts.

What are the de facto wilderness lands?

They are varied lands of peaks, lakes, valleys, meadows, ridges, forests, swamps, plains, deserts. They are the natural habitat for wildlife of all kinds. They provide a vast amount of primitive and unconfined recreation, with varying degrees of solitude for a wide spectrum of people, including local fishermen and hunters, backpacking enthusiasts, day hikers, and casual tourists. They are important sources of unpolluted water to nourish Western lands. As Rep. Morris Udall, the Chairman of this Committee, said in introducing H.R. 3454, "Wilderness is our country's highest form of land dedication. Values of wilderness to the American people are multiple in nature, not just primitive recreation alone. Wilderness is an ecological condition where all values and uses are administered to maintain the natural condition which is so vital to preserve for ourselves and future generations."

Some of the Nation's resource of wilderness lands are already part of the Wilderness System, or are protected pending study and Congressional consideration. Many more wildland areas, however, fully equivalent in beauty and value to protected areas, have no formal protection. These are the Nation's de facto wilderness lands.

These lands have provided wilderness benefits throughout the history of our Nation, with minimal formal protection and attention. But due to this lack of protection, the area of land providing these benefits has continually dwindled as development has proceeded to exploit other resources. However, this development has been concentrated largely in the more valuable resource areas so that the extractive resource values of the presently remaining lands is low in comparison to surrounding developed areas.

Citizen involvement in the entire issue of de facto wilderness on Forest Service lands has its modern roots in a series of actions taken by the Forest Service in the period from 1958-64. It started not due to development of de facto lands so much as to the declassification of land which had previously been administratively protected. The actions I refer to were the general process of shrinkage of primitive area boundaries and in some cases the complete abolition of administrative protection for entire areas. Many of today's controversies over unprotected wilderness began when the Forest Service proposed declassification for areas which had been protected for over twenty years. In fact, these arbitrary declassifications were a major impetus to the passage of the Wilderness Act in 1964, so that some areas would be protected from the constant threat of instant declassification and development on a moment's bureaucratic whim.

However, the extent and seriousness of these actions, plus the strong pro-

development bias that the agency demonstrated in defending them, caused citizens to begin a re-examination of the agency's approach to the issue of wilderness resources on de facto lands.

Conservationists hoped that with the passage of the Wilderness Act in 1964—an act which firmly established wilderness as an important resource and part of the spectrum of multiple use, and which directed two other agencies to inventory the wilderness resource on their lands and report to Congress—that the Forest Service might begin to pay more attention to their part of the Nation's unclassified wilderness resource. These hopes were disappointed. The Forest Service waited for three years after the passage of the Wilderness Act to issue the first of several internal directives which were to eventually form the Roadless Area Review and Evaluation (RARE) program.<sup>1</sup> Citizens did not see any tangible results from the RARE program, initiated in 1971, until 1972, eight years after the Wilderness Act. It was not until 1973 that the Forest Service finally directed that development of roadless areas be temporarily halted to allow timely evaluation of their wilderness resource.

In the nine years between the signing to the Wilderness Act and 1973, millions of acres of de facto wilderness were logged, roaded, and mined without even the most rudimentary study of their wilderness values. While some of these areas were well suited to development, others were poorly suited for development but well suited for wilderness. These misallocations drew more citizens into the growing debate surrounding de facto wilderness.

The great increase in hiking and other primitive outdoor recreational activities also contributing to citizen concern. Miles and miles of popular trails were lost to logging roads, and favorite fishing streams destroyed by sediments from roads and logging operations.

Finally in 1971 the Forest Service began their Roadless Area Review—the RARE program. It was intended “to determine which undeveloped areas of National Forest lands may be given priority for further intensive study because they have strong wilderness characteristics.”<sup>2</sup>

The agency stated that they intended this process to select the highest priority areas to be given Wilderness Study. However, it appears that the program was intended as well to select nearly all Wilderness Study areas, since few substantial additions are being made to the Study List as the follow-up land planning process begins to be completed in many areas.

Selection of an area for formal Wilderness Study of course does not represent a commitment of that area to eventual Wilderness designation; it merely is a deferral of development of the area while a detailed resource study and public involvement process are conducted and then compiled into an agency recommendation to Congress. This process of study and public comment helps to resolve some controversies, and in all cases clarifies the issues involved and make the important facts widely available. Thus, even if such a study does not itself finally resolve questions about the management of an area, it does lay the groundwork for using the political system to rationally come up with a solution or suitable compromise.

In this light, it is very confusing to citizens why the RARE program did not firstly select for study obvious areas of known and established wilderness value where controversy existed, as well as selection of areas of a less controversial nature. There were a fairly small but highly significant number of areas which, even in 1971, were obvious candidates for Wilderness Study because their histories indicated that they had wilderness values and where public controversies would be enlightened by thorough study. While several such areas were selected in the RARE program, far too many were not. Most would fall into one of the following categories:

1. Areas which had been administratively protected for their high wilderness values but which were later declassified despite public protest. Most of these areas were formerly within Primitive Areas or Limited Areas. French Pete, most of the North Kalmiopsis additions, Waldo Lake, and the Elkhorns in Oregon, the Tucannon and Mt. St. Helens in Washington, and Elk Summit in Idaho are all examples.

2. Lands should have been included in studies of existing Primitive Areas, but which were deleted because of manpower or funding shortages within the Forest Service or the U.S. Geological Survey, despite wilderness values and pub-

<sup>1</sup> RARE Final Environmental Statement, p. 13.

<sup>2</sup> RARE Final Environmental Statement, p. 3, item [2].



lic support. The Idaho and Absaroka-Beartooth Primitive Areas are examples of truncated Primitive Areas which should have been re-established for study through the RARE program.

3. Areas of national significance previously proposed for wilderness or National Park status due to their outstanding quality. Missed in the RARE selection were areas in the Siskiyou, Oregon's Volcanic Cascades, and the St. Joe-Clearwater proposal in Northern Idaho, of which only a small portion is classified.

Next I would like to discuss how the RARE selection process worked, or did not work, at the local level, in the field. During the winter of 1971-72, the Forest Service directed its field offices to inventory all existing roadless areas for potential wilderness consideration. Unfortunately, the inventory suffered badly from a shortage of both time and direction. The inventory mapping was done in a brief period of office work from maps at a time of year when field checks were next to impossible. The national directives provided very little in the way of instructions as to what to include. For example, although areas of less than 5,000 acres were permitted to be inventoried, there was no direction as to under what circumstances they should or should not be included. Countless irregularities resulted; some Forests inventoried small units adjoining wild areas of National Parks, while others did not.

Again, some Forests properly included areas with minor disturbances such as unconstructed jeep tracks within the inventory. Congress has included many such areas in the Wilderness System and in some cases the Forest Service itself has recommended such inclusions. However, other Forests used such primitive track to subdivide large roadless units into smaller ones, or to totally eliminate them from the inventory. In a dramatic example, the Beaverhead National Forest identified 777,000 acres of land which was still essentially roadless and undeveloped, but which was excluded from consideration for Wilderness Study due to insignificant jeep tracks, minor pole cutting, etc.

Again, there was no guidance as to how close roadless area boundaries should come to existing roads. Some Forests decided that no roadless land should be included in the inventory if its width were less than some given instance, while other put forward areas with narrow necks and protrusions as prime candidates for Wilderness Study. Very often, one large roadless area was inventoried as if it were several smaller roadless areas.<sup>3</sup>

A special case occurred in Alaska, where there is a vast acreage of undeveloped land. For nearly 21 million acres ranging over more than 500 miles of the Alaskan coastline, the inventory included only seven separate units:

Four areas already mandated for Wilderness or Scenic Area study, totaling 2,423,000 acres.

Two additional areas totaling 144,000 acres, eventually added to the Wilderness Study list.

And one immense roadless area covering all 18 million acres of remaining roadless land on the North Tongass, South Tongass, and Chugach National Forests.

Although Alaska has obvious problems with choosing reasonable roadless area boundaries and sizes, other options would have been much better. Alaskan conservationists and the Alaska Fish and Game Department had identified prior to the inventory roughly fifty separate units with high wilderness values. At least these specific proposals could have been inventoried and evaluated separately rather than lumping them—along with millions of other acres not proposed for Wilderness—together into one unmanageable roadless area which obviously was not going to be selected for Wilderness Study.

In short, the inventory portion of the RARE program was inconsistent, inaccurate, and hurried.

Following the inventory, local Forest Supervisors conducted a varied program of public involvement to obtain input on the inventoried areas, once again while most of them were still covered with snow. The Supervisors then sent their recommended candidate Study areas on to the Regional Foresters, who considered them and sent their own recommendations on to the Chief.

At this point it was apparently decided that such simple reliance on the decisions of local and regional officers of the agency would not stand up to public scrutiny as an objective national program for the selection of Wilderness Study Areas. So in July of 1972, a series of complex forms were distributed to field offices requiring that a series of complicated ratings be prepared on each roadless

<sup>3</sup> Exhibit 1, attached.

area to measure its wilderness attributes and a series of cost forms be filled out to calculate various costs and output reductions which would result from classifying such areas as Wilderness. The accompanying directions indicated that these forms "should require no more than 2 to 2½ hours total time per Roadless Area"!<sup>4</sup> Obviously, once again the process was a rushed desk job.

These forms created wilderness quality ratings of widely varying accuracy based on dubious theory. The ratings varied greatly from Forest to Forest on similar areas. For instance, the Clearwater roadless area, 22,000 acres, in the Snoqualmie National Forest of Washington State adjoins Mt. Rainier National Park and is a highly scenic complex of ridges and forested valleys including a 4000-foot relief, over a dozen lakes, spectacular views of Mt. Rainier, a good trail system, and a wide variety of terrain including peaks, lake basins, river canyons, rocky and forested ridges, and alpine meadows. Lost Creek roadless area on the adjacent Mt. Baker National Forest is the same size, adjoins the Glacier Peak Wilderness, has 5000-foot relief, consists of a long ridge of meadows and rock, and is the same size. It has two lakes and a trail with access at either end. Clearwater received a quality index of 89 and Lost Creek a rating of 143 (out of a possible 200).

The system of arriving at a quality index rating for a roadless area was subjective and arguable, but it did have the apparent advantage of producing an "objective" numerical rating at the end. Unfortunately, the method of producing the number had many flaws. There was, for instance, a great overemphasis on the importance of lakes and streams in arriving at the measure of wilderness quality. The overall size of an area was an important factor—despite the fact that in the inventory some units were arbitrarily broken up into small roadless areas, each with not only smaller size but often less variety in landforms.

The quality index, with size already used as a rating factor, then was often used after being multiplied by area acreage, thus using the factor twice.

The rating method had internal contradictions. For instance, a roadless area received plus points for having a trail system in one category since a trail system was considered to be a recreational asset, while in another category a roadless area was penalized for having a trail system, since a trail system was considered a factor in reducing wilderness solitude.

These are only examples of the confusion and errors inherent in the calculation of the numerical 'quality index' for the inventoried roadless areas. Further trouble came in the application of the index, in combination with other factors, later in the selection process. An extensive critique of the process pointing out many of these flaws was prepared by the conservation community in the northwest,<sup>5</sup> as well as by national conservation groups<sup>6</sup> and research papers.<sup>7</sup>

Cost estimates considered none of the economic benefits of wilderness and in many cases considerably overestimated the timber harvest contributions of roadless areas. For example, the Willamette National Forest Land Use Plan Draft Environmental Statement indicates that the numbers used in the RARE document overestimated the timber productivity of those roadless areas by 28 percent.\* Similarly, data in the Final Environmental Statement for the Quinault Planning Unit on the Olympic National Forest in Washington State show that the RARE estimates for timber were 30 percent higher than that shown by more detailed study.<sup>9</sup>

These overestimates took place in part because of the practice of evaluating the forest land in the roadless areas using the average productivity values for commercial forest land in the Forest. Since the roadless areas were generally the most marginal, least desirable commercial forest lands on the Forests, using the average Forest value inflated the actual timber impact in the RARE study.<sup>10</sup>

Another confusion entered when areas presently administratively withdrawn from the allowable timber harvest base were nonetheless listed as having a timber "cost" associated with Wilderness Study. The Wenaha Backcountry, for example, was listed in RARE as having an allowable harvest impact of 3.6 million board feet per year, when the entire area has been withdrawn from the timber base since 1957 and there would be no impact at all associated with a selection of the area for formal Wilderness Study.

<sup>4</sup> Exhibit 2, attached.

<sup>5</sup> Exhibit 3.

<sup>6</sup> Exhibit 4.

<sup>7</sup> Exhibit 5.

<sup>8</sup> Appendix, Draft Environmental Statement, Willamette National Forest Land Use Plan, pp. 211-32.

<sup>9</sup> Final Environmental Statement, Quinault Planning Unit, pp. 16, 20, 24, 28.

<sup>10</sup> RARE Final Environmental Statement, pp. 622-3.

Ecosystem data was also collected for each roadless area, but the system used to collect the data was inadequate; the entire spectrum of diverse flora and fauna of a National Forest system stretching from Puerto Rico to Alaska was to be classified into only 52 different types, depending on the dominant vegetation. For example, all non-coniferous trees in the western states were lumped together as "hardwoods", as if aspens in Colorado, alders in Washington, and oak in California were the same ecosystem. There exist several more definitive ecosystem classification systems, including that of the Society of American Foresters. Very detailed work categorizing the ecosystems of the Pacific Northwest has been done by the Forest Service, showing the need for more detailed consideration than was given in RARE.<sup>11</sup>

Other data collected included national population distributions and distances from roadless areas to nearby units of the National Park or Wilderness systems.

This quantitative phase of the RARE analysis, whatever its shortcomings, provided the objective basis for selection of Wilderness Study Areas. But the analysis had to be converted into a decision, and for this many criteria were tried and a few were chosen. (However, the criterion I mentioned earlier, of clarifying the issues in areas of existing controversy, was not one of those considered.) The final selection criteria made one factor the one of overriding importance: the final, pre-analysis Regional Forester's recommendation. If an area had the recommendation, it almost certainly appeared on the selected list; if it did not, it had to pass many very difficult hurdles.<sup>12</sup>

Using the ecosystem data, for instance, seven areas were identified as being of particular value. Not one of those areas was selected.

The selection process consisted of a draft list of selected areas released in January 1973, followed by a period of public comment and preparation of a final list in October 1973. The Chief's office received a great deal of public comment in his interim period, which can be partly summarized as follows:

One third of all input favored Wilderness Study status for all roadless areas. Support for enlarging the Study List outnumbered support for reducing the list by a nine to one margin.

However, the final list of New Wilderness Study Areas was only enlarged in response to that input from 11 to 12.3 million acres, and that increase included 60,000 acres (approximately) which was committed to Wilderness Study by the primitive area reclassification program and had merely been overlooked in the first draft list. Both lists included not only "new" areas but also many areas already committed to study by Congressional directive or which were contiguous to existing primitive areas under study. These latter categories accounted for 1.9 million acres, nearly half the total.

The RARE study began as an attempt to identify the priority areas for further wilderness study, using criteria relating to the national perspective on Forest Service wildlands. It was to provide a "comprehensive analysis" of the National need for wilderness on Forest Service lands. (Additional areas would be deferred for study based only on "local and regional considerations".)<sup>13</sup> In fact, the "comprehensive analysis" was discarded as a mechanism for choice<sup>14</sup> and the final selection of areas was based on subjective judgments of agency personnel. Despite the handsomeness and thickness of the RARE document, the job remains to be done. We hope a small step is being taken today.

#### STATEMENT OF DENNIS W. BAIRD, CITIZENS FOR AMERICA'S ENDANGERED WILDERNESS

During the Roadless Area Review and Evaluation (RARE) program of 1973, the Forest Service received considerable criticism from the conservation community for the haste, inaccuracy, flawed and arbitrary nature of the whole RARE program. Litigation on this issue under the National Environmental Policy Act (NEPA) was eventually filed by conservation groups.

There evolved from this a recognition that the RARE program was never intended to be 100 percent complete and final, and that as a result, the millions of acres of roadless country not selected for Wilderness Study by the RARE program would have to receive a detailed, fair, and thoughtful new wilderness

<sup>11</sup> Research Natural Area Needs in the Pacific Northwest, Pacific Northwest Range and Experiment Station Report PNW-38, 1975.

<sup>12</sup> The following discussion relies on the RARE Final Environmental Statement.

<sup>13</sup> RARE Final Environmental Statement, p. 3.

<sup>14</sup> *Ibid.*, p. 5.

<sup>15</sup> Exhibit 6, attached.



consideration through the land use planning process of each national forest. This new look was, and is, particularly necessary since the Forest Service had done nothing to adequately rectify some of the major problems of RARE pointed out to them by conservationists: a grossly inaccurate inventory of the roadless caused by the haste of their initial evaluation, which caused a large amount of roadless acreage to be totally missed; and the arbitrary and often capricious subdivision of large single roadless areas into several numbered subunits—all of which were then treated as independent, unrelated areas in the RARE process (termed "fragmentation" by conservationists).

Citizens had great hopes that a thoughtful and highly professional land use planning effort by the various national forests would serve to rectify these many faults, and would properly and fairly consider the potential wilderness values of the millions of roadless acres not selected by RARE.

Unfortunately, this has not proven to be the case, and what ought to have been an orderly and unbiased look at the question of roadless areas has become a nightmare of chaos, misdirection, and litigation, fraught with a mind-boggling array of problems, all of which bring into serious doubt the ability of the Forest Service to fairly and objectively consider the disposition of America's small remaining treasure of roadless areas. Using as many examples as I can (although drawing only a tiny portion of the dismal array of potential examples), I hope below to point out some of the worst of these problems.

#### INVENTORY PROBLEMS

Starting with an initially hurried and sloppy effort to locate and inventory all areas still roadless, a process which turned out to have missed thousands of acres of roadless land, many national forests then proceeded to assume that the 1973 RARE program was the definite study. As a result, many land use plans were then prepared without any more attention given to identifying accurately what lands were essentially undeveloped. In the South Fork Salmon River Planning Unit of the Boise and Payette National Forest, Idaho, several thousand acres were missed in this fashion, yet even the Regional Forester declined to act on reports that such areas were overlooked, and it was only through a long and difficult appeal to the Chief of the Forest Service that the question received any review at all. A similar situation exists on the Warren Unit of the Payette National Forest, and both the Warren and South Fork plans are now being done over again.

Elsewhere in Idaho, the land use planning process "missed"<sup>1</sup> 63,765 acres, which were later found by conservationists, but the problem of poor inventory is not confined to Idaho. Some 40,500 acres of Washington's Gifford Pinchot NF has now also been found to be roadless, but much more still has not been inventoried. A similar situation exists on the Snoqualmie N.F. in the same state. Worse still, several timber sales have actually been completed (Red Mtn., Siskiyou N.F., Oregon and Lost Creek, Snoqualmie N.F., Washington) in areas that were roadless and pristine, but which somehow were "overlooked" in the inventory process. Such areas could hardly be said to have received a fair and unbiased look at their wilderness potential, and they are now, of course, gone.

The Chief of the Forest Service, in August 1974 (Exhibit 1) recognized that there may have been "a few inadvertent omissions or errors" in the original RARE inventory process, but few forests have paid serious attention to his directive requesting them to identify such omissions. Indeed, Region Four (in which are located the Idaho forests with major inventory problems mentioned earlier in my testimony), told its Forest Supervisors in June of 1974 that:

"We believe R-4's inventory of roadless areas was comprehensive, and few circumstances such as noted above will be encountered." (Exhibit 2.)

The same region however, in June of 1976, had to eat those same words, when it admitted:

"In our various planning efforts, our failure to recognize roadless areas which were not included in the original RARE inventory has been a continual source of embarrassment. Of even greater concern is the increasing number of appeals by various wilderness and environmental organizations due to our failure to recognize such areas." (Exhibit 3.)

Thus it can be fairly said that a large amount of roadless acreage is not only not receiving the thoughtful wilderness evaluation that it deserves, but has

<sup>1</sup> In the Landmark Planning Unit.

not even been recognized as being roadless, and when pressed on this issue, the worry of the Forest Service has not been over that wilderness values have been lost, but instead, over how much trouble the error is going to cause them. Few citizens could have much faith in the agency after this type of record has been developed.

#### FRAGMENTATION OF ROADLESS AREAS

The often artificial subdivision and fragmentation of roadless areas perpetrated in RARE has been, despite assurances to the contrary by the Chief, continued and repeated. Rather than conducting any overall evaluation of the many large combined roadless areas, Forest Service planners have continued to look at separate segments as if they were isolated cases, and in some cases proceeded to divide these roadless areas into different planning units, producing, in effect, subdivision of subdivisions. One of the classic (if that is the right word to describe it) examples of this illconceived fragmentation is the case of the 450,000 acre Gospel-Hump Roadless Area, located north and south of the Salmon River on the Nez Perce and Payette National Forest, Idaho. This vast and lovely roadless area, an ecological whole by any standard, has been subdivided and re-subdivided, by standards probably comprehensible only to God, into a total of seven roadless areas and nine planning unit, producing a display which, when mapped, resembles a jumbled mess more than anything else.

There are also numerous examples of such planning unit elsewhere in the west. Large roadless areas in the Siskiyou's and Red Butte areas of California were divided into multiple planning units. On the Gifford Pinchot in Washington, the Lewis-Shark Rock Roadless Area was divided first into four roadless areas, and then into four more planning units. In Montana, the McGregor-Thompson area was divided into two planning units, the Saphires into three, and Mt. Henry into three units. In none of these cases was convincing evidence shown that any serious look was being taken at the overall potential of the *entire* contiguous roadless area, and on the too-numerous cases of fragmentation on the Payette and Boise Forests in Idaho, subdivision and fragmentation seem to have been the prelude to elimination of significant roadless areas. The arbitrary and seemingly senseless nature of much of this fragmentation has led to an increasing loss of faith in the ability of the land use planning process on the national forests, and has led us to a point where only Congress seems capable of providing the badly needed remedy.

#### NO REAL CONSIDERATION OF WILDERNESS

One of the other critical shortcomings of the land use planning process derives directly from RARE. Some forest planners appear to have decided that if the area was considered and not selected in RARE, then that was proof enough to them that the area was not suitable for Wilderness Study, and that they needed give no further consideration to the matter. The record of land use planning to date, a process which has identified pitifully few new Wilderness Study Areas, would seem to confirm this point of view.

Still other forests have insisted on using arbitrary and subjective Quality Index and Effectiveness/Cost evaluation systems for roadless areas—systems which were at their best very inaccurate and vague guides with which to do evaluations of individual areas.

In many cases, the total consideration given to wilderness potential in a land use plan has been a simple regurgitation of the flawed and hastily assembled RARE data. The Umpqua (Oregon) National Forest's plan for the Williams Creek-Coungar Bluffs roadless areas and the Siskiyou N.F. (Oregon) plan for Mt. Butler-Dry Creek are two of many land use plans that follow this route, failing even to reconsider the numbers provided by the RARE process, preferring to accept them as gospel truth. The Gifford Pinchot Forest's Upper Lewis River Land Use Plan similarly repeats all the old RARE numbers, occasionally discussing the merits of the roadless areas with the plan, but never revising the basic evaluation provided by the RARE numbers.

Some unit plans have attempted a newer, and presumably more thoughtful valuations of the roadless areas' wilderness potential. The Rainy Day plan of Idaho's Nez Perce Forest and Elk Summit on the Clearwater (in Idaho too) both include such a reevaluation, with the latter plan actually showing an increase in wilderness quality. Yet all these reevaluations have been done using the same system as used in the original RARE process, rather than any form



of detailed and objective system which would have given these areas the fair look they deserved. Ironically though, flawed as this system has proved to be, its results have been largely ignored by the Forest Service, especially in those cases where the numbers seem to show that the area should receive a Wilderness study. Remembering that there are existing wilderness areas with a Quality Index of only 82, we still find that even after land use planning has been completed, areas like Elk Summit in Idaho (Quality Index: 148) and Wenaha-Tucannon in Oregon and Washington (QI: 166) are still not slated for a Wilderness study. The fact that many existing Wilderness Areas, all of them places of great beauty and serenity, have low QI numbers by Forest Service standards, raises real questions about the utility of this system, and the fact that the Forest Service has tended to disregard results of the system's use that tend to be "adverse" to them (i.e., tend to favor anything but timber harvest), both combine to force even the most friendly observer of this evaluation system to doubt its value. To rely on it exclusively, as many land use plans continue to do, seems foolishness of the highest order.

The simple fact is that detailed consideration of the wilderness merits of an area continues to be uncommon in Forest Service land use plans. It can be done though, in those cases where agency planners seem committed to good planning. Compare, for example, the kind of detailed description and evaluation of the Colonel Bob Roadless Area (Quinault Planning Unit, Olympic N.F., Washington) with the kind of brief and perfunctory consideration of roadless areas for the Kettle Range Planning Unit, Colville N.F., Washington—less than 1½ pages.

Serious as these concerns about the evaluation system are, of equal concern is a growing belief on the part of conservationists that the agency simply is not playing the game by the rules, and that decisions preceding the start of land use planning are dictating the conclusions of the plan itself. Much of this concern revolves around the fact that many units have had very large timber sales planned for them, far in advance of land use planning—sales often located in the heart of roadless areas that the land use planning process is intended to fairly and honestly evaluate. Often thousands of dollars of timber sale preparation and engineering money has been invested in such sales (the Honker Sale, Mill Creek Planning Unit, Nez Perce N.F., Idaho, is a good example), and only the most naive would believe that a new or honest consideration is being given to the wilderness potential of such areas—the prior investment has doomed them. Similarly, these are cases of large and expensive bridges crossing rivers, only to dead-end at the edge of a roadless area—no difficulty in guessing what will happen next there, or in the other cases where wide, surfaced roads end abruptly at roadless area boundaries. Finally, conservationists have noted alarming similarities between the fates of roadless areas after the land use planning process has been completed, and the presumed fate of such areas in the often old (manytimes pre-NEPA) Timber Management Plans for the same area. Either these Timber Plans have a remarkable ability to predict the future, or much of the land use planning process for roadless areas must be viewed as a joke.

The California Region of the Forest Service has been especially cavalier in its disregard of any fair, honest, or unbiased look at roadless lands. The Regional Forester, in a November 4, 1976 memo to all supervisors concerning timber harvest estimates and allocations for 1980, flatly told the Supervisors that in the sale preparation assumptions, they could assume that:

"Non-select roadless areas will become available for management at the rate of 100,000 acres per year or one half the area by 1980. The Forests with this area should assume their proportionate share." (Exhibit 4.)

How then, could anyone in California assume that roadless areas there will be evaluated in any fair fashion, knowing now that Supervisors have been ordered to plan for the elimination by 1980 of at least half of all such areas? And under these conditions, how could any Supervisor make a claim of honesty about his evaluations of such areas?

The facts are fairly clear—the cards are already stacked against roadless areas and the Forest Service is operating under criteria that neglect any real study of the merits of this or that roadless area, criteria that can only favor development of roadless areas for timber. It is this background which clearly explains the truly bizarre logic of planning unit statements like this one:

Curtis Lake Roadless Area, 6,750 acres. "Commercial timber is only in scattered patches. Resource development is considered marginal. Recommenda-

tion: Resource development" From: South Fork Salmon River Land Use Plan Boise and Payette N.F., Idaho. Jan. 1977.

It is also clear that if logic is to prevail, the Congress will surely have to intervene and play an umpire role. The Endangered American Wilderness Bill is a superb start.

#### LUMPING AREAS TOGETHER

Another problem which has also developed is the so-called "lumping" problem. It was not enough to just subdivide some roadless areas, but in many cases, the planning process has evaluated jointly different roadless areas miles apart and of different character and value. This was done by considering in the land use plan only one alternative providing any form of Wilderness Study—that one including all the roadless areas, with all the other alternatives considering no areas for Wilderness Study. Thus the only alternatives considered were studying either all or none of the roadless areas, either extreme proving to be unfair and unrealistic in many cases. In planning units where the qualities of different roadless areas vary considerably and citizens are particularly interested in one of these areas, this lumping together deprives both the citizens and the Forest Service of the ability to honestly evaluate a particular roadless area on its own merits.

As with other problems, there are a host of examples for this one. Only two alternatives are offered in the South Boise-Wood River Plan (Boise N.F., Idaho), and only one of these considers the 506,000 roadless acres at all—and then all ten inventoried roadless areas, in six non-contiguous groups, are given the all or nothing treatment. Not one alternative provides for, for example, studying the best of them for wilderness, or even just part of the best.

The five roadless areas in the Wallowa Valley Planning Unit (Wallowa-Whitman N.F., Oregon) also appear as potential Wilderness Study Areas only in Alternative B (which was naturally not selected), all to get a study, even though they are not all connected, and are different in character. The other alternatives presented provide for the study of one of the areas. Many other plans on other national forests have also pressed this unrealistic all or nothing approach, with plans offering a wide range of alternatives being less common than they ought to be. (Mount Henry is another case.)

#### LACK OF SUFFICIENT DATA

It is, or certainly ought to be, a "given", that before any type of land use planning goes forward, the Forest doing the planning should first have accumulated a very substantial level of basic resource knowledge—knowledge covering geology, soils, wildlife, hydrology, timber type and quality, to name just a few. When substantial and lovely roadless areas are involved, the need for such base data is even more critical, since the decisions being made are irreversible, and since no plan can be better than the data on which it is based, conservationists have been careful to examine carefully this aspect of land use planning. The results of this scrutiny have been disconcerting.

All too often, rather than working to improve its planning and to gather the necessary data not now available, the Forest Service tries to steam roller ahead, completing blatantly inadequate plans and, in effect, covering up their lack of the rudimentary data that sound planning would require.

These are strong words, I know, but the thousands of hours I've spent involved in battling plans in north Idaho forests with just such flaws have made me, unfortunately, an "expert" on the question of inadequate data. Let me cite just one example.

At issue is the Gospel-Hump Roadless Area, approximately 450,000 roadless and wild acres, located chiefly on the Nez Perce National Forest, in north central Idaho. I spend a great deal of my volunteer time working with the Nez Perce Forest on this issue, which has now dragged on for several years. I have met repeatedly with the Forest Supervisor, the District Rangers, the planners and various staff people. I have personally reviewed each land use plan covering the Gospel-Hump Roadless Area (unfortunately it takes several plans to cover it), making constructive public input on the basis of careful research and a good knowledge of the area in the field.

In reviewing plans for this vast area, one of the largest unprotected areas in the west, I have been absolutely appalled by the lack of fundamental resource data on which to base the kinds of development decisions (and most units done to far commit roadless areas to development) the Forest Service is seeking to



make for the Hump region. At first I assumed that they had the data, but merely had not reproduced it in the unit plans as a matter of convenience. However, I now know better, and I will just limit my talk here to the absence of two kinds of data—wildlife data and soils data.

The Gospel-Hump Roadless Area is a wildlife paradise, with large populations of game and non-game species present and thriving. The sections in land use plans on wildlife have been short and brief, with an occasional map purporting to show areas of critical habitat for a handful of the species present. Many species weren't mentioned at all, and for those that were, data on population and movement patterns was not provided. Amazingly, the files of the Forest Supervisor were found to contain little scientific data to support even the pathetic amount of "data" that did appear in the plans. In fact, conservationists quickly discovered that the Nez Perce Forest really knew very little about the wildlife of this large area, an area of which they had already slated a large proportion of which for development.

The Supervisor's response to concerns about this problem has been to claim that he knew enough about the area's wildlife to allocate much of it to timber. This is an opinion shared by *no* wildlife biologist, and I am submitting for the hearing record a Statement of Reasons<sup>1</sup> concerning two of the Gospel-Hump land use plans, which contains statements by several biologists from other government agencies supporting the views I have just expressed. Senator Frank Church, to his considerable credit, has already promised help in securing funds to help rectify this problem of lack of wildlife data, but even were the funds (at least \$250,000) available today, at least four years of study would be needed to provide the needed data. Meanwhile, the Nez Perce plunges on in its unformed quest to commit large parts of Gospel-Hump to development.

The other problem area that I'd like to discuss is soil, the most basic and important of forest resources, and the very key to sustained yield forestry. In many parts of the mountain west, and over most of the Gospel-Hump area, soil types are very fragile and constitute the limiting factor in land management planning. Any plan worthy of the term "multiple use" must be founded on careful, thorough, and expert knowledge of the soils within the area for which decisions are being made.

We have learned of a report by the Regional Forester's office, which constitutes a review of the quality of soils data available for the Nez Perce National Forest. Our attempts to obtain a full copy of this report have been blocked by the Forest Supervisor and the Regional Forester, and as a result, my attorney has instituted a Freedom of Information Act appeal to the Chief of the Forest Service to obtain full disclosure of this important document. I can quote a part of it to you today. Remember, this report was produced by the Regional Soils Scientist in order to establish the "quality of the information base (on soils) presently existing on the Nez Perce National Forest. The report was produced less than six months ago, so it is very current. Here is just an excerpt:

"The lack of documentation of basic assumptions and collection of field and laboratory data is a growing problem which has ramifications for the future. The Environmental Protection Agency has requested the data files supporting inventories and their interpretations on planning units, such as Mill Creek. These are not challenges but are requests to provide assistance in developing their understanding of the logic involved in developing unit plans. Lack of the ability to supply this basic data could result in future challenges of the Forest Service planning process. A dependence on intuitive judgment for resource management interpretations will not satisfy E.P.A. nor will it stand the test of any future court action.

A review of present mapping indicates single purpose surveys were made in some areas to meet short-term resource planning goals. Mapping units in single purpose surveys usually cannot be extrapolated, reevaluated or redesigned to suit other objectives or for use in multiple resource inventories.

These inventories cannot be correlated nor do they meet the standards established in the Region Land Inventory Guide nor Soil Taxonomy. These inventories will have difficulty withstanding the technical scrutiny of the scientific community and will not be able to withstand court action involving Environmental Impact Statements."

Since these are the conclusions of government soil scientists, it is little wonder that I'm having to threaten legal action to obtain a simple copy of this full report, which was prepared with my own tax dollars.

<sup>1</sup> Exhibit 5.



## REVIEW PROCESS

From what I have said so far, I hope that it will be apparent to the Committee that the conservation groups have invested a great amount of time, money, sweat, and love in reviewing the land use planning process of the Forest Service. What we have found has caused profound dismay, and has led us to propose the legislation now before you. Interestingly enough, much of the timber industry in the west is also convinced of the erratic and unscientific nature of Forest Service land use planning.

The following comments on Forest Service planning come from a recent booklet of the Western Environmental Trade Association, a timber industry organization:

"Unfortunately, there is no uniform set of planning procedures to follow, there are no standards or goals to measure land use decisions, there appears to be no overall coordination of the National Forest planning effort, yet important far-reaching decisions are being made daily for the future uses of your public lands." (Exhibit 6.)

The Forest Service has been sadly deficient in reviewing the quality of its own work. In fact, except through the legal appeals process, the agency has done little in the way of serious review. The fact that a remarkable number of land use plan appeals to the Chief by conservation groups have been sustained (e.g., Elk Summit, Warren, South Fork Salmon in Idaho, Mr. Henry in Montana, etc.) have been sustained offers good argument that a better kind of review is in order.

In one remarkable document prepared by Region 2, a level of review was attempted. I am inserting this document in the hearing record (Exhibit 7) but will summarize it here by stating that it recognizes that the statements (Environmental Impact Statements accompanying land use plans) are "particularly weak" in the following areas: economics, analysis of alternatives, objectives, selection of alternative, and interrelationships with other lands. The review goes on to conclude that "data gaps in social, economic, and natural elements are significant," and that "the EIS process is not always being used as a part of the decision making process but rather is implemented to meet a requirement or as a shield against criticism."

The record of abuse in the Forest Service land use planning process is a long and very sad one, and the point has now been reached where, unless Congress takes action now, significant roadless resources, all of them increasingly rare, will be unwisely sacrificed for extremely insignificant amounts of timber.

A small number of additional exhibits are being appended to demonstrate various elements of bias in the land use planning process, and to illustrate with maps and EIS excerpts various points made in this testimony.

Mr. SCOTT. The upshot of this is that wilderness areas are not receiving acceptable consideration, and the controversy is up instead of down.

It is against that background that Dr. Cutler has launched an effort of reform—and we all understand that that is what it is—to find a way to make roadless area decisions that can be accepted and which will resolve controversy instead of extending it.

Therefore, we applaud the basic goals of the RARE II program. We commend Dr. Cutler and his colleagues for it.

If this program can help correct the seriously inadequate inventory of RARE I—and it has—then that is a positive step to help avoid future controversy, appeals, and petitions to Congress.

If this program can improve on the quality of information and data which has been available in analyzing roadless areas in tradeoff, in the planning process, and in the setting of RPA goals, that will help improve the quality of those decisions—and that is commendable.

If this program can provide some consistency in the standards and procedures with which the Forest Service evaluates roadless areas, then that will help resolve the controversies which have arisen from glaring inconsistencies.

If these are things which RARE II can improve, then we support that, but there are some things RARE II has no promise of improving

as they are presently defined. Therein lies the seeds of future major controversy over roadless areas.

To put it bluntly, RARE II promises no serious improvements in the way roadless lands are being evaluated right now, today, in land use plans that are now at the printers, and which will be issued week after week after week during the coming months on the western national forests.

Every week more of these plans are being finished. As a general rule, the most recent ones—which we have reviewed in detail—just extend the pattern of consistency in inadequate evaluation.

We have been advised and admonished to put great store in an improved land planning process that was mandated by section 6 of the National Forest Management Act passed last year. Under regulations which are now under preparation under that act, an improved quality of planning is much sought by us.

We look forward to that generation of improved planning, but the roadless areas will not be around to benefit if some relief is not granted quickly to get the quality of planning improved right now.

The cold facts are that those regulations, the provision of that act, require only that improved quality of that planning be in place by the mid-1980's.

We have documents from the regional forester in California who advises that, in planning timber sales for 1980, to assume half of the roadless areas are available to be cut. That means that decisions on the roadless areas will be made before the improved planning.

We are prepared to document case after case of current land use planning which simply will not stand up and, therefore, will not help to reduce the level of controversy. Therefore, as far as we understand it, this offers us no reason to see that these roadless areas will get a better deal because, as presently organized, these lands will simply disappear off of the RARE II inventory just at the time that they might get a better shake through the decisionmaking process.

Absent some general reform in wilderness decisions, there will not be a resting of the roadless area controversy as those plans are issued, but it will decrease.

We are prepared to discuss some positive sides of this point. We are prepared to discuss the timber issues. Tim Mahoney of the Wilderness Society is prepared to explain the significant breakthrough which was reached in region 2, particularly in Colorado where roadless areas have been able to be removed entirely from the allowable cut base without any reduction in the operating level of the local timber mills.

Kurt Kutay of the Wilderness Coalition is prepared to present details of his efforts and others in the Northwest who are doing landmark work on the question of tradeoffs between development of roadless areas and improved timber management which can enhance timber growth on lands not involved in roadless area controversies.

I would advise you to share our ideas. All of us are here to speak to our experience.

Here is a set of plans affecting one national forest in Oregon. This is the McLaughlin-Klamath Planning Unit. It was issued in April and is nearly ready to be finalized and approved.

There is no alternative in here for intensified management as a trade-off to the other lands. We would hope that that had been considered in the timber management planning for that area.

Here is the timber management plan issued in August. It contains 60 alternative having to do with the size of the timber base available. You cannot put those two documents together and make any rational conclusion about the possibility of having the best of both possible worlds—more intensive management of lands not subject to wilderness controversy, and the wilderness preserved as well.

We think the planning system ought to begin to look not at issues that divide people, but at issues that bring people together, and that is one of them.

We welcome the prospect of this discussion to help clear the air. We welcome this opportunity to talk about balance in the multiple-use system of our national forests, to which we are committed.

We welcome this forum to seek mutually beneficial accommodation between the concerns of the timber industry and the concerns of many Americans who treasure their wilderness areas including those areas of wilderness which have yet to receive formal protection.

We seek a fair informed decision on these roadless areas. We believe the national perspective is entirely appropriate. We believe that the public involvement process should be encouraged and widened in scope to insure all of the American people who own these lands that they will have an opportunity to determine the future of them.

I am pleased to hear you talk of the Gospel-Hump arrangement. As one who negotiated with the chamber of commerce in that instance, I am proud to say that I think Gospel-Hump represents the reverse of the big myth that most of us see on this table.

We want to maintain the stability of the timber industry in that area, and we are seeking a solution for these kinds of problems.

If some tight situations are going to develop in the course of RARE II, let us identify those and get people involved in that local area to sit down together. It has worked in Idaho. It has worked in Oregon.

It would be a sorry admission and lack of foresight to conclude that people working together cannot resolve these issues. It would be a sorry admission of the failure of our imagination if we did not address ourselves to the constructive question: How can we maximize the preservation of America's treasured wilderness heritage in a balanced land use pattern that also enhances the other uses of our land and brings prosperity to the West and to the products which all of us depend on from our natural resources?

We are very hopeful about RARE II. We are very guarded in our optimism. We are here today to speak in that spirit.

Thank you.

Senator CHURCH. Thank you very much, Doug.

You say you are hopeful about the end results of RARE II, but that you are guarded in your optimism. You express, I think, the general view all of us are taking; that RARE II could produce what we are looking for.

Your principal criticism dealt with examples of land use planning which you feel are not adequate. I think you hope RARE II will come out a lot better than RARE I and take into account the better methods of land use planning that will be applied.

I think we ought to hear from the forest products industry next, and then go to general questions.



Senator McCCLURE. May I make one comment at this point?

I do want to hear the other witnesses, but I might note in passing, Doug, you mentioned the unit planning process and forest base identification which was insufficient because it did not identify the opportunity for intensive management.

I will fully share that criticism. That is a point I have been trying to raise for a long while, as you know. There are those kinds of alternatives and tradeoffs available to us.

On the other side of that, at the same time, is the difficulty of writing a plan that fully considers the possible alternative, and I do not think it is possible for anyone to write a plan that someone cannot criticize because it did not go as fully into some area as might have been suggested.

By way of comparison on the amount of criticism, I might point out the Gospel-Hump compromise, with which you are very familiar as am I. It does not identify any intensive management practice as an alternative end, therefore, is subject to the same criticism.

I mention that only to illustrate the difficulty of creating any kind of agreement or plan that is not subject to valid criticism by someone.

Mr. SCOTT. That is perfectly true, Senator. The people who negotiated that plan are not bound by the difficulties that attend the Forest Service in providing real alternatives. We found one that brought us together.

Senator McCCLURE. I am not certain of that justification, however, any more than to say that the Forest Service has greater difficulty and is subject to greater criticism.

Senator CHURCH. This means to me that there comes a time, no matter how the planning is done, when a decision must be reached in your plan to the Congress. There will then be public hearings that will give opportunity for everyone to criticize the plan, and for the Congress to make such alterations as may seem justified before giving it a final stamp of approval.

Kirk, I understand you are speaking for the industry.

**STATEMENT OF R. KIRK EWART, DIRECTOR, INDUSTRY AFFAIRS,  
BOISE CASCADE CORP., BOISE, IDAHO**

Mr. EWART. Thank you Mr. Chairman. My name is Kirk Ewart. I work for Boise Cascade's operation in Boise, Idaho. I am acting as a spokesman briefly, this afternoon, for the National Forest Products Association and the gentlemen to my right as chairman of NFPA's roadless areas withdrawal task force, and I have a few remarks for the committee as they relate to RARE II.

Dr. Cutler referred earlier to a meeting held by him and Secretary Bergland, and representatives of the forest products industry some time ago where we attempted to explain to the Secretary and Dr. Cutler our concern over the impact of RARE I on the ability of the Forest Service to put through a meaningful timber sale program in the Northwest.

We explained these concerns using a map of the State of Idaho, and pointing out the literal paralysis that existed at the time, and still exists, because of the massing of roadless areas in certain portions of the State.



We pleaded that the land use planning process should be accelerated to free these areas for management. We pointed out that additional manpower would not resolve the problem in these areas of Idaho and elsewhere because the land base was crippled because of the overlay of RARE I.

We in the industry are basically pleased with the response Dr. Cutler and the Forest Service to our plea. We are somewhat, I might say, horrified by the aspect of RARE II which involves a change in the wilderness criteria used in creating the RARE II inventory of some 67 million acres of national forest land.

According to the RARE II criteria, wilderness areas may now contain many activities of man which were forbidden in the past, such as roads of certain description, fence lines, certain radio transmission equipment and so forth.

I cite, as an example, one roadless area in eastern Oregon through which passes a railroad track upon which rides the Amtrak service from Boise to Portland. Therefore, we have a proposed wilderness area which is bisected by the main line railroad.

The railroad certainly does not, in my opinion, enhance the quality and solitude requirements of wilderness. There are many other examples of that which we are prepared to show you at a later date.

Senator CHURCH. That particular example would seem to me to conflict with the clear provisions of the Wilderness Act against motorized vehicles.

Mr. EWART. Amtrak is somewhat normally on schedule. Assuming it is motor powered, I would agree with you.

[Laughter.]

Mr. EWART. I have shown photographs of that to Mr. Smith so he is familiar with it, and I assume that will be one of the early fallouts.

Senator HATFIELD. You are basing that on Dr. Cutler's memorandum of interpretation of the Wilderness Act?

Mr. EWART. Yes.

Senator HATFIELD. I just wanted to identify the source of Amtrak going through the wilderness.

[Laughter.]

Mr. EWART. We are also concerned about the RARE II process as it relates to the Forest Service depending upon 22 meetings held to explain the RARE II process to the public. The number given to us recently was 17,000 people who attended the RARE II meetings which, in my opinion, does not nearly represent the 200 million-plus people of this country which the gentleman to my left happily points out are the owners and users of the national forest system.

We are also concerned that perhaps many of the other users of the national forest system were not truly represented in the RARE II input process, such as the mining industry, the livestock industry, and many of the other interests that represent organized labor in this country, which, as you all know, are totally dependent upon the national forests for their livelihoods.

We are also extremely concerned in the RARE II process. No one can report to me that any of the public meetings identified the RPA process, the goal and assessment of the RPA program, which could enlighten those participating in those meetings as to the impact on the ability of the national forest system to continue to produce

goods and services at the level projected in the assessment of the program for the RPA which now exists as guidance to the Forest Service for future years' management.

In other words, the RARE II program, in our opinion, is again becoming an example of planning from the ground up to determine the goals, instead of planning in line with the goals established before us in the RPA assessment program.

There is now a 25- to 30-million-acre goal for the national forests' portion of the wilderness system. The RARE II process must be completed in light of that goal, in our opinion.

We do not think that the land use planning process is being accelerated or, in some instances, is being moved at all while the RARE II process is being operated in the national forests. I know the Chief's instruction to the regional foresters is to continue their planning process, but in fact, in the field, this is not occurring.

These field people have to do both jobs. They cannot do RARE II and land use plannings.

Also, gentlemen, we are concerned that this process will never arrive at a final solution. That concern goes beyond RARE II. The NEPA process and its accompanying environmental impact statements have shown us in the past that these processes never end.

There never seems to be a point where a plan can be implemented without appeals or litigation or other disruptive action.

We are concerned that 67 million acres of the National Forest System could be thrust into this never ending squabble of the environmental impact statement process which would lead to crushing social impacts not only on the forest products industry, but the wood consumers of this country who are right now, at this moment, in a price squeeze demand problem which has pushed the cost of homes beyond the reach of many.

I think, Mr. Chairman, that concludes our opening remarks. As we open this area for discussion, I am sure my colleagues will have many more enlightened comments.

Thank you.

Senator CHURCH. Thank you, Kirk.

There are two questions you raised in your remarks on which we should get a response from the Secretary. The first was whether the RARE II process takes into account the RPA goal of 25 to 30 million acres of wilderness within the national forests, or whether it is a process that establishes some new goal after all of the evaluations have taken place.

I think we need some answer to that question. It is a very important question.

Dr. CUTLER. Mr. Chairman, I will take a stab at it. I think I will probably pass the microphone to the Associate Chief of the Forest Service.

Of course, the RARE II process takes into account the current 1975 RPA program goal of 25 to 30 million acres for wilderness within the National Forest System. As I recall, the alternatives that were circulated as we developed the 1975 goal included a high level of 41 or 42 million acres.

The goal that was ultimately adopted or recommended was 25 to 30 million acres. The Forest Service is in the process now of distributing

questionnaire material to the American public upon which to develop its 1980 program.

It may well be on the basis of that input, supplemented by the information we have obtained during the RARE II, that we may make an amendment to the goal adopted for the 1975 RPA program.

However, Mr. Chairman, I have no intention of supporting the radically different goal for wilderness within the National Wilderness Preservation System.

Recognizing that the national forest system is only one of four national public land systems that contribute to the National Wilderness Preservation System, there are many other uses to be served by these lands.

I would ask Rex Resler to contribute to this.

Mr. RESLER. Mr. Chairman, the RPA goals will have to be a controlling element in our planning process as we understand it now. Those goals may be changed, as Dr. Cutler pointed out, but on the basis of a recommendation for a change Congress can either agree with or disagree with that recommendation, and we would then consider that as a controlling device in our planning process.

As you well know, the wilderness system can be expanded on two bases: No. 1, an executive initiative; and No. 2, by congressional initiative.

The problem we have encountered since we have completed the primitive area review has been a series of individual initiatives leading to additional studies and/or designations of instant wilderness.

We think it is appropriate at this time for this country to address the total wilderness system under a democratic process—lowercase "d," if you please—and try to make some judgments as to what the wilderness system ought to look like and all of the lands that may contribute to that process.

We would hope to be able to try to provide the kinds of information, working with the Department of the Interior, that would allow not only the executive branch, but Congress, also, some means of providing us with a better guideline as to what we ought to be seeking in the national forest system component of this wilderness system.

In the event that the present RPA goals are not changed for whatever reason—let me put it in the positive. In the event an amendment to the goals is proposed and Congress accepts it, we would use that as a planning guide for further recommendations to fill out that component of the wilderness system.

If it were changed to 30 to 35 million acres, as opposed to 25 to 30 million acres, we would use that figure in this entire process and come forward with that level of recommendation for the executive branch.

Senator CHURCH. Do you understand that answer?

Mr. EWART. Yes, sir.

Senator CHURCH. The fact that the process never ends is another point that I think you made, Kirk.

My only answer to that is that one way to end it is with legislation. I do not know of any other way to cut off appeals and litigation that can extend out year after year.

Now comes the time for the free-for-all. I am sure that, by now, you gentlemen have many questions suggested by the previous presentations.



I invite you to make your own contribution now and get the discussion started.

Mr. CUNNINGHAM. Senator Church and members of the committee, I want to make a general comment on Mr. Ewart's statements wherein he indicated the industry is horrified at the wilderness criteria being applied to the inventory and further described RARE II as an example of planning from the ground up, rather than, I presume, from the top down.

First of all, it seems to me that we are talking about the kind of planning process we have seen so far. This is a tremendous example of public involvements—the likes of which, on a national scale, I have never seen.

I think that this means we are going to have more broad-based planning from the ground up, from the grassroots, from the people in the affected areas. I think nothing but positive benefits can come from this basic process.

I think it is really premature to prejudge what RARE II is or what it would become. In a sense, we are only now completing the first stage, which was basically an objective inventory to remedy the inadequacies of RARE I.

We are going to reserve judgment on the RARE II inventory until mid-October, until we see the final inventory list, but generally I think every indication is that these inadequacies are being remedied.

If anything, the industry should be pleased with the new roadless area definition criteria being applied to the inventory. Unless improvements are made, we are going to be bogged down and the process slowed down for years and years, and we are not going to see any remedy or the kinds of solutions people are talking about.

Therefore, with this first step being made in the right way with the past deficiencies appearing to be remedied now or to be remedied in the process, I think this is something we should all join together in common support of with some degree of unanimity. This is going to help us all.

Your concern that the process will never arrive at a final solution, I think, is certainly a legitimate concern. We have no idea what the final output will be or how that will be implemented.

I feel that, to some extent, we might want to do a better job of defining the problem if we expect to come up with solutions. I don't have a definition for the problem, but I might ask a rhetorical question.

Is there really a need to find out the ultimate disposition of all 67 million acres in a very short period of time? A need does exist on some of these lands, but if we can somehow limit the problem to what actually exists, then I think we will all be better off, particularly in those circumstances such as the Gospel-Hump case where there are legitimate, serious, and important questions of community dependency—where solutions, answers, and decisions need to be made soon.

Therefore, I think a better definition of the problem is in order.

Senator McCLURE. Do you imply by your rhetorical question that you feel there is not a need to identify the ultimate disposition of all of the needs?

Mr. CUNNINGHAM. I refer to that middle category referred to by Mr. Smith and Dr. Cutler, the areas that might require further study.



Senator McCLURE. You are saying that there should be some blue and there should be some yellow, but there is perhaps no need to eliminate the green? Is that correct?

Mr. CUNNINGHAM. No need, perhaps, to immediately eliminate that.

Senator McCLURE. I do not disagree with that. There may be some unresolved questions, but there is an impact upon those areas which are designated for multiple use by the size of the unresolved acreage in the middle. They are not neatly separated.

If you have a large area of unresolved questions, then that must inevitably get back to the question of: What is the allowable cut on the areas which have been leased for use?

Mr. CUNNINGHAM. We need to identify those cases.

Senator CHURCH. I understand and agree with Mr. Cunningham's point that the most urgent cases, where the economic base of a given region might be directly threatened, ought to be the first to be considered.

Mr. CUNNINGHAM. My point would be this: If you can use Gospel-Hump as an example, you could resolve Gospel-Hump and you can release the sale; but if you are applying the same criteria which has been adopted in region 2 and which is being urged in other regions, then you will not solve the problem at all.

Even if you have released it, you cannot make the allowable cut on that area on an annual sales basis.

Senator CHURCH. That is true.

I am saying that you cannot reach a final decision on everything all at once, and we ought to start with priorities.

Mr. KUEHNE. I would like to know what your intended management would be for this green or study area following the completion of RARE II. How would you manage that area during the interim of the continued possibility of study?

Mr. SMITH. These would be the areas that would still be considered for the full range of the uses including wilderness. Until those areas pass through the landmanagement plan and are subjected to an environmental statement, they would be limited to those management activities, development activities, that would not foreclose or preclude their consideration for wilderness.

Those things which would change the character of the lands during that interim period of time, except for statutory rights, would not be permitted, as is essentially the case on the inventory of roadless area today.

Mr. KUEHNE. Would they continue to contribute to the allowable cut level?

Mr. SMITH. I think that is accurate to say. However, there has to be a time, if a decision is not forthcoming that this question be further considered. They cannot continue to contribute if they remain in a study or "hold" category. However, it has been our policy to continue to include these areas as part of the base for the other program activities, such as timber, range, or whatever.

Mr. RESLER. It would be our intent, as indicated, to allow the volume on those sites to continue contributing to the total program harvest level on the unit, provided it did not carry on for an extended period of time.

We are looking to 1983—1983 as the point in time at which we basically will have covered the national forest system with the land planning system. The problem is the same one that was indicated earlier. In some areas the level of activity has been such that if we continue the green areas for an indefinite period of time, the hydrological impact will be such that we will have to program timber harvest at a lower level.

If we cannot get the land allocation resolved in a reasonable period of time—which varies from one region and one forest to the next—we will try to hold the land in the allowable harvest until those land use studies are completed.

Mr. KUEHNE. My second question relates to a statement made by Mr. Smith regarding the wilderness in the blue selected areas, that it would probably be within the 25-million- to 30-million-acre RPA goal or whatever, and that the study area may not be.

Does that include the areas currently on the wilderness study list?

Mr. SMITH. The areas currently on the Chief's list would be expected to be the core of the blue. The candidates for immediate wilderness may not all necessarily be that way. We may not know enough about them, but certainly they would appear in that group.

They might also appear in the other groups as a part of this process, as a part of this decisionmaking process. They could occur in all three groups as I see it today.

Mr. KUEHNE. That would resolve whether those areas went into the harvest base at that time, when you make this final on the RARE II on the process—when you make that allocation.

Dr. CUTLER. The status of areas selected by the Chief in RARE I is a whole new ball game.

Mr. KUEHNE. They are out of the timber harvest base in calculating that level. That would change them immediately upon completion of RARE II.

Mr. SMITH. That would have to be recalculated on the basis of what went into immediate proposals. Obviously, those should be withdrawn, I would think, and the remainder put back into the base but not necessarily programed for the reasons submitted.

Mr. KUEHNE. I would like to make a couple of observations based on this green study area.

One is that certainly this area should be kept at the minimum possible, or else you are not resolving anything or any problem here that would not have been resolved with the completion of the unit planning process, probably.

The second is that there be consideration of an immediate timetable for completion of those, and if the areas were not added to the wilderness system within that timetable, that they be added to the yellow area and be returned to multiple use.

Has there been any consideration of that?

Mr. RESLER. We have looked at that as a possibility. No decision has been made, yet, but we see two benefits.

No. 1, it would set an expressed time frame in which we would complete those decisions. Second, it would allow for planning for manpower and money to get along with that job.

As of now, roadless areas selected are not being treated. They are on the back burners.

Mr. KUEHNE. It seems to me that if these are considered State by State and forest by forest, and an allocation plan comes up to Congress, that Congress should consider possibly limiting the time under which that could remain in study at the time they consider those areas.

Otherwise, I do not ever foresee decisions being made on that study area.

Senator CHURCH. Senator McClure and I were discussing the possibility at that point of legislation which might establish a time limit and prescribe a certain percentage of the land in that category would have to be moved out each year, so we would be sure they would move through that in a reasonable length of time.

Dr. CUTLER. In the testimony Monday night on the Endangered American Wilderness Act, we proposed that any areas established by Congress for wilderness study have a Sunset provision limiting the restriction to no more than 4 years. I assume that could be applied here.

Senator CHURCH. I favor time limits. I think that is an excellent suggestion, and one we should look into.

Mr. CRAIG. Mr. Chairman and gentlemen, I think some of the frustration—at least of the older of us here—might be illustrated by the comment we heard from Mr. Scott to the effect that millions of acres qualified under the terms of the Wilderness Act for classification as wilderness in the National Forest System, and were overlooked in RARE I.

I would like to remind Mr. Scott and any others younger than me that there was a very long battle in connection with the development of the Wilderness Act and, as a consequence, there did come about a piece of legislation which was developed and accepted rather generally—and we are among those who accepted it.

However, that description of the lands that were to be included in the national forest system did not include these lands that Mr. Scott has identified.

I would like to point out that Congressman Saylor, for example, said, "The wilderness preservation system can be established without affecting the economic arrangements of communities, counties, States or business enterprises since the areas are already withdrawn. There will be no withdrawal of timber lands on which lumbering operations depend."

Similarly, the leader of the Senate said, "The bill constitutes no threat to any legitimate economic interest. No one will be adversely affected by passage of the bill. It has been carefully drawn to give all possible protection to the economic interests of the west."

The Senate committee report said, "There will be no withdrawal of lands from the tax base of towns or communities, no withdrawal of timber lands on which lumber operations depend, nor any withdrawal of present grazing or mining rights."

However, when the Forest Service looked at the wilderness needs under RPA and solicited public input, they got a response that indicated, at page 602 of the program, "The public preference stems toward the resource systems, except wilderness."

What did the Forest Service do? They said, "We will have a modest increase." That modest increase was a doubling of the 1975 wilderness system in the National Forest System.



Now Dr. Cutler suggests there may be a modest increase and we are apprehensive.

One final thing about this program. We are being impacted now in our timber sale programs by this RARE II process. In California, before the RARE II limitations, we have had a reduction from a normal sale of about 2.1 billion feet average over a 5-year period, 10 years ago, to 1.7 billion feet, this year.

I have printouts here from the regional office which show that there will be a drop off of 63 million feet in 1978, not from the 1.7 but from the planning program which is a little more than that.

In 1979, there will be a drop off of 153 million board feet in the sales program.

This is the intolerable consequence of the mess we are in, and we do need some help.

The committee of scientists appointed under RPA, as amended, is at work today in the St. Paul and will be, tomorrow and the next day. They are going to come up with a planning approach that will lead to some beneficial results, but the idea that we may have a 4-year sunset provision is not encouraging.

We need something more quickly to meet the needs of these communities.

Senator CHURCH. I think the 4-year sunset provision was suggested in connection with the land denoted in green for which no definite decision can be made at the close of the RARE II evaluation next year—just for that land so that it will not remain in the study category indefinitely.

We are trying to get what you want, moving this thing along.

Senator McCLURE. I have this concern and I should express it.

While it looks good to have all of these unresolved issues in the land base for the calculation of allowable cut, when the ultimate decision is made the entire impact of that decision will be felt then.

I am not certain that that is in anybody's interests, let alone the timber industry's interest, to postpone the day of reckoning and take it all in one big dose.

Mr. EHINGER. I would like to make a couple of comments, throw figures around, discuss things, and bring it down to a few "for instances" to show what is happening, and also to show what our concern is from the standpoint that I feel we are on a train on which we do not know where the engineer is going and does not know where the station is that we are going to get to.

I listened to the environmental group yesterday. Over in the House, they talked with reference to 1979, 1980. We have talked about 4 years. We have talked with reference to the litigation, Congress solving the problem.

Mr. Scott here has amply described what he considers to be a total lack of quality in the planning procedure under RARE I.

Now, the people who are going to plan RARE II are the people who planned RARE I. The same people are going to be out there in the field. They are going to do the same thing. We are not going to have instant brilliance or instant competence.

We are going to deal with real people in the real world to get this job done.



In essence, as far as I can look at it from our side, if there is something as a side in this, but from where I see it it is that the basis and ground work is here for continuing litigation. He, in essence, has thrown down the gauntlet.

He has put what we would all have to consider if you are dealing with people, and people are imperfect. He has said he cannot accept the quality of work we have had before, and that we have to have some magic increase in quality and so on. That never existed before.

We also have to take a program that is a lot smaller in size and make it bigger. We have something here that I see no end to from an operating standpoint.

I would like to throw out a few examples of what RARE II meant. Here is one. Here is the Caribou National Forest. I am showing you pictures. Too bad you cannot see the green underneath. The green is largely colored by red and blue.

The blue was the original roadless area of RARE I. This one down here that is speckled was a candidate for wilderness. Red represents RARE II. That forest is blocked out effectively until RARE II is resolved.

Zero. At Afton, Wyoming, they are not going to get any timber. They are down to the bare bones. There is no way to end the process once the process has started.

I asked Dr. Cutler—double our pleasure, double our fun. Just like Shakespeare, I asked Dr. Cutler, and he doubled our toil and trouble.

Let's go over into Wyoming. We are talking about people and jobs. Here is another one. Look at the blue and look at the red. Saratoga, Wyo. This is the biggest hunk of wood right there. It is blocked out now. All the sales for the next fiscal year—the fiscal year coming and thereafter, the layout has been done, the roadwork has been done—all down the tube.

The Forest Service says, "We have no money to do this. We can get barely enough timber sales up as it is." How can we put all that down the tube and expect these people to have a normal timber sale program?

These are the kinds of things that concern us.

I have a letter from the Arapahoe National Forest which shows the same thing. These are the problems that mean a town where the people will be out of jobs, a mill will be down. We talk of 67 million acres rather glibly. We talk about millions of dollars. When you get down to millions, that is not so bad.

Sixty-seven million acres, that is the whole State of Wyoming and then some. It is nine Eastern States.

When we took out the 7 or 8 million by draft environmental statements, we put 20 million back. I think we were doing that bad under RARE I. Maybe we are doing pretty good. At least we reduced it. That goes down from 55 to 47 million.

Then I listened to Zane, and he said maybe we only had 10 percent on each side, so in RARE II we may have a net 52 result when we only had a net 47 when we started.

The whole problem is that you have got to get it down to the real world. Mills are going out of business. In this process, one goes now, one goes then; it does not make any big clatter, but they don't come back.

We have our problems today. Somewhere somebody has to be concerned about what is happening on Main Street, what is happening in the real world of people who have jobs, homes, families, and aspirations.

It is not going to be done the way we are doing it now—appeal after appeal after appeal. I know somebody said they were going to touch what was done in region 2. The agreement was reached there taking the roadless areas out of the allowable cut. It did not hurt a thing.

It would be an unmitigated disaster for any other region. The only reason it worked there at all was that we have never been able to get funding for over 50 percent of the allowable cut. When you have only 50 percent of the allowable cut, hell you can make all kinds of concessions without hurting a real business.

However, try to expand a business and put out investment and create more jobs to utilize timber better—with the kind of thing going on here no individual in their right mind would even consider it.

That is my speech.

Senator WALLOP. Mr. Chairman, could I make a comment?

You got close to my turf.

Mr. EHLINGER. I thought I would.

Senator WALLOP. I share the concern you have expressed. I have to say, Dr. Cutler, there has been no Federal activity that has ever been undertaken that has done more to generate an antiwilderness sentiment in Wyoming than RARE II, and I think it is a tragedy.

We have areas in that State—but you talk of public participation. The greatest public participation that has ever been undertaken—frankly, the people of my State participated in growth to their utter frustration.

The maps they were presented with were not colored. Their ability to make comment was totally restricted. The Forest Service was unprepared, even with sufficient numbers of uncolored maps, to receive comment.

They were then told that whatever comment they made had to be on a specific basis which made it virtually impossible for the average citizen to go down there, get a Forest Service map, color it himself and make specific comments in order to be received.

Therefore, the public is extremely cynical about that.

I have good timber. The Bridger-Teton Forest is down to less than 40 days' supply of timber, and they are carrying it 180 miles. The towns of Afton and others in the area have gone down the tube, and there is absolutely total frustration. People cannot get an answer.

I am expressing my own frustration because there are areas in Wyoming which should become wilderness, but I would not dare mention it and I do not know anyone else in the State who would right now.

I think it is a tragedy.

I have a timber operator on the west side of Big Horn Mountain who has been operating there a long time. He said he was allowed to go on bidding. His cut was the same. The only trouble was that he was going on the other side of the mountain to compete with Georgia Pacific.

He has to go 60 miles, up, and on the other side of the mountain to compete and bid for timber up there in areas that have roads in them. That is what frustrates them.



They are shown on the maps, yet they are in roadless areas and the roads are shown on the maps.

I am happy that Senator Church is holding this meeting. I am sure we will get some real sense of the real world. Frankly, it has done the environmental movement in Wyoming the single greatest damage of which I can conceive. It is a tragedy.

It has coalesced other forces that have been totally supportive into total hostility. In addition, by reducing timber operations within my State to such a drastically smaller area to try to keep everybody's cut up somewhere close to the environmental impact of that policy, it is 100,000 times more serious than it would be if we were operating just on a general level in the forests of the State.

One hundred thousand may be somewhat of an exaggeration, but the impact of reducing these cuts to a smaller area in the State, (a) makes it much more visible and, therefore, much more controversial for those who do not like it in the first place; and (b) it is destroying any kind of logical management plan for those Forest Service borders.

You have concentrated cuts, then. When this is all done, there will not be any viable ongoing timber economy in those areas because it will be concentrated for too long a period of time in too small an area. Those forests are going to be environmentally damaged.

I think, from the standpoint of our people, we have to have some immediate resolution.

Senator CHURCH. Senator, it is because we are concerned about this problem that we are here, that I sponsored—along with some of the other Senators at this table—the bill that just passed the Senate to restore traditional bidding practices to help small mills in dependent communities.

We are trying to help, and trying to do it in any way that will enable us to reach decisions that everyone can identify and that will not be subject to endless appeal, litigation, and the rest which keeps the forest tied up for years to come.

Mr. EWING. I know we are all here looking for a solution to the same problem. I think we all agree that the solution must be expedited. I think we all agree that the Forest Service and the Secretary have very strong intents and purposes of establishing RARE II's to get these problems resolved wherever they might be.

I would like to throw out a couple of comments which I hope are constructive criticisms.

I recognize that there is a need to identify roadless areas. We may have differed with the specs in arriving at those roadless areas, but whenever you are in a planning stage you have to have a good inventory, whether it is timber, wilderness, or what.

We have developed an inventory through this questionnaire. We might differ with the specs, but you have to have something to start with. You cannot make a good evaluation if you do not have that as a base.

I like the things that the people in Zane's shop are involved with—the ecosystems, the proposals for the national preservation system needs—but I am disappointed in several aspects I would like to bring out here that I think we should take a look at.

It appears to tell me that I have a responsibility to use as many Forest Service lands as possible to fill those little gaps in your wheel.

I think you missed something in there when you said the total wilderness preservation needs without bringing in the needs for other agencies to help fill those gaps. I do not think that was your intent.

I have not seen any input—and this is specifically directed to the Secretary—by this agency, and specifically the Secretary, in his presentations on the proposed legislation whereby he evaluated those areas you propose as wilderness. You did not evaluate those, how they fulfill this ecosystem distribution as you propose.

I assume you have had to for some time. I think that is something that should have been done before this total wilderness concept is completed.

We all know that, years back, we had a lot of problems with lots of fires. We tried to figure out, how do we put out those fires? How do we get people conscious of them? We did a fine job of proposing Smokey the Bear. I know it did not come out overnight. I bet there were 10,000 different ideas, and you all differed as we do now.

I think it is helpful that we get together and try to straighten out some of these things. The thing that is worth doing is trying to evaluate what we do in these areas.

One part of the Forest Service Agency that is doing a fine job is in developing the wheel where you put up your chart. I am not criticizing your guidelines, seeing what you have done here and the need to fill those gaps.

I am dismayed that the Forest Service, as a multiple-use agency does not consider all the RPA goals that are needed for all needs simultaneously.

As indicated yesterday, this looks like a unicycle to me. I do not see any other wheels. I was referred to the part down below, which is your regional analysis and which shows your tradeoffs versus your wilderness.

I recognize that, but I recognize the way this graph is set up that when you look at those tradeoffs it still gears the man on the ground to look at those tradeoffs and how he can fill one gap, a gap for one need—wilderness.

I think you have to have a wheel for every use, and you have to have all these wheels and examine them simultaneously. In other words, you have to have this matrix down below that examines all of these things, but you still have to have these wheels for all of these uses and recognize there are gaps as indicated because we do not have an unlimited land base as indicated yesterday.

Senator McCURE. I have asked staff to put up another chart which bears on the question you raised: What does the chart show in regard to the contribution of the other agencies?

Maybe you should not have the Forest Service's inventory up there in the middle. It ought to be the boxes on the left, out there in the middle.

Mr. SCOTT, Senator. I would like to respond to the spirit of what Arnie just said. I think those came across as very constructive comments.

I think we can have very considerable agreement between us on a number of those things.

It seems to me that the difference I hear between the two sides of this table at the moment is that everybody wants to do something to



he process. These gentlemen over here want to accelerate the process and they want to improve the process, and I am not sure those two goals are necessarily inconsistent.

We talk about the RPA tradeoffs and the possibility of expanded RPA goals. I am looking at page 652 of the RPA program sent up to Congress last year. I find the distinction between a goal of 28.5 million acres of national forests wilderness and 41.2 million acres of national forests wilderness—that is, alternative four and alternative five in the program—shows the tradeoff of that as arrayed under the median of 28.5, the timber sale offerings would be 146.6 and under the high wilderness goal of 41.2, a considerable increase in acreage—the timber sale offered under that alternative will also be 146.6, precisely the same.

A broad question which gets lost in these national goals is: Can we have our cake and eat it, too? Are there ways to address a process to this question that can say, in any particular case—a small community highly dependent in the State of Wyoming or one of the timber sheds in the State of Oregon where there are serious problems, or in Idaho County where we have had experience with this.

Is there some way we can sit down and come to some resolution that intensifies the production of the lands for that purpose, and save the wilderness important to people and meet some of the multiple uses?

You say the process you have does not allow us to look at the answer that satisfies everybody. It says you gentlemen are going to have to choose between our side and their side.

I think there is a way to revise this procedure to simply get some data out that show us how to do both. It may not work in every case. In some cases we are going to have to come to decisions that will not make everybody happy.

We talk about 20 percent solutions with 80 percent unresolved. Impossible. We got 100 percent of the solution on the north side of the Salmon River. On the south side of that river, we tried very hard—as environmentalists—to come to agreement with the interests there and we are going to see an interesting textbook case—the fact that people sat down and resolved something north of the Salmon River.

They do not have the uncertainty, assuming that plan is approved this year, as the south side of the river has because the Forest Service is still trying to figure out what should be done down there. Let's have a process that allows that to happen. I think we can do that.

Senator HATFIELD. I wonder, Mr. Secretary, if you have gone through the RARE II designations and made any evaluation on any of those that could be extrapolated now and some quick agreement reached on final disposition, rather than having each one go through this long and rather involved process.

Is there such an evaluation?

Dr. CUTLER. I think that would be subject to criticism from both sides if we attempted to abort the process; if we were not able to accompany our decision with land use planning data and an environmental impact statement that we have agreed to do otherwise.

There may well be areas on which a consensus can be arrived at more easily than on others, and I am hopeful—particularly in regions where there is a short supply of raw material—that the Forest Serv-

ice will, through its normal planning process, kick out some of those areas in which there is no controversy.

However, I do not think at this time that we can suggest that some of the areas inventoried in RARE II can be released from that inventory unless Zane Smith can correct me. No?

A little premature right now.

Senator HATFIELD. Would Mr. Scott care to comment on that?

Mr. SCOTT. We have quite clearly accomplished something this afternoon. I feel perfectly at liberty to say that Mr. Ewart and I can come to some agreement with the Forest Service about the Amtrak going through a forest in Oregon.

I think there are other cases. As George says, some of the people are not quite as good at doing those inventories. They made mistakes both ways. As I understand what Zane tells me, they are cleaning them up as fast as you bring them aerial photographs and documents that demonstrate how they can clean those up.

I think you can identify those areas, Senator, in some places.

In the State of Oregon where things are likely to get tight before they get tight in other places, our people are willing to sit down with the Forest Service and with the industry to work out something.

I think we could have a little improvement on the Gospel-Hump situation by having the Forest Service at the table, too.

Senator HATFIELD. I would like to emphasize—with the situations described by Senator Wallop and other situations that are perhaps less severe, perhaps in the making or moving in that direction—that we must establish some sort of priorities so as to recognize those unique circumstances.

I have found that, in the omnibus wilderness bill which passed the Senate, we have not reached complete agreement with all parties involved. We have reached a lot of agreement on designated areas there—modifying, shifting borders, and recognizing interest groups and their legitimate rights.

I was amazed that we were able to move along with the degree of enthusiasm, or the degree of opposition—whichever way you want to look at it—which has really been rather mild compared to what it might have been.

I think, Dr. Cutler, you find not only the example I have cited at Gospel-Hump, but others. I would think that one might look at this in terms of trying to categorize, and not deny anybody their rights for input in the process and so forth, but expedite and put priority on certain of these areas.

Dr. CUTLER. One way we can address this opportunity is by cleaning up our inventory, by kicking out the roadless areas that were put in by mistake, and by any appropriate application of the criteria. I think that is what Zane, George, and that staff are doing right now, between now and the middle of October.

We hope we get these mistaken wilderness areas out of the inventory.

Senator HATFIELD. I would like to add one final comment to the frustrations enumerated here today. I am not laying blame, I am merely making an observation.

When we talk about the need for expediting and doing these various and sundry things, then we come back to the question of money, the tool with which to accomplish the objective.

As an example, just this afternoon I offered an amendment to the appropriations bill relating to the Forest Service to carry over \$19 billion from supplemental 1977 as it related to intensive forest management and sales preparation program attendant to that because of the unexpended amounts that had been appropriated under supplemental 1977 which would otherwise expire at the beginning of the new fiscal year, and that we have added money to the budget from time to time on the basis that that was the key for the Forest Service to accomplish a number of their objectives.

Then we come to that point and we find its limitation in personnel—ceiling limitation.

Here we have appropriated the money, but that is really not the solution. Now we come up with a problem of a ceiling on personnel.

A concentrated effort was made by the Forest Service and friends of the Forest Service to get the OMB to lift the ceiling to accommodate the expansion. We must get their response in a week or so.

I feel these are the things that also add much to the confusion of the public, to the confusion of Members of Congress, the user groups, and interest groups; that we have not really put the house in order, so to speak, to be able to accomplish a lot of these goals we announce.

Then if we cannot do it, people feel disappointed, cynical, and a few other things.

Again, I am not making any indictment. I am only making an observation.

I know, Dr. Cutler, that you have only been in office a short time. You have made an imprint already of a very positive nature.

I want to make record that, as of today, we have fought for the increase to increase within the Forest Service, for the recommendations for agreement for 750 billion board feet of which only 220 billion board feet was able to be programmed, leaving half a billion board feet, and for the funds required to process that in order to then provide you with that continuing tool to have to transfer or carry over almost \$20 million into fiscal 1978.

I just am hopeful that, in this RARE II process, we do not find ourselves again with these problems of tools, and with problems of money and personnel, then bog down to the point where we have to start a RARE III program to try to pick up the pieces from RARE I and RARE II.

There is an old adage that relates to the bureaucracy: If it does not work, just double your effort.

I am just making an observation. I am not asking for an answer. You are free to comment.

Dr. CUTLER. The only comment I would like to make is the fact that if all of the people in this room will it, RARE II will succeed.

Senator McCURE. Mr. Chairman, I would like to piggyback on the back of that last comment.

I think a large part of the answer to the problem will be found in the will of the people in this room, but we are in danger of repeating an error in the Gospel-Hump compromise. Not everybody involved is in this room. There are other interests, also.

On the three sides of this roundtable, I see the Federal agency on one side, and two user groups or advocates on the other sides. We do



not have organized labor represented here today. They have a big stake in this, and their voice is not being heard.

I do not see organized recreation groups and they were certainly very evident in Grangeville at the Gospel-Hump hearings. I have heard nothing but a passing reference made to the minerals industry and there are those in the minerals industry who feel that the Department of Agriculture has never really considered them because they are not a renewable resource user.

The Forest Service has inadequately, in the past, considered the nonrenewable resource values of the public lands. Whether advertent or inadvertent to the planning process, it does not identify the National Minerals Policy Act. There has been no reference to its goals at all although it is existing law.

That interest was also invited to participate and failed to participate in the Gospel-Hump, and to our detriment in terms of acceptance of the final solution.

I do not see any livestock groups represented in this room, and they have a big interest in how this comes out.

I am trying to say that, yes, I agree with you if everybody here has the will to make it work. In that case, RARE II has a chance.

However, to focus for a moment, there are a whole of a lot of other people with quite different interests who are not represented here at all, except by those of us sitting up here and those of us who, in one way or another, those of you, and the broad user groups, are trying to represent their interests. I think that is too bad.

I think this is a good beginning, but it is only a beginning of that problem. I think we have to address the interests of these other groups and bring them in in a very meaningful way.

I do not mean to detract from the value of this hearing. If I did not think it was a valuable one, I would not have been spending all afternoon here. I think it is, but it is only a beginning of the process.

Mr. KUTAY. I want to concur with Senator Hatfield's comments earlier, and hope there are corrections which can be made to revise the institutional arrangements which might be blocking improved management of the national forests as an important step which must be taken right away.

I think if there is any major area of agreement we had in timber in Oregon recently in the conference in Eugene, it is that we both can work together for our mutual benefit to improve management on already-accessed lands in the beginning. Perhaps those lands might be opened up in the RARE II process.

I have worked with a lot of local interest groups in Oregon. I tried to help them review lands. I find it difficult, as Mr. Scott suggested, because of the lack of data presented in some of those plans.

I have taken it upon myself to try to make some economic analysis of the endangered American wilderness bill and the omnibus wilderness bill of Senator Hatfield. I was looking at some of the areas and thinking about the high cost of determining those areas, as well as timber harvesting practices.

When I looked a little further, I found out there were considerable amounts of funds being appropriated by Congress for the specific purpose of building main access roads in the roadless areas. Those were, of course, in the millions of dollars.



I thought what a tremendous resource there was there, to put some of that road development money into improved management for previously developed lands. I took the roadless areas that were in both bills and figured out how many miles of roads could be built, the average cost per foot, per mile, per road and got a general figure of how much would be required to build a main access road.

That did not include spur roads or logging costs. Then I figured out what the return per dollar would be for investing those moneys in pre-commercial operations which seemingly might be the most proper level for them.

Through the allowable cuts, we would be able to take those moneys, invest them in already accessed lands, and take credit for future harvests and continue to liquidate that amount of timber which we could harvest from those funds.

That was more than the contribution those roadless areas would provide if they were simply accessed with roads and used for harvesting.

Senator CHURCH. We recognize that as a valid point. If we can get more intensified management and get the job done, it would be of immense help.

We have a vote on the Senate floor. I hope you will all continue your discussion. We will put Dr. Cutler in charge and let the conversations continue.

Before I leave for the vote, I want to thank all of you for coming, and for your participation in this roundtable. From the discussion thus far, I have gotten some ideas as to how we might endeavor to legislate, in connection with RARE II, some provisions in the law that might be helpful.

I had not thought of them before this discussion began, so it has been very useful to me. I am sure it has been useful for the other Senators as well.

Again, I want to thank you all for coming and participating.

Senator McCLURE. Before you go, I want to make one addition to the statement I made a moment ago.

I would not want my statement to say that there was an error in the arrangement at Gospel-Hump which resulted in a compromise agreement.

The context of that comment was that some who were not there helped engender the reasons for dissatisfaction with the compromise after it was reached. It was in that sense that I made the comment, but also the comment you made a moment ago regarding diversion of money into more intensive management practices has been one of my frustrations with environmental groups over the years.

They have said no to one thing and have not given us a whole of a lot of help in getting the other thing done. I think your comment is exactly on target. I think we ought to be doing that sort of thing. I think we can work together to accomplish it.

Dr. CUTLER. Mr. Chairman, can we assume the transcript of this meeting will be reproduced as a Senate document?

Senator CHURCH. Yes; as far as I am concerned.

Senator McCLURE. I think we can get bipartisan support in doing that.

Senator CHURCH. We will leave to vote.

Mr. EWART. I wish to make a statement. My intention has been to impress upon you that the RPA goals can be recognized in selecting the RARE II study goals in relation to the tradeoffs for other resources.

The RPA goal is now 25 to 30 million acres of the national forests wilderness system land. If that can be tolerated without undue pause and come out of the other amenities of the National Forest System that must be a part, in my opinion, of the RARE II process or we are doing no more than planning on a local level based on local prejudices.

Mr. RESLER. Mr. Ewart, that is a gimmick. It has to be a part of the evaluation process. The national goals will provide the framework for the alternative developed. Obviously, you have to go to the local level to get the refined information you need, but there will be control at the national level over those RPA alternatives.

I agree with the point Mr. Ewing was making, that we do need those other wheels represented. You have to visualize them as if they are there. That is a part of the evaluation process.

We realize the frustration all of you are feeling about this roadless area process and the land management planning process in general. If you can take your own frustrations and multiply them a few times you will get the idea of what some of us feel about trying to execute a program required by law which has a few complexities in it along the way.

Some of those complexities have to do with a difference of opinion reflected right here. Regardless of how we define the planning process we are going to undertake, there are going to be different viewpoints of what constitutes adequacy.

What we are trying to do here is do a uniformly effective job of displaying inventoried information, such as we can—we, the agency, and the public involved—so we can make some solid decisions.

There is no way we can get out of this roadless area process, except to support Dr. Cutler and carry on through to completion as competent an evaluation of all of the roadless areas as possible, identify the tradeoffs with the public's assistance—all of the public's assistance, not just portions of it—and then come out with some recommended courses of action.

That biting the bullet is going to be the difficult part. That is when the fun is going to commence.

I see no way out of this process unless we do the best job we can with your assistance, and then define what we believe ought to be done and propose to the Congress as the process requires. We propose and Congress disposes.

You will have the opportunity at the time to express your disagreements or agreements with the proposal, but somebody, some organization—in this case the Forest Service—has to be the catalyst. We have to provide the information, set up the target, and hopefully this democratic process will work effectively. That is what we propose today to do.

Mr. SCOTT. I want to respond.

You said all roadless areas. If we could have some covenants that all of the roadless areas would get the kind of treatment that it to be at least theoretically, sought in RARE II with consistent data and tradeoffs reflected, that would be one thing, but many of the roadless



areas will disappear before we get there through the land use planning process which, until recently, contained no data that there would be any tradeoff.

One of the most irksome examples is the Boulder planning unit in North Idaho. If a person wants to go with a wilderness alternative in responding to this document, they get no choice—they also have to buy the least intensive management and all of the other acres in the planning unit.

There is not a have your cake and eat it alternative displayed for anybody to even think about. That is something that can be improved quickly.

Mr. RESLER. I agree that that would not be an acceptable alternative. I do not know what the background of that case is. You should not have to only accept or reject, but suggest other alternatives.

Mr. SCOTT. Unless they file it under appeal.

Mr. RESLER. I am talking about the process. The process is to define an array of alternatives. Then those alternatives can be adjusted. This obviously was not done.

Mr. SCOTT. I think you can be more specific. One improvement you can make would be to set some direction for what the array of alternatives would be. There is really nothing there says, "Don't hinge it to the least intensive management." Show that tradeoff, but it is not there in most of them.

Mr. RESLER. We are not there yet, but it will be part of the RARE II process.

Mr. CRAIG. I am in agreement that there are opportunities for investment in more management opportunities that would be more productive. I also agree that there may be areas scheduled for timber harvesting that probably should not be harvested.

The Resource Planning Act and, to some extent actually, the National Environmental Policy Act requires the agency to use economic analysis as part of their planning process. I am really somewhat encouraged by this, and what they are working on and what they may come up with.

I think it is possible that they will offer good guidance as to the allocation of resources to provide these various outputs.

In spite of all I would like to tell you, your proposal—while intriguing in some ways—has a fundamental flaw. That is that all of this money that is spent on roads comes from the timber that will be hauled over those roads. It is not from appropriated money.

Ninety percent or more of the road construction done in the national forest is done by timber purchasers, so it is not that you can take something that is available and shift it to another use.

There is still going to have to be some additional funds for that type of activity.

Dr. CUTLER. We tried to estimate what the mileage would be on the main access road in the roadless areas—not those necessarily paid for by timber purchasers or credits, but those paid for through appropriated funds and our forest road trails.

Mr. CRAIG. That is a minimum thing, at least in California. Ninety percent of the mileage is paid for by timber purchasers.

[Off the record discussion.]

Mr. HAMPTON. I have a couple of comments I want to make—observations—call it what you will.

I am not sure they are too well organized. It seems to me that we might have room for greater agreement on this whole wilderness issue if we can somehow take a look at the things that relate to areas where there are real wilderness values present in the country, but not necessarily in the heavily timbered areas.

I am encouraged to see that the ecosystem is one of the national need criteria you are looking at here. Unfortunately, I suppose, from your standpoint and that of the Forest Service, there are not too many of these roadless areas that are in ecosystems other than those that contain a lot of timber.

I recall, Dr. Cutler, when you first announced you were going to have a RARE II study that it seemed to me you were missing something here in not having an interagency approach to this whole thing where we involve BLM and the other agencies so we can be looking at all of the other wilderness values in the country.

Out in the desert areas, I can remember as a younger man, going to Joshua Tree National Monument with my young family and having a great time. It was truly a wilderness experience. That is one example. I am sure there are hundreds of them around the country where we do not have to be engaged in a constant struggle for timber.

I am not suggesting that there are not great timber areas that still need to be set aside as wilderness. I am suggesting that there is probably greater room for some agreement here if we can be looking at the other ecosystems and the values contained therein.

Maybe what I am leading up to here—and I am not even sure in my own mind—is that there has to be an interagency approach and perhaps some way of triggering them could be some oversight hearings on the part of the Congress to bring together all of the agencies that are involved in identified wilderness areas to get together and see where we are going, and establish a little better direction to this whole effort.

Dr. CUTLER. Thank you.

We have not taken your time to go through any detail. The maps on the easel show the ecosystem and the land forms we are using as selection criteria. We think they are important. We think they are a breakthrough for wilderness criteria to give us a scientific basis for selection of the wilderness system.

I am working with assistant secretaries Bob Herbst and Guy Martin, and the staff is working with the National Park Service, Fish and Wildlife Service, and the Bureau of Land Management in developing these criteria. They are trying to, in effect, coordinate the vision of this administration as to what the national wilderness preservation system should be. Hopefully, we can delegate some of these gaps to those other agencies.

We have opportunities on the National Forest System to add grasslands where John McComb is from down in the Cornado National Forest. For the first time, this gives us a really good rationale to put those other types into the system.

Mr. HAMPTON. Can I expend a little bit on what I said?

I think all of us—and I am certainly guilty of this—have been accustomed to thinking of wilderness as the mountain land forms covered by timber. We do have another opportunity. I cannot overemphasize the importance of trying to get together and using this as, perhaps, a common meeting ground where we can resolve some differences.



It might well be that, in some of this middle area where the Forest Service and RARE II will not be able to identify areas that immediately can be set apart as wilderness, they will be put back into multiple use. Maybe there will be some questionable areas in there that have timber value where the tradeoffs are involved where you are going to have to study them further where they would be close to areas of a semidesert character or brush where we do not have the timber values, but where they do have other wilderness values.

You could make a slot that would be acceptable to all the parties concerned.

I have one other comment, a comment on wildlife.

That, also, is one of the national needs criteria. I am sure that I do not have to tell you again that sometimes in the perception of the public they think we have to have pure wilderness to protect certain wildlife.

This might be true in a few cases, but more often than not most wildlife are going to get along much better if we are able to manipulate that habitat.

I recognize that the act does not preclude that, but there have been problems here in the past in that regard.

I would hope that we do not overlook the role of the professional wildlife manager in addressing this issue. Sometimes the public can get a little emotional on the subject of wildlife. Somewhere in that crunch, the professional managers' view can be overlooked.

Dr. CUTLER. It does not include vegetative manipulation for wildlife habitat improvement.

Mr. HAMPTON. Are there not wildlife management areas?

Dr. CUTLER. Not in wilderness areas unless the management is just to leave it alone. There could be introductions, reintroductions—some modest opportunities of this kind.

I think if the highest and best use is for wildlife which is dependent upon continued manipulation of habitat, then it should not be listed as wilderness.

Mr. MAHONEY. Mr. Secretary, I think all of us are aware, but perhaps it needs repetition, that trees, minerals, cattle are not distributed evenly across the land. As Mr. Hampton is saying, there are areas of lesser conflicts.

I believe, as Mr. Smith has shown, that is one way in which you are going to be evaluating wilderness. It makes it convenient to illustrate as, say, the color here illustrates as to mix, board feet, and acres.

Pretend that if you take this many million acres you take a subsequent corresponding effect on board foot reduction. I come from a State in which the trees are not as big as they are in Oregon. They do not grow as close together.

You will find most of the people here today representing timber interests are from the Northwest. In fact, most of the examples given of urgency of need are coming from the Northwest.

What has happened to conservationists in Colorado in the past is that we have had our areas treated as if they were in the Northwest. We have had them treated as if they were a large timber industry that needs our lands.

We fear that, while the needs expressed here today are quite legitimate, they may overreact. The reaction to that may be a straitjacket

on the entire system, which would not allow imaginative management which would help us in our region reach more agreeable solutions among the competing needs for that region.

In Oregon we have an industry that is cutting at 100 percent of the level which the Forest Service calculated as potential, but in Colorado the industry cuts at only 25 percent of what the Forest Service calculates as potential.

That is not to say, necessarily, that the industry should be as large as its potential. The Arapahoe National Forest was mentioned as an example of a national forest full of roadless areas.

The last timber management plan for the Arapahoe showed that it cost the Federal Government \$8 to remove \$1 worth of timber. As Mr. Kutay has shown, there may be ways in which we can have both timber and wilderness in the Northwest. There exist other ways that are not at all alike, and which we may be able to resolve such as the crisis in the central Rockies.

We would like to see the planning effort—RARE II or whatever form this evaluation of roadless areas finally takes—ask some of these fundamental questions: How can we have both roadless lands and timberlands?

We do not want to see a "rush through" planning process when our area does not need to be rushed. No one is losing any jobs in our area because, for the first time, people are looking not only at lands that should be put into the wilderness, but at what lands need to be developed.

We cannot get away from applying some local solutions to local needs.

**DR. CUTLER.** I would like to speculate that one way to address your suggestion—to take more time to do a better job—would be the State-by-State environmental impact statements at a staggered period of time, addressing ourselves first to Idaho, Oregon, and the areas where we have hotspots, material shortages—a crisis—and perhaps taking a little longer to perfect the recommendations in the draft environmental statement in terms of your fieldwork, the public involvement, and our own view, and spin it out in different parts of the country where the need for the decision is not quite so urgent.

I would not want to indicate that we would want to prolong it very much longer, but if a few more months would make a better job I would like to do that.

**MR. MAHONEY.** It has been brought up. Senator Hatfield mentioned that we may need some immediately released areas from the inventory. We may need to make sure that that yellow category of released lands is exercised quickly, and you have spoken of a sunset provision of 4 years for possible wilderness studies.

We again go up against the manpower ceiling and how quickly decisions can be made adequately. It is not just a question of State by State, allowing the critical States to go by or critical regions to be decided more quickly, but also perhaps in terms of your sunset provision.

There are wilderness study areas which have an immediate need for determination and those which we can allow to sit while we make the decisions on the others. I think we need greater flexibility there, too.



Mr. KULOSA. Being familiar with the Colorado area somewhat and the Southwest especially, I think the resolution of this problem is just as necessary in Colorado as anywhere else in the United States.

I would like to state that growth potential in Colorado vis-a-vis other parts of the Nation is very nearly as great as those other parts.

It is true, maybe, that the coast does have larger trees due to the older growth and the past growth, but under management the Colorado lands have very similar growth abilities as the coast and I do not think that they should be written off.

Also, we are experiencing mill shutdowns. Mills are being threatened by the process. I do not feel it should receive any different treatment for that reason.

Mr. MAHONEY. If I may respond; I agree with what Mr. Kulosa is saying in large part. I think, however, we have to separate, in evaluating wilderness needs versus our tradeoffs, the question of where industry now exists and is actually threatened, and where we are only talking about a potential industry which may or may not exist, depending on how funding may be.

We oftentimes are brought into these meetings because of immediate needs where people may actually lose their jobs, and we are making decisions where there are no immediate needs, where jobs have not even been created.

Certainly we have greater flexibility in the other instance, but one of the flaws of RARE I was that all such areas were treated exactly alike. I think that may be one of the subtleties within the tradeoff.

Mr. BLASING. I would like to echo what Herb said. The people in our area, particularly in Montana, are very seriously affected by this kind of process and we are in tough shape there.

In one case I can name specifically, the Forest Service has literally planned the economy of Philipsburg, Mont., out of existence. There were two sawmills there. There was a substantial cut available to those sawmills.

Because of an appeal, and further because of a restriction in Government timber supplies, both of those mills have been shut down. The smallest one is going to try to start up again in the near future.

We need an immediate solution, and this is why we are here, one of the main reasons. We do not have the time to wait.

As Senator Wallop said, mills with only months or days to survive on their contract—for them we are going to have to come to some resolution of the land use planning thing and the wilderness thing if we are going to maintain our economy in Montana where the timber industry generates 50 percent of the income.

Therefore, it is of real concern to us, and I may be dropping back. I do not want to get away from productive discussion, but in your discussion of the public involvement—I am not sure if I heard you right, or I am not sure that what happened where I was is different than what you said—the public, when they were asked to comment on the criteria and the roadless area inventory in our area, were told very specifically by the Forest Service that that is all they wanted to hear about.

They were given no opportunity to say whether or not this area was good or this area was bad. Those of us who have been participating



with the public in this process have told those people that this is what you tell them because this is what they are asking for.

There is no opportunity for the public to give that input until the alternatives are presented. This represents a serious concern to me because it has been my experience—and maybe the experience of some of the people on the far side of the table—that once the alternatives on the draft environmental impact statement come out it is very difficult to change them.

The Forest Service has usually made up a large portion of their mind.

**Mr. SMITH.** During the initial workshops in July and August, we did not get into the evaluation. As already pointed out, we had to start from someplace. We had to develop an inventory.

If we had leaped right into evaluating them, we feared we would not get a product which could later deal with the evaluation. We have a period of time in which we have to begin collecting some data so we know something about the existing system and the potential. We want to get ready to begin.

You'll see the national level screen and the local tradeoff analysis. There is going to be a period during this winter where we will, again, engage in an additional round of public involvement which can assist us in constructing the alternatives and actually applying the data to the areas.

That is one opportunity.

The next opportunity is going to be to issue a draft environmental statement. At this stage, the Forest Service will really have the benefit of some previous comment from the public, and they would present it in a draft environmental statement, alternative by alternative, and explain the data in an understandable way.

This would deal with such things as potential jobs, economic potential, economic urgency, community by community. Therefore, we should be winding up with two more kinds of formalized opportunities for public involvement on the evaluation of the areas.

**Mr. SCORR.** If I may, I want to come back to that.

Our concern is that the evaluation be based on the information and not go to the public to ask: Which of these 10 areas do you like the most? Which do you like the least? Or do you not want any of them? But, tell the public the real information.

Here is what it costs. You can go to the public with: Do you want to have 50 miles of ORV trail open or closed? If there is nothing in that process that sets that in context, that miles of ORV trail open throughout that forest, you are really asking the wrong question and creating controversy, rather than asking questions that help within that context.

We are all for lots of public involvement. We are for asking the public to help us select the best areas for wilderness or timber harvest but somewhere let there be an exchange so it does not have to be either or.

**Mr. EWART.** I would not want to have this meeting close without offering for the record a book entitled "Wilderness Withdrawals and Timber Supply." This book was just prepared by the National Forest Association for purposes such as this.

We have several copies which we offer for the record.

[The publication referred to above follows:]

# Wilderness Withdrawals and TIMBER SUPPLY

How Wilderness Withdrawals Impact  
Timber Supply, Homebuilding, Employment,  
and Community Stability



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# Introduction

Withdrawal of productive resource lands for Wilderness preservation is more than a local issue. It has serious economic and social impacts nationwide. Singly and cumulatively, Wilderness set asides require careful study and evaluation before land and resources are classified for non-development and limited use.

The concern here is not to argue for or against Wilderness. The forest industry has been, and remains, a firm supporter of Wilderness preservation. Lands with special ecological and aesthetic values should be preserved for their beauty and educational opportunities. But U.S. citizens also must have the timber and other resources public lands can yield within the framework of good resource and environmental management. The question is really one of using the growth capacity of our lands without waste.

This booklet presents facts about the effects of designating productive federal timber-growing lands as Wilderness. Impacts can be catastrophic—to the nation's timber supply, housing programs, employment and community stability.

Many people confuse lands set aside for Wilderness preservation with recreational lands. They are not the same. Wilderness is defined by law as ". . . an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." It is the most restrictive single-purpose use of federal land. Most land used for recreation is multiple-use land, serving many purposes. Impacts of land withdrawals on the most popular forms of outdoor recreation are also discussed.

## Summary

America's forests are among the most bountiful in the world. But its productive forests—the public and private lands available, suitable or usable for timber growth and harvest—are declining.

The reasons for the decline vary, but a major cause is the withdrawal of federal land from timber production, mostly for Wilderness.

Congress is now considering a host of Wilderness proposals affecting productive federal timberland on a piecemeal basis. If adopted, they will further imperil the nation's timber supply, and with it homebuilding, and thousands of jobs in the forest products and related industries.

In all, proposals for Wilderness designation and Wilderness study, together with land areas which may qualify for potential study, embrace some 350 million acres (548,750 square miles) of public lands—a land area three and a half times the size of California—or more than the size of all the New England states and 13 other mid-Western and mid-Atlantic states.

Wilderness designations are, for all practical purposes, irreversible.

The 1974 Forest and Rangeland Renewable Resources Planning Act (RPA) and the 1976 National Forest Management Act (NFMA) are among basic laws enabling the government to weigh carefully goals for both timber production and Wilderness, so that careful decisions can be made on land and resource management issues.

### **One Orderly Assessment Is Already In Progress**

Through the RPA, and other processes Congress has established, impacts of land management decisions on timber supply, housing goals and employment can be assessed

in an orderly way, as well as impacts on recreation, wildlife, water and range.

One such assessment was the Roadless Area Review and Evaluation (RARE I) by the Forest Service, started in 1970, to review 56 million acres (87,500 square miles) of "roadless" or undeveloped areas in the 187-million-acre National Forest system. In 1977, this review was reestablished as RARE II and expanded to review some 67 million acres. The stated purpose of RARE II is to speed up completion of the Wilderness system on the National Forests and to return lands not suitable for Wilderness to multiple use.

In RARE I, some 12 million acres of National Forest lands were selected as prime candidates for further Wilderness study. The remaining 44 million acres, because of a court agreement, required Environmental Impact Statements on management plans before these lands could be managed in a way that would alter their Wilderness character.

The 67 million acres involved in RARE II are over and above the 12.8 million acres (20,000 square miles) of National Forest lands already in the Wilderness system and the 3.1 million acres of Primitive areas set aside for eventual addition to the Wilderness system.

All roadless areas are now, and will continue to be, treated as Wilderness, with no commodity activity permitted, until all appeals on proposed land management plans are exhausted.

Thus, the Wilderness potential of roadless areas is not "endangered."

When the Forest Service review process is completed, Congress can then evaluate recommendations within the framework of RPA goals to determine how much land is needed to meet demands for timber, Wilderness, recreation, and the other uses of these public lands.



## Recommendations

### **The forest industry urges Congress:**

1 To assess carefully all of the social, economic and employment impacts Wilderness designations will create when productive timber-growing lands are withdrawn for the most restrictive of all land use classifications.

2 To provide direction to the Forest Service, and sufficient funding, for prompt completion of management plans and Environmental Impact Statements for the 67 million acres of roadless areas. Timber growth in these lands is now unutilized—and could be for years—until all issues over their use are resolved. Deferral of timber harvesting in these areas is already impacting Western mills dependent on National Forest timber—36 mills and plants have already closed; others are on the brink. Lumber and plywood prices are at an all time high.

3 To fully evaluate Resources Planning Act goals for both Wilderness and timber production before adopting new Wilderness proposals. Legislating new Wilderness areas piecemeal, without evaluating the land base essential to meet timber supply needs, is imprudent. It shortcircuits the orderly procedures now underway and the processes mandated by the Resources Planning Act.

**WILDERNESS IS MORE THAN A LOCAL ISSUE. DECISIONS HAVE ECONOMIC AND SOCIAL IMPACTS NATIONWIDE—ON THE TIMBER SUPPLY AVAILABLE FOR HOUSING, PAPER AND WOOD PRODUCTS; ON JOBS; ON COMMUNITY STABILITY AND COUNTY TAX REVENUES, AND ON ALL CONSUMERS AND USERS OF WOOD-BASED PRODUCTS.**

## Definition of Problem

Lands available for the continuous growth and harvest of repeated timber crops are shrinking because of competition from other land uses and inadequate assessments of the impacts land withdrawals will have on timber supply nationwide.

For federal forest lands, the most serious competition is withdrawal of productive forest lands for Wilderness preservation—the most restrictive of all land use classifications.

For private forest lands, other land uses and diverse management objectives are reducing the land base usable for timber production.

Congress and federal agencies are now considering proposals to consign millions of acres of productive federal timber lands to permanent nonproduction in Wilderness preserves.

Areas proposed or under study for Wilderness are locked up from all uses until final land use designations are made.

Inadequate consideration is being given to economic, social, and employment impacts of Wilderness withdrawals.

**Wilderness proposals are now political footballs, considered piecemeal, without weighing impacts on local, regional or national timber supply needs, homebuilding programs, employment, developed recreation or other resource values.**

## Ten Facts Congress Should Consider

Congress should consider carefully 10 facts before designating productive federal timber-growing lands as Wilderness:

1. Existing laws prescribe orderly, efficient guidelines for designating use of National Forest lands—1960 Multiple Use-Sustained Yield Act, 1964 Wilderness Act, 1974 Resources Planning Act, and 1976 National Forest Management Act.

2. National Forests contain 52 percent of the total U.S. standing inventory of softwood sawtimber—from which come products for housing and construction, pulp, paper and packaging and other wood products.

3. The National Forests supply 15 percent of all the timber consumed annually in the United States—the same dependency America had on Arab oil at the time of the 1973 embargo—and 27 percent of all U.S. softwood sawtimber—the wood most used in homebuilding and other construction.

4. Any reduction in the timber base on which annual allowable harvest calculations are based will result in a reduced harvest and even more unutilized timber growth.

5. Forest industries are the major employers and the primary economic base in hundreds of rural communities. In the West, the National Forests are the major single source of timber supply; the Forest Service is a monopoly owner and seller of timber.



6. Private forest lands cannot make up for shortages caused by National Forest timber waste.

7. Ninety percent of all U.S. single-family housing is of wood-frame construction. Wood is also the framing and sheathing for a substantial volume of townhouses and garden apartments.

8. Consumer demand for wood and paper products is projected to double by the year 2020, the Forest Service estimates.

9. Recreational use of public lands is also expected to double by the year 2020, according to Forest Service projections.

10. Wilderness use, measured in visitor days, represents a very small portion of U.S. public recreational needs and is the least used of all categories on public lands.

Each of these points is discussed in the following pages.

## Existing Protection for Wilderness

With passage of the 1964 Wilderness Act, the United States became the first nation in the world to establish a national policy proclaiming a commitment to Wilderness preservation. This Act, adding to the 1960 Multiple Use-Sustained Yield Act, specified Wilderness as one of the multiple uses of federal lands.

Since 1964, two major statutes established guidelines for preserving Wilderness and ensuring wise use of all National Forest resources:

**1 The 1974 Forest and Rangeland Renewable Resources Planning Act (RPA)** mandates that the Forest Service periodically assess and report to Congress what the nation's demand upon its renewable resource base will be, and what land uses are best to meet such needs.

Goals were established to meet the demands of six resource systems, including timber production and Wilderness.

Congress recognized the Forest Service's recommended RPA program goals in 1976.

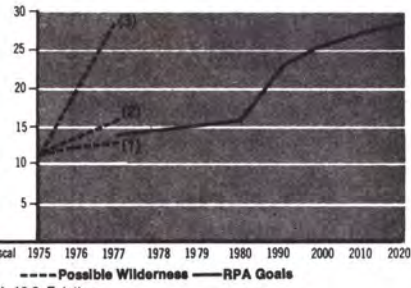
**2 The 1976 National Forest Management Act (NFMA)** requires that guidelines for forest management plans "insure consideration of economic and environmental aspects of various systems of renewable resource management . . ."

The primary goal of these laws is to ensure that federal lands are managed in the wisest and most productive manner to benefit all citizens.

# RPA Goals vs. Accomplishments

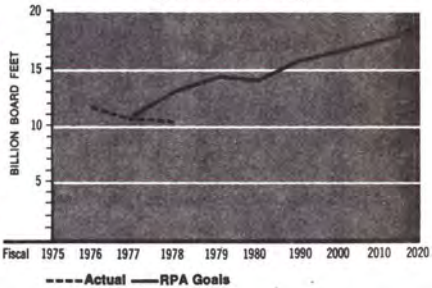
It is important to look at the Resources Planning Act recommended goals and accomplishments for 1977 for six resource systems on the National Forests: Wilderness, Timber, Recreation, Wildlife and Fish, and Range, Land and Water. The only goal met, and surpassed, of the six resource systems, is Wilderness, and is illustrated in the following charts.

### National Forest Wilderness



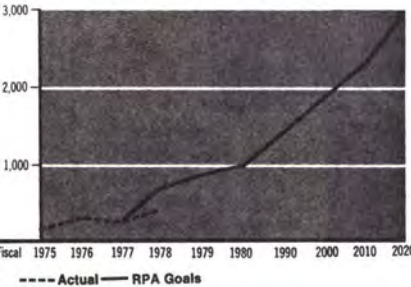
----- Possible Wilderness — RPA Goals  
 ) 12.6 Existing  
 ) 3.2 Primitive Areas  
 ) 12.0 Study Areas (Congressional and Forest Service)  
 26.3 (As of 5/24/77)

### Timber Sales (National Forests)



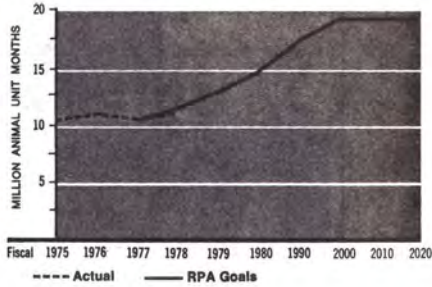
----- Actual — RPA Goals

### Fish and Wildlife Habitat



----- Actual — RPA Goals

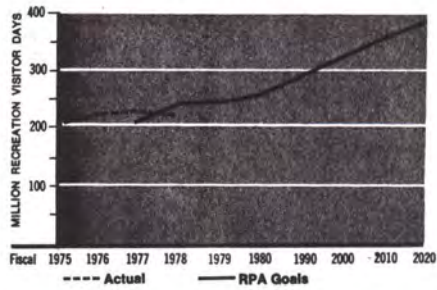
### Range Use



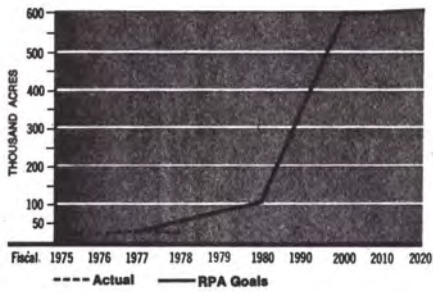
----- Actual — RPA Goals



### Recreation Use



### Soil, Water, Land Rehabilitation



## Wilderness: How Much is Needed?

The Wilderness Act of 1964 legally defined Wilderness in narrow, restrictive terms—as an undeveloped area of at least 5,000 acres, where "man himself is a visitor who does not remain."

Since passage of the 1964 Act:

14.7 million acres of federal land (22,969 square miles) have been designated by Congress for Wilderness preservation—more than the combined land area of New Hampshire, Connecticut, Massachusetts and Rhode Island.

12.8 million of these acres (20,000 square miles) were taken from the National Forests, with the remainder from National Parks and wildlife preserves.

An additional 3.1 million acres of National Forest land (4,844 square miles) were set aside in Primitive areas for eventual Wilderness classification.

Still another 67 million acres of National Forest roadless areas (104,688 square miles) may not be used for multiple use, pending completion of administrative or legislative action. The commercial timber areas of these lands support an annual timber harvest in excess of 2.7 billion board feet—enough wood to build 270,000 new houses every year.

—In all, some 351.2 million acres (548,750 square miles) of federal land, in National Forests, National Parks, National Wildlife Refuges and Bureau of Land Management (BLM) lands are either already in the Wilderness system, are being considered by Congress, or are or will be studied by federal agencies.

### STATUS OF WILDERNESS PRESERVATION (Millions of acres)

	Existing	Pending Proposals in Congress	Possible Additions from RARE II and BLM Studies	Total
National Forests				
Primitive Areas				
National Parks				
National Wildlife Refuges				
Unclassified Land in Alaska				
Bureau of Land Management				
<b>Totals</b>	<b>14.6</b>	<b>189.8</b>	<b>147</b>	<b>351.2</b>

\*These 7.9 million acres represent only a small fraction of National Forest lands being considered for Wilderness.

\*\*The RARE II inventory encompasses 67 million acres of National Forest land that could be designated as Wilderness.

\*\*\*Includes 3.1 million acres of Primitive areas originally set aside for eventual Wilderness classification.

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## Forest Service Roadless Area Review

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The Forest Service is now reviewing 67 million acres of "roadless" or undeveloped areas in the National Forest system (RARE II). This second inventory and review process has added substantially to the 56 million acres withheld from multiple-use management pending completion of the RARE I process.

As required by the RPA and NFMA, the Forest Service must assess:

- The environmental impact of any decision.
- The socioeconomic impacts of Wilderness withdrawals.
- Present and future timber and recreation demands.

Until this process is completed and appeals are exhausted, all activities altering the natural state of identified undeveloped areas are prohibited.

**Prompt, orderly completion of this study is essential. It is imperative that lands determined best suited for multiple use are returned to this use as soon as possible. The timber-growing potential of these lands will determine the timber supply available from western National Forests.**

The following chart shows the tremendous amount of timber tied up until the roadless area review is completed.



**Impacts on Allowable Harvest  
In the National Forest Roadless Area Reviews  
(RARE I and II)**

Forest Service Regions RARE I	Number of Areas	Total Acres (Thousands)	Commercial Forest Land (Thousand Acres)	Roadless Area Annual Allowable Harvest (Billion Bd. Ft.)	Total Annual Allowable Harvest for Whole Region (Billion Bd. Ft.)
Northern		7,612		.457	
Rocky Mountain		5,757		.134	
Southwestern		1,430		.008	
Intermountain		11,942		.182	
California		3,098		.209	
Pacific Northwest		6,502		.889	
Southern		37		.001	
Eastern		0		0	
Alaska		20,699		.586	
<b>TOTAL</b>	<b>1,447</b>	<b>56,166</b>	<b>18,856</b>	<b>2.276</b>	<b>16.0</b>
<i>RARE II Projections</i>	<i>1,725*</i>	<i>67,000**</i>	<i>22,476*</i>	<i>2.7*</i>	<i>(unknown)</i>

\*NFPA Projection

\*\*Forest Service Projection

## National Forest Land Use Patterns

Of the 187 million acres of National Forests, only 90.1 million are classified as commercial timber lands—land available or suitable for timber production. But this is only part of the story.

On about a quarter of the 90.1 million acres, timber harvesting is severely restricted for aesthetic reasons and buffer zones along roads and streams.

**Timber harvesting actually may now occur on about 69.7 million acres, but is restricted severely on 25 million of these acres. Thus, lands available to grow trees must be prudently and intensively managed for timber production.**

The remaining 117 million acres are unavailable, unsuitable or unusable for timber production.

**82.7 million acres alone are presently treated as Wilderness.**

### National Forest Land Allocation

Total = 187 Million Acres



## National Forest Timber Supply

National Forest commercial timber areas have the largest single concentration of U.S. softwood sawtimber—trees of the type and size used to make lumber and plywood.

52 percent of the nation's total inventory of standing softwood sawtimber is in the National Forests.

27 percent of all the softwood sawtimber, the wood used most in home-building, is supplied by the National Forests annually.

National Forests supply 15 percent of all the timber consumed annually in the United States—the same dependency America had on Arab oil at the time of the 1973 embargo.

The production of timber on these lands is vital to the nation's timber supply—now and into the next century.

**Any reduction in the land base on which allowable harvest calculations are figured will result in a reduction in the allowable harvest.**

Where the wood is  
STANDING TIMBER INVENTORIES,  
SOFTWOOD SAWTIMBER



Where the wood  
comes from  
SOFTWOOD SAWTIMBER HARVEST





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## National Forests: Economic and Employment Contributor Nationally

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Nationally, the impacts of federal land withdrawals on the economy and employment can be devastating:

- Nationwide, the forest industry employs 1.2 million people.
- 180,000 of these people owe their jobs directly to the continuing availability of timber from National Forests.
- Sale of National Forest timber returned \$438 million to the national Treasury in 1976, of which \$110 million was returned to counties in which National Forests are located.
- The House version of the Endangered American Wilderness Act of 1977, H.R. 3454, would designate 1,170,372 acres of National Forest land in nine western states as immediate Wilderness. As illustrated in the following table, the commercial timber areas of these lands have a potential timber yield of 112.6 million board feet annually—enough timber to build nearly 10,000 new homes a year. The table also reveals impacts on the local economy in terms of lost revenue, on employment and on other economic and social values by removing productive timber-producing lands from commodity use.

**Endangered American Wilderness Act of 1977  
(H.R. 3454)—Summary of Impacts on Timber Supply and Jobs\***

State/ Name/ National Forest	Gross Average	Proposed Instant Wilderness Designation		Annual Timber Sales Foregone to U.S. Treasury (\$1,000)	Annual Timber Industry Sales Foregone (FOB Mill) (\$1,000)	Annual Funds to Counties Foregone*** (\$1,000)	Annual Cost to Economy in Terms GNP (\$1,000)	Value of Stumpage Foregone Over Rotation (100 Yrs) (\$1,000)	Other Impact on Local Mills, Job Market	
		Com- mercial Forest Land Acreage	Poten- tial Timber Yield (MMBF) (Yearly)						Direct Jobs	Indi- rect Jobs
<b>Arizona</b>										
Pusch Ridge										
Coronado N.F.	56,430	0	0	—	—	—	—	—	—	—
Galluro Additions										
Coronado N.F.	55,210	—	0	—	—	—	—	—	—	—
<b>California</b>										
Golden Trout										
Inyo & Sequoia N.F.	179,825	23,150	14.2	2,059	4,260	515	41,180	205,900	85	355
Santa Lucia										
Los Padres N.F.	21,250	0	0	—	—	—	—	—	—	—
Ventana Additions										
Los Padres N.F.	61,080	2,360	0	—	—	—	—	—	—	—
<b>Colorado</b>										
Hunter-Frying Pan	67,000	NA**	NA	NA	NA	NA	NA	NA	NA	NA
<b>Montana</b>										
Welcome Creek										
Lolo N.F.	28,440	15,060	1.7	115.6	408	29	2,312	11,560	10	40
<b>New Mexico</b>										
Manzano Mountain										
Cibola N.F.	37,000	0	0	—	—	—	—	—	—	—
Sandia Mountain										
Cibola N.F.	30,930	5,360	.1	—	—	—	—	—	—	—
Chama River Canyon										
Santa Fe and Carson N.F.	50,300	13,250	1.9	150	570	37.5	3,000	15,010	—	—
<b>Oregon</b>										
French Pete Creek										
Willamette N.F.	45,400	32,749	24.0	5,208	8,400	1,302	104,160	520,800	120	600
Kalmiopsis Additions										
Siskiyou N.F.	280,000	156,399	47.1	6,829.5	16,485	1,708	136,590	682,950	235	1,177
Wild Rogue										
Siskiyou N.F.	38,200	17,425	7.2	1,004	2,520	261	20,880	104,400	36	180
<b>UTAH</b>										
Lone Peak										
Wasatch and Uinta N.F.	29,567	5,479	0	—	—	—	—	—	—	—
<b>Washington (and Oregon)</b>										
Wenaha-Tucannon										
Umatilla N.F.	175,000	50,000	15.0	825	4,500	206	16,500	82,500	90	375
<b>Wyoming</b>										
Savage Run										
Medicine Bow N.F.	14,940	12,000	1.4	38	9.4	—	760	3,800	10	35
<b>TOTAL</b>	<b>1,170,372</b>	<b>333,232</b>	<b>112.6</b>	<b>\$16,229.1</b>	<b>\$37,152.4</b>	<b>\$4,058.5</b>	<b>\$325,382</b>	<b>\$1,626,920</b>	<b>586</b>	<b>2,762</b>

\* U.S. Forest Service figures adjusted by NFPA to reflect bill reported by House Interior Committee

\*\* Not Available As of 8/15/77

\*\*\* Because of unavailable data, this column doesn't reflect the impact of the Payments in Lieu of Taxes Act of 1976.

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## Private Forest Lands are only Part of the Answer

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Many who urge increased Wilderness classification of federal forest lands claim shortfalls in timber supply from federal forests can be met by increased timber harvests from private lands. Facts refute this premise.

**Only about a third of the private non-industrial woodlands have the potential for increased timber production.**

Other facts:

Industrial forest lands are now producing closer to potential than any other ownership category. Serious long-term damage could result if it became necessary to overcut industrial forests to compensate for federal timber shortfalls in the face of rising consumer demands.

Private non-industrial woodlands, while productive, are generally either understocked or stocked with non-commercial species.

Private woodlands are being reduced by withdrawals for highways, airports, shopping centers, and agricultural uses, among others.

Private owners, in many cases, may not intend to use their lands for timber production, just as many public forest lands are not used for timber production.

Private woodlands contain predominantly hardwood timber, while public lands grow mostly softwood timber. The two groups are generally not substitutable for each other in most markets.

Private non-industrial woodlands will be called on to supply much of the increased wood fiber demand in the future. They need substantially more silvicultural attention over the next 20 to 40 years to achieve their potential productivity. Increased harvesting now in young stands could jeopardize future timber supply.

**Moreover, recent studies reveal that of the 296 million acres of commercial forest land in the hands of private non-industrial owners.**

Much of the land, some 21 million acres, is located in areas of high population density, such as Fairfax County, Va., or DeKalb County, Ga., where the



land is most likely to be used for residential construction, rather than timber management.

A large portion of privately owned woodlands is in small holdings: 52 million acres are in holdings of 1 to 50 acres, and 62 million acres are in holdings of 50 to 100 acres. If an initial crop of timber is harvested from these lands, their small size makes economical timber management difficult. Additionally, once the initial stand of timber is harvested, the land may not be replanted since incentives for timber production are usually inadequate.

Another 78 million acres of land will not generally be available for increased timber production because of its low site quality for growing timber.

Although some overlap exists, such as land too small in acreage for economical timber management also being in an area of high population or of low site quality, **it is safe to say that only 100-120 million acres of the 296 million acres of private non-industrial land is actually available for increased timber production.**



**100-120 million available acres**

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## Demand for Timber Products to Double by Year 2020

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U.S. demand for wood-based products—and world demand—will double by the year 2020, according to projections by the Forest Service.

Here are some facts on consumer needs for wood and paper products:

In 1900, Americans consumed 7,140 million cubic feet of wood and wood fiber products. In 1970, consumption was 12,725 million cubic feet, an increase of 78%.

Total demand for paper, paperboard, and building board is projected to rise to 147 million tons (medium level) in 2000, and to 225 million tons in 2020—some 3.4 times the consumption in 1974, according to the Resources Planning Act Assessment of 1975.

Over 5,000 products are derived from wood—many used daily.

90 percent of all U.S. single-family housing is of wood-frame construction.

Between one-third and one-half of U.S. softwood lumber and plywood, plus substantial volumes of hardwood plywood, particleboard and insulation board, are used for the production, upkeep and improvement of housing.

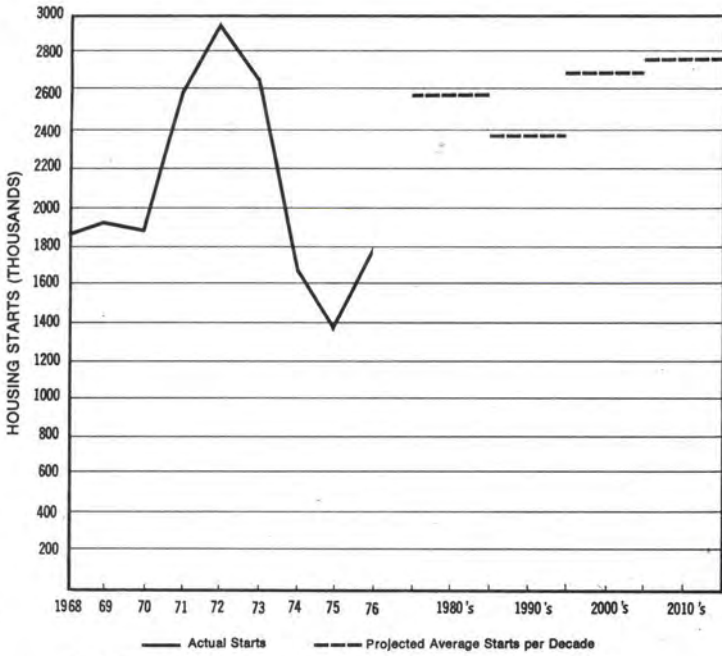
Wood also provides the framing and sheathing for townhouses, garden apartments, churches, schools, shopping centers and agricultural buildings.

Forecasts of housing demand reveal an increasing trend in housing production through the end of the century, averaging 2.58 million units (figure includes mobile homes) annually through the year 2020, compared with the average of 2.02 million for the period 1967-76. (See chart) The 1968 Housing Act called for 26 million housing starts as the goal over a 10-year period, or 2.6 million a year.

Energy consumption is a major national concern. Wood-frame construction, adequately insulated, is ideally suited for national energy conservation goals.

## Total Housing Starts

(Includes Mobile Homes)



SOURCES: 1975 Resources Planning Act Assessment  
U.S. Department of Commerce

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## Wilderness: The Restrictions

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### ACTIVITIES PERMITTED IN A WILDERNESS AREA

Hiking\*  
 Mountain climbing\*  
 Fishing\*  
 Hunting\*  
 Backpacking\*  
 Cross-country skiing\*  
 Canoeing\*  
 Swimming\*

### ACTIVITIES NOT PERMITTED OR RESTRICTED IN A WILDERNESS AREA

Human-made structures, even toilets  
 Campers  
 Motorcycles  
 Powerboats  
 Ski lifts  
 Wildlife management—restricted  
 Forest management—restricted  
 Watershed management—restricted  
 Control of forest disease, insects  
 and fire is severely limited\*\*

\* All these activities are permitted and available on multiple-use public lands. In many instances, recreationists enjoying such activities as cross-country skiing and backpacking prefer multiple-use areas because logging roads afford more accessibility.

\*\* Wilderness areas are especially susceptible to fire, insect and disease attacks.



Mr. EWART. For this purpose, they will be available from the National Forest Products Association.

I would further comment that we in the forest products industry do support what Mr. Scott just said. We favor maximum involvement in the process for wilderness and for timber production.

It is my feeling that the consumers of this country have never seen the full impact on them caused by excessive land withdrawal. When and if the national wilderness preservation system exceeds the RPA goals, the consumer must know what it is doing to him and his offspring in the future as it relates to their ability to acquire shelter.

We favor a maximum public involvement by not only the consuming public, but all other users of the national forests and certainly organized labor.

Mr. McCOMB. I have heard a great deal of concern today and before this concerning economic hardship. I assume that this is not the first time the Forest Service has heard that expressed.

I would not be surprised if there are limits for hardship cases, but I am curious whether that is the rule or the exception.

Mr. RESLER. I think it depends a little bit on how long it takes us to reach some kind of reasonable conclusion on the blue or the yellow. Our objective will be to try to complete that first cut within a year's time.

If we can do that, then we think we can minimize those impacts and keep within a tolerable level. We may have to make substantial changes in the allocation of resources—mainly money and manpower—to try to strengthen some of the areas where that impact will be the greatest, but we do not want to cause impact in any localized area if there is any way we can avoid it.

*If it carries on for an extended period of time—for example like fiscal year 1979, before we can get some decisions made through this process because of appeals, litigation or otherwise—if we cannot come to some kind of conclusion, then you will see some serious impact and will get worse over the years.*

I think it is to all of our advantage to do what we can to expedite this process, make the first cut so that we can make some decision on land allocation. These decisions—in spite of all of the data we can put together—are going to finally be political decisions.

What we want to do is display those options so we can reach some consensus, hopefully, on these important land allocation decisions. Believe it or not, we would like to get on with the business of managing the national forests like we know how to manage the national forests.

We would like to avoid any further dissipation of our efforts in unproductive efforts. We will do the best we can. We want to focus our efforts, minimize the impacts, get the decisions made.

If the process bogs down beyond that, I think you will see some decisions you do not like in the Halls of Congress.

Mr. EWING. One of the things that bothers me—and I need your reaction—is that when there is a proposal for land withdrawal the first thing I have to say is, what can I find against it?

I have to start looking at those things because I feel that there is a never-ending desire for that. I am sure, from your standpoint, that you say, "Everytime they put in a road, they are going to log another area." I am sure they have the same reactions we do on either side.

That is one of the reasons I was trying to pursue, the other day, where are we going with these various goals. I think you want to know

where we are going on timber goals as well as we need to know what your ultimate goals are on wilderness preservation, and whatever else might be backing off the timber supply because I represent timber.

If I were a miner, I would be asking the same kind of questions of you people. I think if we knew those a little better, knew we were getting there, two things would happen. Let's go from the wilderness standpoint.

We said 30 million acres for a figure. I will not debate which was the right figure as we begin to arrive at 28, 29 million acres.

If I were proposing wilderness, I would become selective—which ones really qualify? By the same token, we should do this on the timber issue.

This is not an accusation, but these kinds of things bother me. Most of the areas I know quite well in western Oregon that have been selected generally for wilderness have pretty high timber values. There may be differences of opinion.

I am saying, most.

I use wilderness. A lot of people who know me know I do. The kind of things that I think are excellent timber-using areas are Mount Thielsen. It bothers me that we are selecting those high timber value areas, and we get all those selected that come by natural attrition.

I think it is worthwhile that we sit down and talk about some of these things. Where are we going? How are we going to do these things?

Mr. FONTAINE. I would like to speak about the concern expressed today about the Forest Service and-use decisions. I am concerned about that, too.

I do not think it has been the intent of the wilderness advocates to delay these decisions. I think, in the past, we have felt there are a lot of areas that should be considered for wilderness evaluation really have not been given a fair shake.

We feel these wilderness values have not been given the same consideration as some of the other resource values.

As a result, I think it is only human reaction, when a person feels his ideas are not being given a fair chance, to feel cheated. I think that is what results in the appeals and litigation we are talking about.

It seems to me, from a personal point of view, that the RARE II process may give use a chance to see those wilderness values are given a fair consideration. I think, as a result, if we are to go through this in a fair process—and, I think, in a timely way, too—you will probably see fewer appeals and less litigation because people will feel that they have been given their day in court, even though they may have lost in some cases. They had a chance.

In some cases in the past, I think it has not been that way.

Mr. KUEHNE. I would offer one piece of advice.

As you go around the country talking to people and as you instruct the Forest Service people, I hope you can ask them to try to do their best to convince the people who are wilderness advocates that they are really sincere about giving all of those wilderness areas.

People are concerned about a fair evaluation, whether it is real or not. I think you will all agree with me.

The wilderness advocates feel there is press against wilderness in many areas of the forest. If they feel they are being given a fair chance, I think that all of us would be more willing to cooperate in the process and see that we do arrive at a timely decision.



Mr. O'DONNELL. I am Jim O'Donnell from Spokane. I am an alternate to this roundtable.

Zane made his presentation earlier. We talked about the needs there. When he came to the wildlife, he talked about the perceived needs of wildlife by the public.

I recently attended two workshops, one in Yakima and one in Spokane. There was no explanation of the criteria given out, no name put on the sheet that was turned back in. Therefore, the Forest Service has nameless criteria sheets, and they are basing their needs on what people think certain wildlife, as an example, need.

As Mr. Hampton put it, it is an emotional thing rather than a biological thing. I hope the Forest Service consults with professionals in that field as well as with the other agencies who manage these resources.

If they do not, I am afraid the emotion—as Mr. Davis explained at the meeting yesterday on the House side—of loons, grizzly bear, and wolf are going to unscientifically denote wilderness areas where they are not needed.

Dr. CUTLER. I do not think there is any danger of that. They have over 200 scientists involved in this team exercise. I do not know exactly what you are talking about with respect to the panther and grizzly bear.

We know that most animals respond to the diversity of habitat, so we will not go down a primrose path on that.

Mr. McCOMB. I would like to talk a little bit on this idea of a goal.

I agree with what you have in mind about how much timber we need to produce in the United States, knowing that is a very desirable thing. Without knowing much about the timber industry, it seems that is something you could put a number on, a range of numbers, pretty readily.

I am not sure an acreage goal for wilderness is a desirable thing to have. I do not think anyone in the room would think we have had an adequate wilderness system of 30 million acres, or 30 million acres of timber.

I think one of the things we can move toward, by identifying those tradeoffs, is the thing Mr. Scott has outlined as having the best of both worlds, no matter what size that wilderness system is. Thirty million acres might be too much and unduly infringe on real demands for timber, but 50 million acres might not be too much if it did not do that and did not adversely impact other needs.

Dr. CUTLER. I think we could spend the next endless hours in endless argument.

Let me say, in recessing this meeting, that I think this has been a very fruitful discussion. I know I have profited from it. I am sure the Forest Service has. I think the Senators learned a great deal from it. We learned from them.

I am going to propose that the Department of Agriculture sponsor a get-together of everyone who is here today, plus the other interests identified as being interested and not being here, in our departmental conference room every 2 or 3 months during the next year or so, so we can keep in touch with one another, keep fine-tuning this process, I hope to our mutual satisfaction.

On behalf of the committee, if I may, and on behalf of the Department of Agriculture, I thank you all for coming.

[Whereupon, at 4:47 p.m., the hearing was adjourned.]

# APPENDIX

## ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
FEDERAL BUILDING MISSOULA, MONTANA 59807

8260

December 20, 1977



Attached for your information is a copy of "RARE II Wilderness Attribute Rating System: A User's Manual." This manual, recently developed by a team of Forest Service and university specialists, describes the system we will be using as one of several parts of the RARE II process of evaluating roadless areas for possible addition to the National Wilderness Preservation System. Other evaluations are being made of the resource and economic tradeoffs and the social impacts, of possible wilderness classification of RARE II areas; results of these studies will form the basis for final selections of areas.

Results of our application of the Wilderness Attribute Rating System can be reviewed in Forest Service offices after mid-February 1978. We will solicit a critique of these ratings during the public review period on the Draft EIS next summer.

Sincerely,

JAMES E. REID

Director  
Planning, Programming and Budgeting

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RARE II WILDERNESS ATTRIBUTE RATING SYSTEMA USER'S MANUAL

Developed by the Wilderness Attribute Rating  
System Task Force, November-December 1977

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Perry Brown, Colorado State University  
Dick Buscher, U.S. Forest Service  
Bev Driver, U.S. Forest Service  
Dick Gale, University of Oregon  
John Hendee, U.S. Forest Service  
Burt Litton, U.S. Forest Service, University of California  
Bob Muth, University of Washington  
Dick Shafer, U.S. Forest Service  
Randy Washburne, Washington State University  
Paul Weingart, U.S. Forest Service  
Pete Wingle, U.S. Forest Service

RARE II Wilderness Attribute Rating System

## Users' Manual

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## RARE II WILDERNESS ATTRIBUTE RATING SYSTEM

## EXECUTIVE SUMMARY

This report describes a Wilderness Attribute Rating System designed for application to the 1,920 roadless areas inventoried in the RARE II process. The system rates on a seven point scale the four requisite wilderness attributes described in the Wilderness Act. These four requisite attributes are: natural integrity, apparent naturalness, outstanding opportunities for solitude, and primitive recreation. In addition, the system provides for rating four supplemental wilderness attributes: outstanding ecological, geological, scenic, and historical features. They are supplementary because their presence is permissible, but not required by the Wilderness Act. The system also provides for ratings of adjusted natural integrity and adjusted apparent naturalness-- ratings that reflect improvement in the natural integrity and apparent naturalness scores if boundaries of the area were adjusted, where possible, to remove serious intrusions.

Each of the wilderness attribute ratings is based on evaluations of pertinent component data. For example, natural integrity ratings are based on impacts of human activity in each area; solitude ratings are based on components such as presence of vegetative and topographic screening, size of area; and so forth. The underlying theory is that compiling as much objective and descriptive data on components of all the wilderness attributes will facilitate consistent ratings of the wilderness attributes by both resource professionals and the public. Professionals are urged to involve the public in applying the system.

The suggested application of the Wilderness Attribute Rating System requires: 1) component evaluations and overall ratings for wilderness attributes, 2) computer processing of wilderness attribute ratings, including a composite rating, to identify the most highly rated roadless areas in terms of wilderness attributes.

## RARE II - WILDERNESS ATTRIBUTE RATING SYSTEM

## A User's Manual

Background

In the first Roadless Area Review and Evaluation (RARE I), a wilderness quality index was developed based on ratings of scenic value, isolation potential, and variety of available recreational experiences. This wilderness quality index (WQI) was severely criticized for its conceptual and methodological weakness and inconsistent application. However, the W.Q.I. did emerge in RARE I as a major variable used to select "new wilderness study areas".

Because of numerous criticisms of RARE I, use of the wilderness quality index was discontinued for RARE II. However, the need for some means to evaluate the relative wilderness characteristics of the 1,920 inventoried roadless areas was pointed out by reviewers of the proposed RARE II procedures. Thus, on November 8, 1977, a task force was convened to consider the need for, and feasibility of, constructing an improved system for evaluating the relative wilderness characteristics of the roadless areas identified in RARE II.



## Improving on the Old Wilderness Quality Index

In developing the concepts and methodology for a rating system to replace that used in RARE I, the task force began by considering criticisms of the RARE I quality index so as to avoid repeating unacceptable approaches. Shortcomings of the RARE I Wilderness Quality Index included: <sup>1/</sup>

1. The Index did not emphasize wilderness attributes specifically mentioned in the Wilderness Act, but focused on other factors based on public interest or Forest Service perceptions of quality. The quality criteria were arbitrary and their validity as indicators of wilderness values was not clearly established.

2. The quality index forms were filled out by one individual with no independent judgments by others to see if each evaluation was reliable.

3. More than one attribute was included in a single index factor, such as "spaciousness" and "opportunities for unconfined recreation." Some factors such as "size" were measured twice because it was a factor in more than one variable.

4. Several index items were scored inconsistently with each other, with the result that these evaluations tended to cancel each other out. For example, size was double counted in the evaluation process, but the affects of size were somewhat offset by the division of contiguous roadless

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<sup>1/</sup> Milton, W. J. 1973.

A Critique of the Methodology of the Forest Service Roadless Area Inventory Impact Study. Unpublished MS Thesis, University of Montana, 49 pp.

Burke, James and Robert Twiss. 1976.

Quantitative Method in the Wilderness: The Selection of Wilderness Areas by the U.S. Forest Service. Design Method and Theories 10(1): 50-61

Gale, Richard. 1973.

Critique of the RARE I Final Environmental Impact Statement. This 300+ page critique was submitted by the Pac. NW Chapter of the Sierra Club. Dr. Gale, Associate Professor of Sociology, University of Oregon, authored pages 26-50, critiquing the quality index.

as along administrative boundaries and the treatment of these areas discrete units.

5. Scaled items were inconsistent in that different items often had different maximum and minimum ratings (e.g., some started at 0 and others 1), the rationale for these differences were not specified, and mid-points were often not defined or were defined differently.

6. There was arbitrary weighting of component variables in the index.

#### Developing a New Wilderness Attribute Rating System

The issues of validity and reliability, which the RARE I quality index lacked, were viewed as the keys to an improved wilderness rating system.

Validity is the extent to which a rating instrument (e.g., a scale) actually reflects what it is purported to measure. In RARE I, wilderness quality was defined as a weighted product of scenery, recreational opportunity and isolation potential. The rationale for using these, rather than some other criteria, was not clear or logical, and thus the validity of the index was severely criticized. More clearly defined and acceptable criteria are needed for an improved system.

Reliability is the degree to which ratings or judgments by independent coders are consistently similar. Reliability can be facilitated by providing coders with training and explanations of procedures, clear definitions of data or features to be evaluated and how it is to be done (e.g., what is a "high" vs. "moderate" level of impact), and by inter-coder checking to see if different coders are rating the same features in the same way. A new wilderness rating system must have a much higher level of reliability than the RARE I index, both to be more helpful to decision-makers and to gain in-service and public acceptance.

To improve validity, the new rating system does not purport to measure wilderness quality because that is such a subjective concept that can vary from one person to another. Instead, the new system is defined as a Wilderness Attribute Rating System and confines itself to criteria specifically mentioned in the Wilderness Act. To improve reliability, the Wilderness Attribute Rating System emphasizes systematic procedures and the use of as much objective or descriptive data about each area as possible to guide evaluations.

The Wilderness Attribute Rating System calls for ratings of the degree to which each roadless area possesses certain attributes required or mentioned by the Wilderness Act. These wilderness attributes are:

1. Natural Integrity
2. Apparent Naturalness
3. Outstanding Opportunities for Solitude
4. Opportunities for Primitive Recreation
5. Supplementary Attributes which the Act says Wilderness may contain, including outstanding (a) ecological, (b) geological, (c) scenic and (d) cultural features.

The first four are requisite attributes because they are specifically required by the Wilderness Act, while the supplemental attributes are permissible, but not required by the Act. Thus, while the new rating system doesn't purport to measure wilderness quality, it does rate

veral requisite and supplementary attributes that are thought by many people to reflect wilderness quality.

The underlying theory used to develop the ratings is the compilation of pertinent component data and descriptions of conditions in individual address areas to guide ratings of each attribute. A seven category scale ranging from (1) very low, to (4) moderate, to (7) very high is provided for each attribute based on evaluations of specifically defined components. The rating system deliberately seeks to avoid any reference to terms such as wilderness quality, suitability, qualifying characteristics or any other phrases with decision implications. The system seeks only to produce area ratings for the 4 requisite wilderness attributes and 4 supplementary attributes so it can be displayed for use by decision makers--just as inventory data for other resources such as timber or forage might be compiled and displayed.



Figure 1 - Wilderness Attributes and their Components

<u>Wilderness Attributes</u>	<u>Components on Which Ratings are Based</u>
1. Natural Integrity	Fourteen possible physical developments or human-caused impacts (e.g., roads, railroad rights-of-way, reservoirs, grazing, air pollution, etc.), scaled as to their presence, effect on natural integrity, size of area impacted, potential separability from rest of area, duration of impact if uncorrected, feasibility of correcting.
2. Apparent Naturalness	Uses the same components as natural integrity, but the ratings differ.
3. Outstand Opportunity for Solitude	Size of area, topographic screening, vegetative screening, distance from perimeter to core, human intrusions, scaled as to their degree of impact on opportunity for solitude
4. Primitive Recreation Opportunities	Size of area, topographic screening, vegetative screening, distance from perimeter to core, diversity, challenge, absence of facilities, scaled as to their degree of impact on primitive recreation.
5. Supplementary Attributes	
a) Ecological	Presence and abundance of endangered or threatened plants and animals or other special ecological features
b) Geological	Presence and abundance of special geological features
c) Scenic	Ratings based on Visual Management System
d) Cultural Features	Presence of any "cultural-historical features"

## Technical Review and Revision of the Attribute Rating System

The basic conceptual framework and method for the Wilderness Attribute Rating System was developed in a one-week session in Washington, D.C. in mid-November. During a second week-long session in early December in Portland, Oregon, the framework was expanded, components for evaluating each attribute were further defined and scaling and coding procedures developed. The proposed system was then submitted to a diverse group of resource managers, researchers, university professors, and environmentalists for technical review and criticism.<sup>2/</sup> Draft copies of the system were mailed to reviewers, their comments solicited by telephone, and the rating system revised according to their suggestions.

The third week in December, nearly 40 National Forest personnel representing every region of the country met in Denver to be trained in the use of the Attribute Rating System and to test it on their selected areas. The system underwent a fourth revision at this point, based on suggestions and comments by these individuals. The enclosed final version was then released to the field for application to the 1,920 inventoried areas, following regional training sessions by the Denver participants.

<sup>2/</sup> Reviewers included: Mr. Don Aldrich, Montana Wildlife Federation, Missoula, Mt; Dr. Keith Argow, Dept. of Forestry, VPI; Dr. Wendell Beardsley, USFS, Missoula, MT; Dr. Bill Burch, School of Forestry and Environmental Studies, Yale University; Dr. Monte Christiansen, Dept. of Parks and Recreation, Penn State University; Dr. Roger N. Clark, USFS, Seattle, Wash.; Professor Roger W. Clark, School of Forestry and Environmental Studies, Yale University; Dr. Gary Elsner, USFS, Berkeley, Calif.; Dr. Jess Grove, Dept. of Recreation and Parks, Clemson University; Dr. Marvin Hoover, retired USFS, Fort Collins, Colo.; Dr. Bob Lucas, USFS, Missoula, MT; Mr. Chuck McConnell, USFS, Denver, Colo.; Mrs. Doris Milner, former President of Montana Wilderness Association, Hamilton, MT; and Dr. Jack Wolfe, USFS, Atlanta, Georgia.

## Important Considerations For Application

The acceptance and usefulness of the Wilderness Attribute Rating System will depend on: (1) the strength of its conceptual and methodological framework, the validity of the attributes selected for rating and the components on which these ratings are based; (2) systematic, conscientious and reliable application. Weakness in either area will be fatal. The first area is dealt with through the technical review and progressive development of 4 revisions of the system to its current state by a diverse task force. The second concern rests on the systematic nature of the rating system and training of personnel who will use the system to provide reliability. Several steps to insure reliability have been taken.

First, the procedure is designed to enhance reliability by making attribute ratings based upon objective or descriptive component data. These components are explicit and the individual points on the scales are accompanied by sentence descriptions that should make the ratings fairly reliable. While some of the guidelines call for "best guess" estimates, there is a consistent set of response points for the ratings and all the rating scales are the same for every evaluator.

A major step to insure reliability will be the training sessions for all personnel who will use the system. Individuals will be carefully instructed in all phases of the process. Definitions of the attributes and the manner in which data are to be scaled will be outlined. Coders will also be encouraged to pilot test the system before full application begins.

A final reliability check will be in the eventual review of all the component data and attribute ratings by the public during the summer of 1978. If the component evaluations and the attribute ratings are biased in some systematic way, public review should detect it. Citizens will be provided the full details of using the Wilderness Attribute Rating System and will be encouraged to use it.

Another problem with which raters must cope is maintaining an appropriate level of sensitivity to certain nuances of the attributes. For example, the attributes of apparent naturalness, opportunity for solitude, and primitive recreation call for raters to take a perspective more akin to that of users than of managers. To help do this, we encourage raters to ask the assistance of users with whom they are acquainted as a sort of 'perception check' on their own judgments.

Throughout the system, raters are asked to scale the relative occurrence, degree, significance or importance of many components prior to making an overall rating of the related wilderness attribute. Where all the attribute scales range from 1 to 7, the component scales on which they are based vary in scale length from 1 to 3 to 1 to 7. The rationale for this variation in the component scales needs to be understood.



The number of items appearing in each component scale reflects the level to which we assumed raters could make reliable and consistent distinctions. Where inadequate data exists or judgments must necessarily be crude, there is little point in forcing responses into a 7-point scale. Rather, a 3-point scale (e.g., high-medium-low) probably suffices; moreover, it probably results in a more reliable level of rating. However, if more precise data is available and can be translated into a large number of meaningful scale descriptors, scale lengths of 5 or 7 points are used. The basic trade-off here is between having standardized scale lengths to avoid confusion (such as if all component scales were 7 points like the attribute scales) compared to varying the length of the component scales to fit the precision with which the data can be evaluated. The component scales have varying lengths to fit the nature of the data because this approach was judged to improve the overall reliability of the system.

Where a roadless area falls in more than one forest or region, each unit shall make a rating and those units shall work together and develop one composite rating that will be used. Forest/Regional coordinators will be responsible to decide which unit will be responsible for the individual area report.

REQUISITE ATTRIBUTE 1, NATURAL INTEGRITY AND  
REQUISITE ATTRIBUTE 2, APPARENT NATURALNESS

In the words of the Wilderness Act, wilderness is "an area...retaining its primeval character...generally appears...affected primarily by the forces of nature."

Thus, the first two requisite wilderness attributes are "natural integrity" and "apparent naturalness." Each roadless area will be rated according to, (1) the degree to which it retains its primeval natural integrity in a pure ecological sense, and (2) whether it appears natural to most people.

Natural integrity is defined as the extent to which long-term ecological processes are intact and operating. All areas have sustained some level of impact from human activity (global-wide pollution, micro-climatic changes, etc.). The intent here is not to establish some unrealistic rigid notion of purity but to rate the extent to which human influences have altered natural processes away from conditions one might expect had those impacts not occurred. This is not an "either-or" situation; the issue is the degree to which each roadless area reflects varying levels of environmental modification. Stated another way, each roadless area is rated as to the degree it possesses the Requisite Wilderness Attributes of Natural Integrity and Apparent Naturalness. This rating will be based on evaluation of several components of naturalness such as presence of vegetative manipulation, impacts of facilities, and so forth as explained in the following.

Worksheet 1 provides for description and evaluations of selected components of the requisite wilderness attributes of natural integrity and apparent naturalness. These components include all the man-caused influence which may have impacted the primeval natural integrity of a roadless area. Worksheet 1 provides (1) descriptions of possible impacts, (2) which impacts are present or absent, (3) evaluation of the effects on natural processes, (4) how large an area is impacted, (5) potential for separating the impacted portion from the rest of the area, (6) duration of the impact if left uncorrected and (7) feasibility of correcting the impact. Finally, the worksheet calls for evaluation of (8) the overall influence of these component impacts on the natural integrity of the area and (9) the apparent naturalness of the area.

A 7-category scale ranging from "none" to "extreme" is used to rate the impact of the components on the requisite wilderness attributes of natural integrity and apparent naturalness. Those areas with the highest numerical rating are the most natural, since they are the least impacted.

In addition, corrected ratings of natural integrity and apparent naturalness are called for each area, redefined as if some or all of the impacted portions of the area were removed. This corrected rating reflects the potential improvement in an area's natural integrity and apparent naturalness rating through adjustment in boundaries to remove intrusions.

Apparent naturalness is closely related to Requisite Attribute 1, but where that measure is primarily a matter of estimating the magnitude (the measurable extent) of an impact, Requisite Attribute 2 focuses on the importance of those impacts to most visitors.

There is the admitted problem here that managers are usually poor judges of how users or the general public perceives things. There is also the problem that it is unlikely there is such a thing as a "typical" person.

"Apparent Naturalness" is a function of knowledge which varies greatly among individuals. Nevertheless, raters should attempt to take the perspective of a non-resource professional in making these judgments. Raters should cross-check themselves on these ratings and, in some cases, may wish to solicit the views of citizens who could help provide the needed perspective.

Apparentness may include impacts which are seen, heard, or smelled. It also should be derived on the assumption that visitors are close enough to at least be potentially aware of it (in other words, the impact isn't hid away where no one will ever see it).

Remember: While we are asking whether or not an impact is apparent, this Attribute is rated on the basis of perceived or apparent naturalness. Thus, if an impact(s) is judged to be highly apparent, the Attribute is rated downward in apparent naturalness.



## Definitions of Impacts

Column 1 lists the major categories of impacts to be described. It represents a condensed list, which will facilitate comparison of all areas. As needed, more can be added in an "OTHER" category; however, excessive additions should be avoided.

1. Physical Developments. This includes all constructed facilities or ground modifications, such as:

- a. Road and Railroad. Include, and describe, all routes whether abandoned or not. Include all constructed routes where earth-work and/or surfacing and drainage structures are involved (unimproved roads - see item 12).
- b. Utility Rights-of-Way. Include all energy (electric, gas, oil, slurry, etc.), telephone, water, aquaduct and other linear transmission facilities and developed rights-of-way; or which include routes that have been cleared, graded, or both which either are apparent or require periodic maintenance which will perpetuate this apparentness.
- c. Reservoirs. Self-explanatory. Include constructed range stock ponds.
- d. Watershed Management. Water fluctuation devices, weirs, water level fluctuation of rivers or reservoirs, diversions, monitoring devices, etc.
- e. Special Recreation Facilities. Include developed site facilities, ski trails and facilities, lodges, their utility systems, etc.

- f. Other Fixed Site Facilities. Include airports, sawmill sites, helispots, industrial facilities, electronic sites, snow survey stations, bridges, lookout towers, cabins, facilities developed on private lands, and other non-linear facilities.
- g. Fences. Both maintained and abandoned.
- h. Constructed Trails. Include all that have resulted in any vegetative cover or soil changes. Do not include game trails.
- i. Other. Add as needed to subdivide one or more of the above categories or to add new impacts, but attempt to include additions in the above categories when possible (an example might be disposal of wastes or chemicals).

2. Mineral Developments. Include all activities associated with surface or subsurface developments or extraction. Include vegetative, water, and ground impacts, as well as off-site impacts (i.e., tree clearing, acid poisoning of water, acid kill of vegetation or soil pollution, spoil piles, excavations, etc.).

3. Recreation. Include effects of use and management (i.e., trampling or soil compaction or erosion in developed or undeveloped campsites, impacts on soil and vegetation from ORV use, soil loss from hiking, climbing or horse use on or off trails, pollution of water, damage to trees, etc.).

4. Grazing. Include effects of past and current grazing by domestic livestock or pack and saddle stock. (Past soil losses, even though land has revegetated, vegetative changes, active erosion, water pollution, stock driveway problems, hillside terracing by grazing livestock, site deterioration, browsing of vegetation that has long-term effects, etc.).

5. Wildlife Management. Effects on area through management of wildlife, (i.e., over-browsing as a result of predator control; impacts caused by wildlife as a direct result of State season setting, kill restrictions, etc.; effects on non-game or endangered species as a result of management.

6. Vegetative Manipulation. Include purposeful or unintentional changes caused by other than natural factors. Include tree plantations and other purposeful plantings or seedings, timber cutting, wildlife habitat improvement, timber stand improvement, furrowing, use of herbicides, fertilization, prescribed burning, unnatural vegetative changes that have occurred as a result of past management practices. Areas for which an Environmental Analysis Report is approved by the Chief for salvage operations will be included if approval is given prior to January 23, 1978.

7. Insect or Disease Control. Identify actions which caused situation to deviate from what would have occurred in a natural condition, and assess what the present impact is of those past practices, whether transitory or long-term.

8. Elimination of Native Plants or Animals or Non-Indigenous Plants or Animals. Include presence of exotic weed species introduced by livestock or its feed, introduced fish and animal species, effects of major plant or animal diseases which have affected naturalness. Do not include those species absent because of natural successional change or those introduced by natural means.

9. Fire History. The extent to which vegetative change (species, age structure, successional stage) has occurred since the introduction of fire control. Areas of low normal fire incidence may not deviate to as great a degree as areas where natural fires were frequent.

10. Air Pollution Effects. Most areas are affected to some degree by intensity, frequency, type and extent of air pollution. (Sources of air pollution are usually outside the roadless area, but impacts of air pollution may be present in the area).'

11. Water Pollution. The public often perceives a lack of water pollution in roadless areas, even though technical information indicates that it does exist. Indicate the extent, frequency, type and distribution of the pollution caused by human use, industry, leaching from mined areas, etc.

12. Unimproved Roads. Tracks, ruts, jeep trails, etc., that were created by repeated traverse of the same route.

13. Occupancies. Habitations, cemeteries, etc.

14. Other.



## Definition of Evaluative Criteria and Rating Scales

The criteria for appraising the natural integrity attribute are shown in Columns 2-8 of Worksheet 1. Each will be explained separately as well as how the rating scales should be used.

Column 2: Presence: This column documents whether each of the impacts listed in Column 1 is present or absent on the study area regardless of the extent of the impact and its location. If there might be a small impact but the evaluator really is not sure, the scale alternative "Do Not Know" should be checked. However, the evaluator should check with technical experts or persons familiar with the area before an "Absent" or "Do Not Know" answer is marked. Once the "Absent" or "Do Not Know" box is checked in Column 1 for any impact, the evaluator is through with that impact. If the "Present" box is checked, the location of the impact is to be described on the supplemental pages of the worksheet.

Column 3: Effect of Impact on Natural Processes: This column will record the evaluator's perception of the overall influence of each impact (if it was not eliminated in Column 2) on the natural processes of the roadless area. Each impact should be rated in terms of its influence on the natural processes of the impacted area only, and not in terms of the influence on the entire study area. For example, a 500-acre clearcut which drastically impacts within a 200,000 study area would be rated in terms of the impact on the natural processes of only that 500-acre tract; its impact is not to be generalized throughout the entire area. Where there are closely spaced impacts, the intervening areas may also be affected. Questions to be considered in making this rating include: has the impact accelerated or decelerated the rate of natural succession; has the plant species composition

been altered; has the impact altered the animal life of the area; has water or air quality been affected; has it caused soil erosion or compaction; and other questions relevant to natural processes. Using all this information in combination, evaluators should select that response (or scale) alternative in Column 3 which, in their professional judgment, best describes the situation. Is the present effect of the impact on natural process "None", "Low", "Medium", "High", or "Extreme"? Raters should use the categories supplied below. When a situation does not clearly fit the specified categories, raters should use their best professional judgment and clearly explain the basis for their response on a supplementary page for Worksheet 1. When making this rating, it is important that no attention be given to the items that will be considered in Columns 4 through 8. Each of these other evaluations (Columns 4 through 8) will be made separately as a part of the attribute rating system. THIS PROCEDURE MUST BE FOLLOWED WHEN ANY COMPONENT OF ANY ATTRIBUTE IS BEING RATED ON WORKSHEETS 1, 2, 3, or 4. In sum, the current influence on the natural processes of the impacted area should be rated, and that only. A written explanation documenting the bases for the rating should be recorded on the appropriate space on a supplementary page for Worksheet 1.

Effect of Impact on Natural Processes (Column 3)

- |         |   |
|---------|---|
| None    | - Although impact is present, affects on natural process are either non-existent or so minimal as to be insignificant in any ecological sense |
| Low     | - Impact is present and measurable but only minor significance. Processes continue to operate largely uninterrupted                           |
| Medium  | - Impact has some significant affect, with natural processes disturbed to some extent   |
| High    | - Impacts are significant with natural processes interrupted to a significant degree  |
| Extreme | - Impacts are very significant, natural processes either completely disrupted or at least substantially so.                                   |

Column 4: Area on Which Natural Integrity is Impacted: This column records by decile group the percentage this impacted acreage represents of the total roadless area. In making this evaluation, remember that this percentage is to be determined only in terms of the impact on the natural integrity of the area and in terms of the area actually impacted in that manner. Rate the impacted area according to the following categories:

- Nil - Less than 1 percent of area affected
- 1 - 1-10 percent of the area
- 2 - 11-20 percent of the area
- 3 - 21-30 percent of the area
- 4 - 31-40 percent of the area
- 5 - 41-50 percent of the area
- 6 - 51-60 percent of the area
- 7 - 61-70 percent of the area
- 8 - 71-80 percent of the area
- 9 - 81-90 percent of the area
- 10 - 91-100 percent of the area

Column 5: Separability of Impacted Area from Whole Area: This column designates (yes or no) whether the impacted area could be physically separated from the roadless area and have the area still remain a viable candidate area as defined in the inventory instructions. Special attention, therefore, needs to be given to the location and significance of each impact within the study area. Impacted areas in the center will be more difficult to separate than those on the periphery. Linear-type impacts (e.g., old roads) would be more difficult to separate than a concentrated impact, such as an old logging sale. Each impact will be considered separately and then a composite-overall significance rating will be made on Row A for all impacts taken together. For each rating, a written explanation must be provided on Page 2 of the supplementary worksheet pages to document the bases for each decision. If the "yes" box is checked for Column 5 on Row A of the worksheet to indicate overall separability, a single map showing the location and extent of the impacts and the non-excluded area should be stapled to Worksheet 1. In order to apply this concept of separability, careful judgment must be used to avoid an attempt at gerrymandering all such impacts out of the area. It is emphasized that location and significance must be the determinants.

Column 6: Duration of Impact, if Uncorrected: In this column, evaluators will record their judgment of the time period over which the impact will last if no corrective actions are taken. Use the time period categories given in Column 6. Write an explanation for each rating in the space provided on the Worksheet 1 supplementary pages.

Column 7: Feasibility of Correcting: In this column, professional judgment will be used to rate the feasibility of correcting all but minimal levels of the impact through management actions or natural processes. The key issue here is whether or not the natural ecological processes have been restored. For example, a naturally-reclaimed roadbed might still show evidence of cut-and-fill activity, but the natural processes originally disturbed by the action could have been recovered. This rating will be influenced by considerations of: costs, time and technology. All relevant factors, in combination, should be used when making the rating. Use the rating scale and descriptors provided below. Write an explanation on the supplementary page for Worksheet 1 for a rating that does not follow the category descriptors supplied below:

Feasibility of Correcting (Column 7)

None	Impacts are virtually irreversible, given any reasonable constraint of time, money or technology
A little	Impacts correctable only with concerted application of time, money or technology. Chance of successful correction is low.
Moderate	Impacts correctable with moderate investment of time, money or technology. Chance of successful correction is good with appropriate investment.
High	Impacts correctable with only limited investment of either time, money or technology. <i>Chance of correction very good.</i>
Very high	Impacts easily correctable, even with no investment. Chance of correction excellent.



Column 8: Overall Influence on Natural Integrity: This is a summary column in which all of the information considered in Columns 2-7 are combined for one rating for each impact. One rating will be made for Physical Developments that summarized Column 2-7 ratings for elements a-i. The exception is that the rating made in Column 5 is ignored. These Column 8 ratings should be made separately for each impact as they influence the natural integrity of the entire roadless area. Use the rating categories and descriptors below as guides. Explain a different basis for any rating on the supplementary pages of the Worksheet.

Influence on Natural Integrity (Column 8)

- |           |  |
|-----------|--|
| None      | - Effects on natural processes, none or low only. Generally less than 15 percent of area impacted. Duration of impact usually less than 5 years with high or very high feasibility for correction. |
| Very low  | - Effects on natural processes low. Generally less than 15 percent of area impacted. Duration of impact usually less than 5 years but may be up to 10 years, with high feasibility of correcting.  |
| Low       | - Effects on natural processes, low or medium. Generally less than 25 percent of area impacted. Duration of impact usually 5-10 years with high or moderate feasibility of correcting.             |
| Moderate  | - Effects on natural processes medium. Generally between 25 and 50 percent of area impacted. Duration of impact between 5 and 10 years, with moderate feasibility of correcting.                   |
| High      | - Effects on natural processes medium to high. Generally over half the area impacted. Duration of impact over 10 years, with moderate to a little feasibility of correcting.                       |
| Very high | - Effects on natural processes high. Between 50 and 75 percent of the area impacted. Duration of impact usually 10 years or more, with feasibility of correcting only a little or none.            |
| Extreme   | - Effects on natural processes high to extreme. Often 75 percent of area impacted. Duration of impact in excess of 10 years, with little or no feasibility of correcting.                          |

After the Column 8 ratings are made, a composite-overall rating will be made on Row A for the entire area. Use the ratings and descriptors shown below for the overall rating of Natural Integrity; if another basis for a rating is used, provide an explanation on the Worksheet. If, and only if, a "Yes" appears on Row A for Column 5, an additional Column 8 rating will be made. That rating, which appears in Row B, rates the overall influence of all impacts on the natural integrity of the area that remains after all separable impacted areas have been removed from consideration. These separated impacted areas will not be considered in this rating. This final rating for the remaining area should be explained at the bottom of Page 2 of the worksheet.

Overall Natural Integrity (Row A/B)

- 1 = All impact ratings are extreme, very high, or high
- 2 = All impact ratings are very high or high, none are extreme
- 3 = All impact ratings are high or moderate
- 4 = Most impact ratings moderate, with no more than one rated either low or high
- 5 = All impact ratings low or moderate
- 6 = All impact ratings low or very low, none are none
- 7 = All impact ratings low, very low, or none

Column 9: Overall Influence on Apparent Naturalness: The second requisite attribute, Apparent Naturalness (Column 9), provides a measure of the degree to which the impacts documented in Attribute 1, Natural Integrity, are apparent to most visitors. For example, even though the entire roadless area has been affected by fire exclusion (resulting in successional changes, etc.), it is likely that few visitors would be aware of this impact. On the other hand, a spoil bank might be highly apparent.

To rate Apparent Naturalness, it is necessary that the evaluator take the perspective of an "average" visitor in terms of technical ecological knowledge. Each of the 14 impacts should be rated according to how apparent they would be to most visitors. Rate only the apparentness to visitors to the impacted area, not to visitors who never come close to the impacted area.

After the apparentness ratings have been made for each impact, make an overall rating for how apparently natural the entire roadless area is to most visitors use Column 9, Row A. Use the overall rating scale and descriptors provided below. Provide a brief explanation of this rating on the supplementary pages of Worksheet 1. If there is a "yes" in Column 5, Row A, provide an overall apparent naturalness rating for the redefined area (roadless area minus impacted areas) in Column 9, Row B. Write a brief explanation of this rating on the supplementary pages of Worksheet 1. If there is a "No" in Column 5, Row A, go on to Attribute 3.

## Apparent Naturalness (Row A/B)

- 1 = Roadless area is obviously impacted in many sections, with the impacts readily apparent to virtually all visitors, regardless of knowledge.
- 2 = Roadless area contains impacts apparent to all but a few. Disruption is apparent in sight, sounds, or smells.
- 3 = Roadless area apparently unnatural to most people, but evidence of unnaturalness usually restricted to one of the senses.
- 4 = Roadless area is viewed as natural by many visitors, but unnatural impacts apparent to many others nevertheless. Apparentness usually only in terms of either sight, sound, or smell.
- 5 = Roadless area apparently natural to most visitors but there are some impacts (sight, sound, or smell) apparent to some visitors.
- 6 = Roadless area apparently natural to most visitors, only limited clues of unnaturalness.
- 7 = Most visitors find roadless area apparently natural. Evidence of unnaturalness either absent or apparent only to the most knowledgeable.



Summary of Instructions for Worksheet 1

Basically, the tasks of the evaluator are:

1. Complete the descriptive information about the area at the top of the pages of Worksheet 1.
2. Rate each impact in Column 1 according to the Column 2 criterion.
3. For each impact checked "Present" in Column 2, either write in the required information and/or check the most appropriate box under Columns 3-8. Specify the location of each impact on the supplemental pages for Worksheet 1.
4. Forget about Column 9 until all ratings for the Natural Integrity Attribute have been made.
5. Explain and document in writing (on the supplemental sheets provided) the bases of the ratings made in Columns 3, 5, 6, 7 and 8 for each impact listed.
6. Make composite-overall rating for Columns 5 and 8 on Row A.
7. If response to Column 5 on Row A is "Yes," make rating for Column 8 on Row B.
8. Explain and document in writing (on Page 2 of the Worksheet) the bases of the ratings made for Column 5 (if "Yes," only) and for Column 8. Do the same for Column 8 on Row B if relevant and prepare map required.
9. Make ratings and explanations for Requisite Attribute 2 as instructed in preceding section.
10. Check to see that all necessary ratings or information were provided.
11. Transfer the necessary ratings from Worksheet 1 to Worksheet 4. This would include the rating for overall natural integrity (Column 8, Row A), natural integrity of the adjusted area (Column 8, Row B), overall apparent naturalness (Column 9, Row A), and apparent naturalness of the adjusted area (Column 9, Row B).
12. Make photocopies of all data pages for office files.
13. Staple all information relevant to a particular area together.



EXPLANATIONS OF RATINGS MADE FOR SPECIFIC IMPACTS

Name of Area \_\_\_\_\_  
Evaluators \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Impact: \_\_\_\_\_

Col. 2 - Location

Col. 3

Col. 5

Col. 6

Col. 7

Col. 8

Col. 9

Impact: \_\_\_\_\_

Col. 2 - Location

Col. 3

Col. 5

Col. 6

Col. 7

Col. 8

Col. 9

NAME OF AREA \_\_\_\_\_  
EVALUATORS \_\_\_\_\_

EXPLANATION OF OVERALL RATINGS

\_\_\_\_\_ For Entire Area \_\_\_\_\_

For Col. 5 Rating

\_\_\_\_\_ For Col. 8 Rating \_\_\_\_\_

For Col. 8 Rating

\_\_\_\_\_ For Col. 9 Rating \_\_\_\_\_

For Col. 9 Rating

\_\_\_\_\_ For Redefined Area \_\_\_\_\_

For Col. 8 Rating

\_\_\_\_\_ For Col. 9 Rating \_\_\_\_\_

For Col. 9 Rating



## REQUISITE ATTRIBUTE 3: OUTSTANDING OPPORTUNITIES

FOR SOLITUDE <sup>1/</sup>

The Wilderness Act states that a wilderness "...has outstanding opportunities for solitude..." Elsewhere in the Act are other references to solitude as an important attribute of wilderness. Several studies of wilderness users further indicates the importance of solitude. Thus, opportunity for solitude is a requisite attribute of wilderness.

Solitude is defined as being isolated from the sights, sounds, and presence of others and from the developments and evidence of man. Solitude is a psychological state that varies from one individual to another - what is a crowd to one person may be solitude to another. However, the issue is not one of defining the relative human density levels of each area; that can be changed by management. Instead, the rating system focuses on those intrinsic features of the roadless areas that offer users, outstanding opportunities for solitude--size of the area, presence of vegetation, topographic screening, and so forth.

Features such as trails, trail heads, numbers of campsites and their distribution are not included. Such features can affect opportunities for solitude but, like human density, their impact on solitude is a function of management (e.g., by future closing or opening trails or campsites, controlling use, etc.). Instead, the components for evaluating the requisite

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<sup>1/</sup> The specific wording of the Wilderness Act calls for "...outstanding opportunities for solitude or a primitive and unconfined type of recreation." We consider this to represent two distinct, yet related, attributes of the wilderness resource. In some areas, both attributes may be readily available while in others solitude is difficult to find but primitive recreation opportunities are abundant. The interpretation is that the attributes are not a matter of "either-or", but the relative degree to which each is present.

wilderness attribute "outstanding opportunity for solitude," as called for in Worksheet 2, are: size, presence of topographic screening, vegetative screening, distance from the perimeter of the area to its core, and degree of permanent off-site intrusions. Based on evaluations of the impact of these components, an overall seven-category rating is assigned to each area's potential to provide "outstanding opportunities for solitude." The seven rating categories range from "none" to "outstanding."

#### Definitions of Components and Rating Scales

Worksheet 2 shall be used to rate Requisite Attribute 3, Outstanding Opportunities for Solitude. It will also be used to rate Requisite Attribute 4, the Opportunity for Primitive Recreation. We will return to Attribute 4 shortly.

In Worksheet 2, the components are listed down the left-hand column. Each row represents one component for either Solitude or Primitive Recreation, with the exception of the first four criteria (size, topographic screening, vegetative screening and distance from perimeter to core) which are rated for both solitude and primitive recreation.

The components and their associated rating scales are described below. To use the rating scales, circle the appropriate response alternative that most accurately describes the component being rated. Ignore those spaces on Worksheet 2 that have been blocked out.

After all the criteria have been rated for the Solitude Attribute, make an overall rating of the entire roadless area on the 7-point scale at the bottom of page 1 on Worksheet 2. IMPORTANT: If your overall rating is inconsistent with the ratings for the individual components, provide an explanation of the basis for your rating. For example, if you feel an area has "outstanding" opportunity for solitude and most of the component ratings are "moderate" or "low" ratings, explain your reasoning.

There are several components of the solitude attribute, including topographic screening, vegetative screening, distance from perimeter to core, and permanent off-site intrusions perceived from area.

1. Size: Size of a roadless area when considered by itself is an inadequate measure of potential for solitude or primitive recreation. However, in combination with the other criteria, it is an important component of an area's overall potential. Moreover, with all else equal, a large area has more potential for solitude than a small one.

Small Rare II areas, such as those frequently found in the east, may be discriminated against; i.e., they may be rated as having low potential for solitude if the same categories for size classes were used across all Regions to evaluate an area's potential for solitude. Therefore, each Region will establish its own size class categories for this component. This will be done by analyzing the acreage values of each of the Rare II areas and present Wilderness areas in each Region and then segregating the data into quartile ranges.

Size is measured as the gross acreage of the roadless area. The gross acreage of a roadless area contiguous to an existing Wilderness, Primitive Area, or Inventoried Roadless Area, is the total of the roadless area plus the established area.

		<u>Acres: R-1</u>
(Upper Quartile)	- High potential	0 - 9,999
(Upper Middle Quartile)	- Moderate potential	10,000 - 29,999
(Lower Middle Quartile)	- Low potential	30,000 - 79,999
(Lower Quartile)	- Very low potential	80,000 +

Topographic Screening: This component represents the extent to which topographic screening offers opportunities for solitude. The assumption is that diverse relative relief in the roadless area enhances opportunities for solitude by increasing opportunities for screening (by reducing extent of vision). However, in some cases excessively steep slopes can act to concentrate use in a few areas (travel corridors, lake shores). Inter-party visibility in such conditions could be very high. It is rated according to the following:

High	Roadless area contains a diversity of highly dissected topography that easily screens people from one another within short distances
Moderate	Diversity of topography offers screening potential in at least half the area, may be limited or lacking in remainder.
Little	Rolling-type terrain, limited diversity of topography offers limited screening potential.
Minimal/None	Flat terrain, virtually no relief for screening, or, topographic variation is so great that visitors are concentrated into small areas where inter-party visibility would be high.



3. Vegetative Screening: This component represents the collective vegetative cover that offers opportunities for screening of parties from one another. In areas where vegetative cover is heavy, the sights of other people is reduced.

However, in some cases, excessively dense vegetation can act to concentrate use in those areas where openings for travel and camping are possible. Inter-party visibility in such conditions could be very high.

Dense	Most of the roadless area has dense vegetation, which screens people from one another, even within a quarter mile, but there is still sufficient opening to permit travel and camping without undue concentration.
Moderate	Vegetative screening is good in at least half the area, screening people easily within a quarter mile of one another; limited or no screening available in remainder.
Little	Less than a quarter of the roadless area offers vegetative screening; or, vegetation is so dense that it concentrates use in a limited area, increasing inter-party visibility.
Minimum/None	Open, virtually no vegetative screening throughout the area, or, vegetative screening is so great that visitors are concentrated into small areas where inter-party visibility would be high.

4. Distance from Perimeter to Area Core: The distance from the perimeter of the roadless area to the core or approximate geographic center is a measure of the potential for solitude and for escape from the evidence of man. Measurement should be from the approximate center of the area to the nearest point along the boundary. If the roadless area is contiguous to an existing Wilderness or Primitive Area or to another roadless area, the entire roadless tract should be used to compute this rating. Use the following scale:

Low potential	Less than 1 mile from core to perimeter.
Moderate potential	From 1 to 3 miles from core to perimeter.
High potential	From 3 to 5 miles from core to perimeter.
Outstanding potential	In excess of 5 miles from core to perimeter.

5. Permanent Off-site Intrusions: This includes off-site evidence of man's activities likely to be seen, heard or smelled by visitors from within an area such as transportation corridors. Aircraft, timber harvest operations, industrial development, mines, lights from a nearby city at night, reservoirs, ski areas, etc.

Minimal/None	Generally no off-site intrusions perceptible to visitors from within the entire area.
Some	Off-site intrusions perceptible, but relatively distant and generally not permanent. Some off-site intrusions are close-by, but generally not permanent.
Many	Off-site intrusions are close-by and permanent.

6. Overall Rating of Solitude Opportunity: To determine the overall rating of solitude opportunity, examine the ratings given each component. Use the categories and descriptors outlined below. REMEMBER: If your overall rating for solitude departs from the guidelines presented below, use the second page of Worksheet 2 to explain your rating.

No opportunity	All five components rated in bottom category.
Very low opportunity	Three components rated in bottom category, remainder rated only one scale position better.
Low opportunity	Two components rated in bottom category, none rated in top category.
Moderate opportunity	No components rated in bottom category, none in top category.
High opportunity	Two components in top category, none in bottom category.
Very high opportunity	Three components in top category, remainder no more than one scale position away.
Outstanding opportunity	All five components rated in top category.

## REQUISITE ATTRIBUTE 4: PRIMITIVE RECREATION OPPORTUNITY

The Wilderness Act states that wilderness "...has outstanding opportunities for...a primitive and unconfined type of recreation." Further definition is given to this kind of recreation by other wording in the Act prohibiting permanent improvements, motorized activity, human habitation, and other implied restrictions to protect the wilderness character of the area. Many of the recreation activities that take place in wilderness also occur in other areas, but wilderness conditions greatly enhance some of these activities for many users. Some of the characteristic primitive-type wilderness recreation activities are hiking, camping, fishing, hunting, cross-country skiing, winter camping and nature study.

Primitive recreation opportunity can be defined in terms of the types of experiences it makes possible for users. Not all of the specific experiences need to be present at one time to have primitive recreation.

The working definition which guides rating this attribute is:

Primitive recreation is that which provides opportunities for isolation from the evidence of man, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills. It is characterized by meeting nature on its own terms, without comfort and convenience facilities.

Ratings of the Requisite Wilderness Attribute 4, primitive recreation opportunity, is based on some of the same components as used for solitude, plus some others. The components also used to rate solitude are size of area, topographic screening, vegetative screening and distance from perimeter to core. The added components to rate primitive recreation are diversity of opportunity, challenge (hazardous things like dangerous animals and cliffs), and absence of man-made facilities.



As with the other wilderness attributes, evaluations of the components are used to derive an overall 7 category rating for primitive recreation opportunity ranging from "none" to "outstanding."

#### Definition of Evaluative Criteria and Rating Scales

Procedures for rating this attribute follow those used for Requisite Attribute 3, Outstanding Opportunities for Solitude. REMEMBER: the first 4 criteria used for the Solitude Attribute will be used again here, as indicated on the right-hand side of Worksheet 2. The criteria and rating scales are:

1-4. Size, topographic screening, vegetative screening, and distance from perimeter to core: Use the same ratings and descriptors as those presented in the discussion of Attribute 3.

5. Diversity: Diversity of vegetation, fish and wildlife, terrain, lakes and streams, and climate improves opportunities for a larger variety of primitive recreation activities. The response scale for this component is:

Very Diverse	Roadless area has much diversity in nearly all above categories.
Moderate	Roadless area has only some diversity in above categories, or no diversity in some but much in others.
Little Diversity	Roadless area mostly homogeneous in nearly all of above categories.

6. Challenge: The challenge component is measured as the number and extent of challenging features such as dangerous animals, climatic disturbance,

avalanche potential, terrain features (cliffs, quicksand, sink holes), fast-moving water, glaciers, and a lack of dominant visual features on which to orient oneself. What constitutes a hazard is a function of knowledge and experience, but the definition rests on a common sense definition of those features that are commonly considered hazardous by most visitors. This is important in order to indicate the degree to which an area has potential to produce opportunities for challenge and risk-taking as part of the primitive recreational experience. The response scale for this component is:

Rare	Features commonly considered hazardous seldom encountered or only a few scattered parts of the roadless area.
Few	Features commonly considered hazardous encountered in area.
Many	Features commonly considered hazardous encountered throughout area.

4. Absence of Recreation Facilities: The absence of facilities component denotes a freedom from man's developments which is important in affording opportunities to develop and test outdoor skills and to be free of the evidence of man. It is measured by the quantity and distribution of facilities like trails, bridges, and camp facilities. The response scale for this component is:

Highly developed	High standard trails, bridges over all streams, even small ones, highly developed campsites.
Moderate development	Trails, at least some built to high standards, bridges over most streams, campsites moderately developed (fire rings, fireplaces, toilets, tables, water, pumps, etc.).

Limited development	Mostly low standard trails, few bridges over large streams, very simple, limited campsite facilities (fire rings, some pit toilets, etc.).
Minimal/None	Either no or very few recreation facilities in area; low standard trails, logs over-streams, etc.

8. Overall Rating of Primitive Recreation Opportunity: To determine the overall rating of primitive recreation opportunity examine the ratings given each component. (Rating values for primitive recreation increase from left to right). Use the categories and descriptors outlined below. REMEMBER: If your overall rating for primitive recreation departs from the guidelines presented below, use the second page of Worksheet 2 to explain your rating.

No opportunity	All seven components rated in bottom category.
Very low opportunity	Five components rated in bottom category, remainder rated only one scale position better.
Low opportunity	Three components rated in bottom category, none rated in top category.
Moderate opportunity	No component rated in bottom category, none in top category.
High opportunity	Three components rated in top category, none in bottom category.
Very high opportunity	Five components rated in top category, remainder rated only one scale position away.
Outstanding opportunity	All seven criteria rated in top category.

When the ratings for Attributes 3 and 4 have been completed, code the overall ratings for Solitude and Primitive Recreation onto Worksheet 4.

WORKSHEET 2: FOR RATING OPPORTUNITIES FOR SOLITUDE AND PRIMITIVE RECREATION

Name of Area: \_\_\_\_\_ Code: \_\_\_\_\_ Region: \_\_\_\_\_ Forest: \_\_\_\_\_ Acreage: \_\_\_\_\_ Evaluators: \_\_\_\_\_ Date: \_\_\_\_\_

Components of Attribute	Opportunity for Solitude						Opportunity for Primitive Recreation				
	Very Low Potential	Low Potential	Moderate Potential	High Potential			Very Low Potential	Low Potential	Moderate Potential	High Potential	
Size (acres)	Minimal/None	Little	Moderate	High			Minimal/None	Little	Moderate	High	
Topographic Screening	Minimal/None	Little	Moderate	Dense			Minimal/None	Little	Moderate	Dense	
Distance From Perimeter to Core	Low	Moderate	High	Out-standing			Low	Moderate	High	Out-standing	
Permanent, off-site intrusions	Many		Some		None						
Diversity of opportunity							Little Diversity		Moderate		Very Diverse
Challenge							Rare		Few		Many
Absence of Facilities							Highly developed	Moderate develop'mt	Limited develop'mt	Minimal/None	

Overall Rating	Opportunity for Solitude								Opportunity for Primitive Recreation						
	None	Very Low	Low	Moderate	High	Very High	Out-standing		None	Very Low	Low	Moderate	High	Very High	Out-standing
	1	2	3	4	5	6	7		1	2	3	4	5	6	7



Name of Area: \_\_\_\_\_

Evaluators: \_\_\_\_\_

<u>Attribute</u>	<u>Components of Attribute</u>	<u>Explanation</u>
Solitude	Topographical Screening	_____ _____ _____
	Vegetative Screening	_____ _____ _____
	Distance from Perimeter to Core	_____ _____ _____
Permanent Off-Site Intrusions		_____ _____ _____
	Overall Rating	_____ _____ _____ _____ _____

Name of Area: \_\_\_\_\_

Evaluators: \_\_\_\_\_

<u>Attribute</u>	<u>Components of Attribute</u>	<u>Explanation</u>
Primitive Recreation	Topographic Screening	_____ _____ _____
	Vegetative Screening	_____ _____ _____
	Distance from Perimeter to Area Core	_____ _____ _____
	Diversity	_____ _____ _____
	Challenge	_____ _____ _____
	Absence of Facilities	_____ _____ _____
	Overall Rating	_____ _____

SUPPLEMENTARY WILDERNESS ATTRIBUTES-  
INSTRUCTIONS FOR RATINGS

Section 2(c)(4) of the Wilderness Act indicates that an area ". . . may also contain ecological, geological, or other features of scientific, educational, scenic or historical value." This seems to imply that such features, though not necessary, do enhance wilderness quality if they exist to any "extraordinary" degree. Consequently, a supplemental attribute rating (1-5) is provided based on components of ecological, geological, scenic and cultural features, i.e. their presence and estimated abundance or importance. The supplementary attribute rating may be useful in helping make marginal decisions. The identification of supplementary features with significant values in a roadless area may also lead to a recommendation for the specific site to be included in the Special Interest Areas system, (scenic areas, botanical areas, historical areas, etc.), rather than being included in the Wilderness system. At the very least, the supplementary attribute rating will alert decisionmakers to the existence of "special" ecological, geological, scenic or cultural values within a roadless area.

## A. Ecological

Analysis of outstanding ecological features includes identification of Endangered or Threatened plant and animal species present as well as other special features which may be present. Such features often will have important scientific and educational values associated with them.

For Endangered or Threatened species, the location, extent and population condition should be described briefly on Worksheet 3.

Other special ecological features present in the area could include unusual plant or animal communities associated with unique land features such as swamps, lava flows, caves, etc. They might include unusual relationships between two more species that may not occur under other circumstances. Special ecological conditions might also include communities or species that occur well outside the range normal to that community or species.

Each of these special features should be described by nature, location, and extent in the roadless area; the descriptor found at the bottom of the worksheet should then be selected that best describes the occurrence of the feature outside the roadless area. If more than one such feature exists, the rating of the feature that is most unique or rare would be the rating for the area.

#### B. Geological

Special geological features are landforms that, in the judgment of a qualified person, represent significant examples of geologic processes such as natural bridges, mass movement areas, caves, lava flows, etc. Such features should be described in nature, location, and extent in the area on Worksheet 3. The statement should then be chosen that best describes the occurrence of the feature within the physiographic province in which it lies. If more than one such feature exists, the feature that is most rare or unique will determine the rating for the area.

#### C. Scenic Values

Analysis of scenic values will follow the system process for determining variety classes as prescribed in The Visual Management System<sup>1/</sup> (VMS) and should be performed by individuals trained in VMS.

<sup>1/</sup>USDA Forest Service, 1974. National Forest Landscape Management, Vol. 2: Chapter 1, The Visual Management System. Agriculture Handbook 462, 47pp.



For the purpose of the RARE II study, only Variety Classes will be determined. The percentage distribution of variety classes A, B, and C will determine the rating for the roadless area.

This analysis is intended to produce one rating based on the following assumptions:

1. Scenic quality for the roadless area is related to the degree of variety within the given character type.

2. Foreground and middleground views (up to 5 miles) of the scenic resource outside the roadless area may affect evaluation of the rating for the roadless area.

Steps in rating scenic values are as follows:

1. Define and describe the character type of which the roadless area is a part to establish the frame of reference from which variety classes are determined.

2. Preferably, regions should develop a variety class determination chart for each character type and/or subtype in which roadless areas are found. If character type and variety class determination charts have not been developed and described for the areas being evaluated, the variety class chart in exhibit 1 should be used to map variety classes.

3. Map variety classes within the roadless area and determine rough percentages for variety classes A, B, and C.

4. Identify and map areas of distinctive variety within 5 miles of the roadless area which can be seen from within the roadless area to alert the decisionmaker to the existence of these outstanding values.

5. Considering the percentage distribution for variety class composition within the roadless area, use the following chart to determine

the rating which most closely approximates the conditions for the area.

SCENIC VALUES

<u>Rating</u>	<u>% Distribution of Variety Classes</u>
Insignificant	A 10%
	B 25%
	C 65%
Infrequent	A 10%
	B 40%
	C 50%
Significant	A 25%
	B 50%
	C 25%
Outstanding	A 50%
	B 40%
	C 10%
Unique	A 65%
	B 25%
	C 10%

	Class A Distinctive	Class B Common	Class C Minimal
Landform	High relief for region. Diverse relief, outstanding landform features.	Relief moderately common within region and only moderately diverse in roadless area.	Little variety, no dominant features, no diversity.
Rock Form	Features stand out in landform. Unusual or outstanding avalanche chutes, talus slopes, outcrops, etc., in size, shape & location.	Features obvious but do not stand out. Common but not outstanding avalanche chutes, talus slopes, boulders and rock outcrops.	Small to nonexistent features. No avalanche chutes, talus slopes, boulders and rock outcrops.
Vegetation	High degree of pattern in vegetation. Vegetative diversity significant throughout area, unusual plants	Continuous vegetation, limited diversity. Most species common in region.	Highly uniform vegetative cover. Species very common.
Water Forms Lakes (include intermittent)	Unique lake features compared to region. Diversity of shape, irregular shorelines. Aggregate acreage of lakes more important than size of any individual lake.	Lake features fairly common in region. Some shoreline irregularity.	No evidence of water-related features.
Water Forms Streams	Numerous or unusual flow characteristics.	Common flow characteristics with region.	Little or no flow apparent, year-round or intermittent.

#### D. Cultural Features

Cultural resources comprise all evidence of historic and pre-historic human use of an area. Many of these resources--campsites, petroglyphs, pictographs, vision questing sites, and trails, as well as historic sites exemplifying the development of an area such as pioneer homesteads, evidence of early logging or mining activity, and trade or military routes or roads, may require special management consideration. Cultural features will often have educational, scientific, and historical values associated with them.

Indicate existence of any recorded historic sites and briefly describe their nature and location on Worksheet 3. NOTE: There is no rating of significance of these features; their presence and location is all that is recorded.

#### Overall Supplementary Value Rating

On Part II of Worksheet 3, make an overall rating of the supplementary values of the roadless area. Provide an explanation for your rating in the space provided. Use the guidelines below to make your rating:

Insignificant = Area contains only common features; no cultural features or endangered or threatened species present.

Infrequent = Area contains generally fairly common features; cultural features, or endangered or threatened species may be present.

Significant = Area contains one feature of infrequent occurrence in the region; may contain cultural features, or endangered or threatened species.



Outstanding = Area contains two features of infrequent or rare occurrence in the region; may contain cultural features, or endangered or threatened species.

Unique = Area contains at least three features of rare or unique occurrence; may contain cultural features, or endangered or threatened species.

Transfer the overall rating for the supplemental attribute to Worksheet 4.

WORKSHEET 3: FOR RATING SUPPLEMENTARY ATTRIBUTES

Area: \_\_\_\_\_ Code: \_\_\_\_\_ Forest: \_\_\_\_\_ Evaluators: \_\_\_\_\_ Date: \_\_\_\_\_

PART I

Attribute	IBM Card Number	Pre- sence		Overall Rating for Entire Area <sup>1/</sup>					Description of location, significance and extent of attribute in area	
		Present	Absent	Unknown	Insignificant (1)	Infrequent (2)	Significant (3)	Outstanding (4)		Unique (5)
1. E C O L O G I C A L a. Endangered or threatened species of animals or insects										
b. Endangered or threatened species of plants										
c. Special ecological features										
2. Special geological features										
3. Scenic values			X	X						
4. Cultural features										

PART II

	Put X in appropriate box					Explanation
	Unique	Outstanding	Significant	Infrequent	Insignificant	
1. Overall rating for supplementary value	5	4	3	2	1	

<sup>1/</sup> Explanation of rating scale:

Insignificant = Present throughout the physiographic province

Infrequent = Often found in the province

Significant = Infrequently found in the province

Outstanding = Not found elsewhere in the province.

Unique = One of very few known occurrences

## USING THE WILDERNESS ATTRIBUTE DATA

All of the wilderness attribute data worksheets and accompanying data sheets will be retained at the Forest Supervisor's office, but a complete copy of all the sheets for each area (with all sheets clearly labeled) will be sent to the Regional Office. This is important so the information will be available for use by decision makers and inspection by the public. In addition the Wilderness Attribute Rating Summary sheet (worksheet 4) will be filled out for each area to expedite processing of the data.

All of the Attribute ratings and component evaluations for each area will be keypunched directly from the 3 worksheets onto IBM cards and will also be stored on tape. Ten attribute rating scores will be recorded or calculated as follows (A 1 rating is lowest for all scores).

N (1.) Natural Integrity Rating, 1-7: The overall rating of each areas natural integrity based on the evaluations of the up to 14 components that were considered (worksheet 1).

AN (2.) Apparent Naturalness Rating, 1-7: The overall rating of each areas apparent naturalness based on evaluation of the perceptible impact of the same 14 components above (worksheet 1).

Ad N (3.) Adjusted Area Natural Integrity Rating, 1-7: The overall natural integrity if a boundary adjustment removed separable intrusions (worksheet 1).

Ad AN (4.) Adjusted Area, Apparent Naturalness Rating, 1-7: The overall rating of an area's apparent naturalness if a boundary adjustment removed separable intrusions (worksheet 1).

S (5.) Solitude Opportunity Rating, 1-7: The overall rating of an area's opportunity for solitude (worksheet 2).

R (6.) Primitive Recreation Opportunity Rating, 1-7: The overall rating of an area's primitive recreation opportunities (worksheet 2).

CR (7.) Composite Wilderness Attribute Score, 4-28: The overall score reflecting an area's wilderness attributes, sum of natural integrity, apparent naturalness, solitude and primitive recreation attribute ratings (Numbers 1, 2, 5 and 6 above).

ACR (8.) Adjusted Area Wilderness Attribute Score, 4-28: The overall score reflecting an area's wilderness attributes if separable naturalness intrusion were removed by boundary adjustments. Sum of adjusted area natural integrity adjusted area apparent naturalness, solitude and primitive recreation attribute ratings (Numbers 3, 4, 5 and 6 above).

SA (9.) Supplementary Wilderness Attribute Rating, 1-5: The overall rating of an area's supplemental values based on presence of extraordinary ecological, geological, scenic and cultural features. (Worksheet 3) \*Note that this attribute is rated on a 5-point scale.

SV (10.) Scenic Value Rating, 1-5: The rating of an area's scenic values based on a modified application of the visual management system. (worksheet 3) \*Note that the rating uses a 5-point scale.

As soon as wilderness attribute ratings are completed for an area, worksheet 4, the Wilderness Attribute Rating Summary sheet should be filled out to facilitate immediate keypunching of the vital data (rating scores) produced by the system. The other 3 worksheets will also be ADP processed later so all the wilderness attribute and component evaluation data, will be available for subsequent land use planning or wilderness study.

#### Analysis

The summary sheet (worksheet 4) has all the wilderness attribute scores and provides a basis for very general analysis, even before computer processing. Roadless areas on a Forest or in a Region can be hand sorted by Wilderness Attribute scores and so forth. Basically, the worksheet is designed as a computer keypunch form. Once the attribute ratings are in the computer they can be analyzed many different ways in combination with all the RARE II data using computer system 2000.

Following is a suggested way to display the wilderness attribute data for use in decision making:

Printout Set 1: Wilderness Attribute Ratings and Composite Score Comparison: The 10 wilderness attribute ratings, which include the 2 composite wilderness attribute scores, offer a great potential for data analysis. The task force will continue to develop an analysis scheme. At this stage only one suggested kind of printout is offered to array the wilderness attribute rating scores for use in decision making.

Printout Set 1; a sample of which is attached, prints out all wilderness attribute ratings for all roadless areas in a region, or alternatively, all areas within the representativeness types--within ecosystem types, physiographic provinces (landform), accessibility to population, and wildlife representative areas. Regardless of what group of areas are included in the printout, all 10 wilderness attribute ratings are listed for each area, and the composite wilderness attribute score is graphically plotted on the right side of the printout so all the areas printed can be quickly scanned to identify those with the highest or lowest ratings.





WILDERNESS ATTRIBUTE RATING SCORES AND COMPOSITE SCORE DISTRIBUTION

Code	Area	Wilderness Attribute Scores								(9) Supple- mentary Attributes	(10) Scenic Value	Composite (7) Wilderness Attribute Rating								
		(1) Naturalness	(2) Apparent Nat'ness	(3) Adjusted Nat'ness	(4) Adjusted Apparent Nat'ness	(5) Solitude	(6) Primitive Recreation	(7) Composite	(8) Adjusted <sup>2/</sup> Composite			lowest	12	16	20	highest				
		1-7	1-7	1-7	1-7	1-7	1-7	4-28	4-28	1-5	1-4	4	8	12	16	20	24	28		
1. 6070	Mica Mtn.	(Hypothetical Data)																		
2. 6124	Cindy Cr.	-6-	-7-	-7-	-7-	-5-	-6-	-24-	-25-	-2-	-3-									x
3. 6129	Raisin Cr.																			x
4. 8869	Daisy Cr.																			x
		<p>This is a suggested printout to assist decisionmaking. All attribute scores are printed and the composite Wilderness Attribute Score is plotted to graphically display how areas compare.</p> <p>Separate printouts can be ordered for areas grouped by region, ecosystem, landform, wildlife, accessibility, or any combina- tion thereof.</p>																		
		<p><sup>1/</sup> The composite score is the sum of numbers 1, 2, 5, 6.</p> <p><sup>2/</sup> The adjusted composite score is the sum of numbers 3, 4, 5, 6.</p>																		

**FRIDAY, NOVEMBER 18, 1977**

**PART VIII**



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**DEPARTMENT OF  
AGRICULTURE**

**Forest Service**

■

**ROADLESS AREA  
REVIEW AND  
EVALUATION (RARE II)**

**Inventory List**

59688

## NOTICES

[3410-11]

## DEPARTMENT OF AGRICULTURE

## Forest Service

## ROADLESS AREA REVIEW AND EVALUATION (RARE II)

## Inventory List

Notice is hereby given of the inventory of roadless and undeveloped areas within the National Forests and Grasslands. This notice includes information on the background, coordination and methodology for RARE II. It also includes a listing of areas which while not included in the inventory will have implementation of planned activities constrained while their wilderness potential is reevaluated at the same time as the inventoried areas are evaluated.

Information regarding details of any specific listed area may be obtained by making inquiry with the Forest Supervisor of the appropriate National Forest.

## BACKGROUND

Soon after passage of the Wilderness Act in 1964, the Forest Service and others recognized that there were, in addition to primitive areas, National Forest areas that should be considered for inclusion in the National Wilderness Preservation System (NWPS). As a result, a Roadless Area Review and Evaluation (RARE) program was initiated. This was an effort to identify those roadless and undeveloped areas which were the best candidates for inclusion in the Wilderness System. It resulted in inclusion in October of 1975 of 274 wilderness study areas containing 12.3 million acres from an inventory of 1,449 areas containing 54 million acres.

Forest Service policy has been to consider the nonselected roadless areas for wilderness potential again during the land management planning process, usually in conjunction with unit planning. While this has resulted in selecting additional study areas and allocation of some areas to nonwilderness use, the process has been slow. Also, this process proved generally incapable of adequately considering "wilderness needs" (a national issue) in a planning system whose hallmark is making land allocations within a local context. In some cases, administrative appeals and lawsuits have delayed implementation of plans and programs on areas allocated to other than wilderness by unit plans.

The public has grown impatient with this process. This has been one of the probable causes for increasing congressional proposals and enactments for wilderness or wilderness study prior to completion of formal reviews or planning by the Forest Service. The process has not allowed for full consideration of the cumulative effects on availability of nonwilderness services and goods from the National Forests.

There were several weaknesses in the original RARE. Some areas were subdivided and considered as individual

parts rather than as a whole. Criteria for inventory were quite general. As a result, the boundaries for some inventoried roadless areas stopped short of the actual state of roadlessness and some areas were entirely missed. There was latitude for regional interpretation of Service-wide criteria, causing some inconsistency. RARE was designed to deal essentially with the West, with National Forests in the East and the National Grasslands being given less attention.

During recent testimony on H.R. 3454, the Administration indicated its intention to take an overall look at the roadless area situation on the National Forests. The desire is for speedy determination of which areas are needed to help round out a quality National Wilderness Preservation System and which areas should be given no further consideration for wilderness, i.e., be available for a range of nonwilderness uses.

To achieve this aim, the Forest Service has undertaken a new inventory and evaluation of roadless and undeveloped areas in the National Forests and National Grasslands. Because it builds upon and perfects the previous planning effort it is called RARE II. RARE II is an acceleration of the roadless portion of the Forest Service land management planning process. This current review is designed to consider the entire National Forest System, and regional variations will be minimized.

There are several expected results of RARE II. These are: (1) Better input for the continuing land management planning process, (2) data to assist in the 1980 update of the Resources Planning Act assessment and program, and (3) information on which to base recommendations for wilderness proposals. RARE II will provide information on which to base recommendations on which National Forest System areas should be proposed to round out its share of the National Wilderness Preservation System and gain timely release of the remaining roadless areas from further wilderness consideration.

## INTERAGENCY COORDINATION

The 1964 Wilderness Act provided that certain lands under the administration of the Department of Agriculture and certain lands under the administration of the National Park Service and Fish and Wildlife Service in the Department of the Interior should be reviewed as possible units of the National Wilderness Preservation System. The Federal Land Policy and Management Act of 1976 provided that lands under the jurisdiction of the Bureau of Land Management in the Department of the Interior should also be reviewed for possible wilderness designation.

The success of RARE II is dependent to a large measure on close coordination and cooperation between the four Agencies responsible for the administration of the National Wilderness Preservation System. This cooperation has begun.

## METEOROLOGY

The RARE II project is composed of three distinct phases:

## 1. INVENTORY

The goal is to develop a comprehensive inventory, in tabular and map form, of all areas in the National Forest System that meet minimum criteria as wilderness candidates under the Wilderness Act, as manifested by Congress through its actions in adding to the National Wilderness Preservation System. Whether or not any areas should be wilderness was not considered in the inventory phase.

The inventory phase began with an identification and mapping of all roadless and undeveloped areas in the National Forest System by the Forest Service according to specific criteria established by the Forest Service to insure consistency throughout the country. This initial inventory was then made available to the public at 237 workshops across the nation, attended by about 17,000 individuals. The public was encouraged to review the initial inventory and point out mistakes they felt the Service had made in developing the inventory. Opportunity was also given for the public to suggest areas for the inventory that did not meet Forest Service criteria but which the public felt should be considered for wilderness.

This public input was reviewed and the initial inventory was accordingly corrected. Public suggestions for additions that did not meet the Forest Service inventory criteria were also added to the inventory, so long as such inclusions would not: abridge contractual agreements or legal rights; involve areas that had been allocated to nonwilderness uses by completed land management plans on which final environmental statements had been filed; involve areas in which action plans were scheduled for implementation by October 22, 1978; or, be impractical to manage in their natural condition. Suggested additions to the inventory that had been cleared for non-wilderness uses in the land management planning process—through the public involvement and final environmental statement stages—were generally not added to the inventory. The inventory contains 1,920 areas encompassing 65.7 million acres.

This is supplemented by a list of 34 areas that have been through the land management planning process and allocated to nonwilderness use, but which have been identified for additional review. On these, development will be delayed while the additional consideration of wilderness values occurs.

## 2. EVALUATION PROCESS AND CRITERIA

The goal of the evaluation phase is to identify gaps in the existing NWPS; determine the opportunities within inventoried areas which would help fill these gaps; and then analyze the social and economic impacts of possible wilderness designation of these areas.

Although most of the inventoried areas might qualify for wilderness designation,



an evaluation phase is necessary to help determine which of the areas would be most beneficial to help complete a well rounded out National Wilderness Preservation System as well as which should be made available for nonwilderness uses. This phase will provide the information necessary to determine which areas are most needed for what uses.

Because the Wilderness Act, while defining a wilderness, did not establish criteria for the National Wilderness Preservation System, information was gathered at the previously mentioned public workshops on what factors people felt should be considered in evaluating potential additions to the System. These factors fall in two basic categories: factors that would increase the quality of the Wilderness System and factors relating to social and economic impacts of wilderness designation.

The data relating to the first category indicated that ecosystem and landform representation, accessibility and distribution, and the presence of certain wilderness-associated wildlife habitats are important elements of an "ideal" Wilderness System. Other sources, including professional land managers, the academic community, public interest groups, and works of noted wilderness writers seem to substantiate these findings. These four criteria will, therefore, be used to identify the gaps in the existing system and describe the "ideal" system. This will necessitate evaluating the ade-

quacy of the existing NWPS, in cooperation with Agencies in the Department of the Interior in terms of meeting these characteristics of an "ideal" system. All four involved Agencies will then try to determine which seems most capable of providing candidates to fill the identified gaps. For the gaps that the National Forest System seems best suited to fill the RARE II inventoried areas will be analyzed as to socioeconomic impacts of alternative selections.

The next evaluation step will be to measure the potential social and economic impacts that would result from designating the suited RARE II areas as wilderness. The information gathered at the workshops indicated that this is a vital phase of evaluation and particular emphasis should be given factors relating to energy and mineral resources and all renewable natural resources.

The evaluation data gathered will be presented so as to show: (a) The characteristics of the existing NWPS, (b) the gaps in the existing NWPS that National Forest System lands should fill, (c) the characteristics of each of the RARE II inventoried areas in relation to the gaps that occur in the existing NWPS, and (d) the social and economic impacts of wilderness designation of several alternative groupings. This will be presented in a programmatic environmental statement having State-by-State or similarly simplified segments for ease of public analysis.

These data will then be offered for public comment. The public will have the field season of 1978 to check the accuracy of these data and present their recommendations as to which areas should be wilderness and which areas should be devoted to nonwilderness uses. These recommendations will be solicited during a formal public involvement period ending in the fall of 1978.

#### 3. FINDINGS AND RECOMMENDATIONS

The goal of this phase is to set forth one or more recommendations to the Congress and the American people that will help round out a quality National Wilderness Preservation System and allocate other roadless lands for nonwilderness uses.

The findings of RARE II will be covered by a Final Environmental Statement setting forth recommendations and alternatives. The recommendations will identify specific areas and will display both the benefits and costs.

The final recommendations should both enhance and round out a quality NWPS and assure prompt availability of other lands for nonwilderness uses. RARE II will not be able to reach recommendations on all roadless and undeveloped areas, so some may have to be considered further by conventional planning and study methods.

JOHN R. MCCOY, JR.,  
Chief, Forest Service

## FINAL INVENTORY ROADLESS AREA REVIEW AND EVALUATION - II

STATE: AK			
CHUGACH N.F.	AREA CODE	AREA NAME	GROSS ACRES
	1001	RESURRECTION	27700
	1002	KENAI LAKE	23500
	1003	JOHNSON PASS	13500
	1004	W. KENAI MTS.	17200
	1005	PARISHAN FLOD	17000
	1006	COLDEN	10400
	1007	UNAKNIK	10000
	1008	COLUMBIA GLACIER	9350
	1009	PRINCE WILLIAM SOUND 1A	15500
	1010	MONTAGUE IS.	21200
	1011	FIDARO/BRIVINA	42300
	1012	HINCHEBROOK/HARTZ	21100
	1013	COPPER RIVER WILDLANDS	5000
	1014	BERING LAKE	33940
	1015	TOMI CAPE	8400
	1016	RED PEAK	3700
	1017	MILNA BAY	2100
	1018		
TONGASS N.F.			
AREA CODE	AREA NAME	GROSS ACRES	
1001	STIKINE ROLLS AREA	200051	
1002	CANTON ROLLS AREA	91000	
1003	CHITKIN ROLLS AREA	91000	
1004	CHITKIN ROLLS AREA	91000	
STATE: AL			
NF IN ALABAMA			
AREA CODE	AREA NAME	GROSS ACRES	
6043	NEED BRAKE	800	
6044	PERRY MOUNTAIN	3000	
6045	WINDY MOUNTAIN	3160	
6046	BLUE MOUNTAIN	3160	
6047	SHIRONE CREEK	3102	
6048	SIPLEY ADDITION	1004	
6049	THOMPSON CREEK	7774	
6050	ROBERTS CREEK	3100	
6051	ROBERTS CREEK	3100	
6052	MONTGOMERY-BORDEN CREEK	7411	
6053	SHURY FORK	5145	
6054	SABALTOON ADDITION	300	
6055	WIS BALTAPART	600	
6056	WEST ELLIOTS CREEK	600	
6057			

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5048	LAUREL W. SCREE	3700	5041	GRANITE CHIEF	1200
5049	MT. OLIVE	3400	5042	FRIZ	15000
5050	RAM JOURN	33500	5043	DADEWELLES	18500
5048	GRANT LAKE	3500			
5049	MORSE RDN	3700	LASSEN_N.F.		
5050	TIGRA LAKE	4700			
5051	WINDY HILLS AREA	31200	5048	TIMBERG-CRAVER	7500
5052	LOG CABIN ROAD&BAG	15400	5049	LAVA	4800
5053	DEAZER CYN	52500	5048	SAITFIELD	18200
5054	SLABS MTN	52500	5049	PROSPECT	4200
5055	WATZBERG RD	17500	5047	DEWILLER HARDEN	3500
5056	DEEP HILLS	14800	5048	LOST CREEK	4300
5057	DEEP HILLS	14800	5049	LOST CREEK	4300
5058	WHITE MTHS	22000	5040	CINDER BUTTE	16000
5059	BLANCO MTH	17000	5041	BLACK CINDER	1500
5060	SIOCH CREEK	34500	5042	MT. HARKNESS	300
5061	WATERBURY MTH	49000	5043	CHINLETT MTH	9100
5062	MOLDES CANYON	49000	5044	CUM CREEK	9100
5063	ANDREWS MTH	11800	5045	TRAIL LAKE	1200
5064	PAIUTE	136100	5046	HEART LAKE	9900
5065	MOND-CRAZERS	4300	5047	DOL. SPINSE	7800
5066	MT. OLIVE	3700	5048	CHINA CREEK	3100
5067	REGLISTON	87300	5049	BUTT MTH	6000
5068			5050	MILL CREEK	9500
	KLAWATH_N.F.				
5048	CALLAHAN FLON	3000	LOC. CODES_N.F.		
5049	DEIDER	11000			
5050	JOHNDRN	10000	5048	SEMP-FRAZER	320700
5051	JOHNDRN	10000	5049	BOYCHERS	5000
5052	KELSEY	4000	5050	BLACK BUTE	20300
5053	TOM MARTIN	8000	5051	BEAR MOUNTAIN	12000
5054	WILSON	4000	5052	CHALK PEAK	7100
5055	MULE CAMP	200	5053	SILVER-THREE PEAKS	15500
5056	ROULDER	500	5054	SILVER-THREE PEAKS	15500
5057	PONTIQUERE	39100	5055	SILVER-THREE PEAKS	15500
5058	CRAPDS	13000	5056	SILVER-THREE PEAKS	15500
5059	MOON	38500	5057	SILVER-THREE PEAKS	15500
5060	MOON	38500	5058	SILVER-THREE PEAKS	15500
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5063	MOON	38500	5061	SILVER-THREE PEAKS	15500
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5066	MOON	38500	5064	SILVER-THREE PEAKS	15500
5067	MOON	38500	5065	SILVER-THREE PEAKS	15500
5068	MOON	38500	5066	SILVER-THREE PEAKS	15500
5069	MOON	38500	5067	SILVER-THREE PEAKS	15500
5070	MOON	38500	5068	SILVER-THREE PEAKS	15500
5071	MOON	38500	5069	SILVER-THREE PEAKS	15500
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5083	MOON	38500	5081	SILVER-THREE PEAKS	15500
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5196	MOON	38500	5194	SILVER-THREE PEAKS	15500
5197	MOON	38500	5195	SILVER-THREE PEAKS	15500

## NOTICES

5127	DIABLO	18200	5185	BYZALE SWAMP	20500
5128	JUNCAL	18200	5186	916 CANYON	6000
5129	MAZILITA	32800	5187	GRABE MOUNTAIN	18000
5130	DRY CREEK	18600	5188	MT BIDWELL	18000
5131	DRY LAKE	18600			
5132	WONDHOFF	12000	PLUMAS N.F.		
5133	SANMILL-SADLANGE	50500	AREA CODE	AREA NAME	GROSS ACRES
5134	CUYAMA	19000	5199	CHICO CREEK	24000
5135	JOHNSON	19000	5200	BUCKB LANE	19400
5136	YEGUEPITA	8700	5189	BUCKB LANE	19400
5137	QUATRAL	4500	5190	BALO ROCK	3100
5138	MIDWAY CANYON	2400	5191	GRIZZLY PEAK	6700
5139	LOGWOOD	1500	5192	ADAMS PEAK	3300
5140	CHUCK CREEK	4500	5193	WEST YUBA	8000
5141	WHEEL PLANE	4500			
5142	DE LA GUERRA	5700	ROQUE RIVER N.F.		
5143			AREA CODE	AREA NAME	GROSS ACRES
5144			5703	KANGAROO	24922
5145			5724	CONDREY MOUNTAIN	11214
5146					
5147			GROSS ACRES		
5148			10700		
5149			15000		
5150			17100		
5151			18500		
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5337			957000		
5338			962000		
5339			967000		
5340			972000		
5341			977000		
5342			982000		
5343			987000		
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5363			1085000		
5364			1090000		
5365			1095000		
5366			1100000		
5367			1105000		
5368			1110000		
5369			1115000		
5370			1120000		
5371					

5204	JENNIE LAKE	13700	5201	CHINA SPRINGS	1300
5201	KIMBO CANYON	2700	5206	HEAVER BALLY	19200
5202	DENNISON BEAK	4700	5205	CHERRY FLAT	180
5203	MOSES	29000	5206	GRANITE PEAK	3200
5204	BLACK MTN	15200	5207	LAKE ELKANOR	7000
5205	SLATE MTH	13100			
5206	WOODPECKER	64000			
5207	DOMELAND ADDITION	3100			
5208	SINCON	52700			
5209	CANNELL	47300			
5210	CHICO	31700			
5211	LYON RIDGE	5200			
5212	SCODIES	48000			
5213	WOOLSTAFF	44300			
5214	HILL CREEK	20200			
5215	GREENMORN CREEK	29700			
5205	DOMELAND ADDITIONg II	1100			
SIERRA N.F.					
	AREA CODE	AREA NAME	GR088 ACRES		
5207	5267	SAN JOAQUIN	123800		
5209	5198	KINGS RIVER	29700		
5210	5220	FERRISBURG RIDGE	5150		
5211	5241	DEVIL GULCH	30300		
5212	5222	MOUNT RAYMOND	6700		
5213	5223	SHUTEVE	7700		
5214	5226	STANLEY LAKES	118100		
5215	5245	WOODCHUCK	19700		
5205	5228	SYCAMORE SPRINGS	8500		
SHASTA TRINITY V.F.					
	AREA CODE	AREA NAME	GR088 ACRES		
5078	5100	ORLEANS MTN	3100		
5133	5700	WELLS MOUNTAIN	8700		
5151	50	BURNT LAKE FLOW	30		
5210	14700	SACKSOME			
5217	19000	BONANTA KING			
5218	15000	BELL-HUINBY			
5219	13000	EAST CRAGS			
5220	10200	CHANCELULLA			
5221	21500	CHINQUARIN			
5222	21300	COW CREEK			
5223	17300	DEVILA ROCK			
5224	5500	DOG CREEK			
5225	6000	EAST NEEDLE			
5226	6200	EAST FORK			
5227	63100	EAST SIBARD			
5228	25900	LITTLE FRENCH CREEK			
5229	5000	MT. SIND			
5230	9300	KETTLE MOUNTAIN			
5231	35200	MT. SHASTA			
5232	11200	PANTHER			
5233	22500	PATTISON			
5234	5400	PENNEY RIDGE			
5235	6800	SLATE CREEK			
5236	17200	SOUTH FORK			
5237	3300	UNDERWOOD			
5238	39000	WEST SIBARD			
5239	5300	WEST NEEDLE			
5206	6100	SALT GULCH			
5258	500	MURPHY SLADE			
5299	7400	FISHER GULCH			
5300	4200	EARLE			
5800	1900	BAKOVEN RIDGE			
5801	1000	KTOVELEG GAP			
5802	1300	HOB0 GULCH			
SISKIYOU N.F.					
	AREA CODE	AREA NAME	GR088 ACRES		
5101	5101	SISKIYOU	8290		
SIX RIVERS N.F.					
	AREA CODE	AREA NAME	GR088 ACRES		
5079	5079	ORLEANS MTN	65200		
5145	5145	BIG BUTTE-BHINDONE	12400		
5227	5227	COW CREEK	1320		
5237	5237	UNDERWOOD	7300		
5247	5247	KELLY	5500		
5248	5248	MONREY	6900		
5250	5250	NORTH FORK	6100		
5251	5251	SOLTER	14700		
5252	5252	SALT CREEK	8200		
5253	5253	YOLLA BOLLY EXT.	100		
5308	5308	BOARD CAMP	5000		
5309	5309	MT. LABSIC	6400		
5310	5310	PILOT CREEK	6500		
5701	5701	SISKIYOU	72300		
5757	5757	NORTH FORK SHITH	39800		
5708	5708	PACKSADDLE	3400		
5709	5709	RD. KALHIOPRIS ADMIN.	200		
STANTLAUS N.F.					
	AREA CODE	AREA NAME	GR088 ACRES		
5258	5258	MT. REBA	6600		
5256	5256	NORTH MOUNTAIN	7400		
5257	5257	TRUMBULL PEAK	4700		
5258	5258	TUOLOMNE RIVER	16200		
5210	5210	CHERRY LAKE	1800		
5211	5211	BELL MADOW	7400		
5212	5212	SAIER HOUSE	3000		
5213	5213	EAGLE	15900		
5214	5214	OGNE	11300		
5215	5215	NIGHT	3000		

5986	RAYMOND PEAK	17500	2204	CRYSTAL CREEK	81880
5986a	CARBON ICEBERG	166300	2205	KREUTZER-PRINCETON	13300
			2206	ROWLEY	8900
TANOE N.F.			2207	CANYON CREEK	14000
AREA CODE	AREA NAME	GROSS ACRES	2209	COCHETOPA HILL	85880
5172	WEST YUBA	14200	2210	COCHETOPA DOME	7000
5259	HUNGAN CANYON	3500	2212	SANTOOTH MTN	49000
5260	BROUSE LAKE	19300	2215	MINERAL MTN	51400
5261	GRANITE CHIFF	38700	2217	MIDDLE FORK	6880
5262	NORTH FORK AMERICAN	41900	2218	CANNIBAL PLATEAU	31900
5262a	EAST YUBA	17100	2220	CARBON PEAK	27000
5265	N F MIDDLE FORK AMERICAN	11100	2221	CRYSTAL PEAK	5440
5981	HALD MTN	5500	2223	ELK CREEK	3100
			2224	UNCOMPAGRE	39040
TOiyANE N.F.			2225	EL PASO CREEK	3200
AREA CODE	AREA NAME	GROSS ACRES	2226	CINARRON	15000
4656	WILDHORSE	26260	2228	BALDY PEAK	10240
4657	SWEETWATER	59900	2229	BEAVER CREEK	1480
4658	DEVILS GATE	8440	2231	UPPER N FK DALLAS CREEK	1880
4660	LONG	3870	2232	IRON MOUNTAIN	7880
4663	HOOVER EXTENSION	92800	2237	SUNSHINE MESA	1120
4666	LEAVITT LAKE	4660	2238	HILSON MESA	1940
4661	HALD MTN	540	2239	OPHIR NEEDLES	480
4982	DARDENELLES	2480	2240	SAN MIGUEL	9420
4984	TRAGEDY-ELEPHANTS BACK	1280	2241	ROUBIDEAU	19780
4985	RAYMOND PEAK	30350	2242	TABEQUACHE	10240
4986	CARBON ICEBERG	113600	2243	SELAD MESA	26300
4988	MT OLSEN	820	2244	BLACK POINT	10750
			2245	UTE CREEK	20360
			2246	CAMPBELL POINT	11300
			2247	JOHNSON CREEK	10330
STATES CO			2258	CHIPETA	16520
			2259	SNEYA MOUNTAIN	840
GRAND MESA UNCOMPAGRE GUNNISON					
AREA CODE	AREA NAME	GROSS ACRES	MANTI LABEL N.F.		
2180	ELK MOUNTAINS-COLLEGIATE	137900	AREA CODE	AREA NAME	GROSS ACRES
2181	PADRE	123970	4834	ROC CREEK	8210
2182	DRIFT CREEK	1440			
2183	BRINGHOUSE PARK	14000	RIO GRANDE N.F.		
2185	ELECTRIC MTN	8400	AREA CODE	AREA NAME	GROSS ACRES
2186	CLEAR CREEK	8100	2209	COCHETOPA HILL	26210
2189	HIGHTOWER	5000	2210	COCHETOPA DOME	4730
2191	PRIENT MOUNTAIN	102580	2217	MIDDLE FORK	45310
2192	SALT CREEK	10880	2220	CARBON PEAK	87730
2193	BATTLEMENT MESA	36800	2224	STARVATION CREEK	22000
2194	NICK MOUNTAIN	10400	2225	PORPHYRY PEAK	24560
2195	KANNAH CREEK	29450	2226	BANDER DE CRISTO	150000
2196	WEST ELK	208410	2274	SAGUACHE PEAK	11940
2198	BEAVERCANYON	62780	2275	TRACY MOUNTAIN	28780
2199	GOTHIC MTN	4700	2277	SAGUACHE CREEK	13910
2200	WNETATONE MTN	16500	2278	WHEELERWAGON	26910
2201	FLATTOP MTN	23930	2279	BRISTOL HEAD	67940
2202	BOSTON PEAK	50100	2280	DEEP CREEK-DECKER CREEK	120200
2203	HATCHLESS	39400	2281	FOX MOUNTAIN	9130



2282	BENNETT PEAK	48840	3133	RAMAN MOUNTAIN	3132
2283	WILLOW MOUNTAIN	40240	2224	EAST RAMAN A	3130
2284	ROVER SAN JUAN	128360	3324	KEOP CREEK	4882
2285	REVER CREEK	12770	3326	REVER CREEK	4880
2286	RIO GRANDE RESERVOIR	2170	3328	OTIZER CREEK	1872
2287	RUBY LAKE	4990	3351	BRUSH CREEK	972
2288	BEAVER MOUNTAIN	7680	3353	JABOUET	3122
2289	ROUSE MOUNTAIN	6120			
2290	SMITH SPRINGS	12910			
2291	CAUCES BASIN	15640			
ROUTE H.F.					
2292	PLATTE RIVER NE-1	2240			
2293	SUBARLONP DE	2097			
2294	LYONS CREEK IN DC	2288			
2295	DAVIS PEAK DA & D&M	13440			
2296	DAVIS PEAK DA & D&M	100840			
ROOSEVELT H.F. - ADAPAHO					
2297	WALL CREEK	11160			
2298	ANAPHO CREEK DS	79150			
2299	NEVER BUNNER DU	34500			
2300	COOK CREEK	8270			
2301	WILLIAMS FORK AN	7820			
2302	WILLIAMS FORK AN	7820			
2303	EAST RAMAN	4140			
2304	GREEN RIDGE	59970			
2305	GREEN RIDGE	12260			
2306	LITTLE SOUTH	2108			
2307	ADAPAHO	9320			
2308	DOMINICANIS BOWEN	9320			
2309	NEVA FLATTOP	10100			
2310	GRANGER MOUNTAIN	7440			
2311	HILL CANYON	1370			
2312	HILL CANYON	1370			
2313	INDIAN PEAKS-A	3400			
2314	INDIAN PEAKS-B	4340			
2315	INDIAN PEAKS C	6100			
2316	INDIAN PEAKS D	1480			
2317	INDIAN PEAKS E	2500			
2318	JAMES PEAK-N	2500			
2319	INDIAN PEAKS G	220			
2320	STRASBERG CREEK	13370			
2321	INDIAN PEAKS H	1020			
2322	INDIAN PEAKS I	1020			
2323	INDIAN PEAKS J	8900			
2324	MARYLAND CREEK	1720			
2325	MARYLAND CREEK	2920			
2326	JACQUE PEAK	9480			
2327	JACQUE PEAK	31260			
2328	RED PEAK	4300			
2329	JEFFERSON	3500			
2330	JEFFERSON	6870			
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## NOTICES

2243	BADGER CREEK	15008	2148	JAGJUE PEAK	15100
2244	STARVATION CREEK	9800	2148	WYO ELK CREEK	15180
2245	BARBER CREEK	9800	2148	MIDDLE CREEK	8400
2246	BANDRE DE CRISTO	98920	2148	SOUTH FORK PINKEY RIVER	3740
2247	MT. BLANCK	11565	2148	PINEY	12120
2248	TUNNER PEAK	16000	2150	DOCK PEAK	9120
2249	DEBARON PEAK	17320	2151	DEBARON PEAK	9120
2250	DEBARON PEAK	17320	2151	DEBARON PEAK	9120
2251	SPARKSH PEAKS	15100	2151	DEBARON PEAK	9120
2272	PURGATOIRE	14400	2154	RED DIST	4820
2273	CUCHARA	14320	2154	MEKWEATER	8510
2274	WICHITA	12400	2156	COM LAKE	2820
2275	WICHITA	12400	2156	COM LAKE	2820
2339	MAROCARBABLE	8300	2159	BURRO MOUNTAIN	14940
2340	ST. CHARLES PEAK	10865	2164	WHITE RIVER	13855
2341	ARNOLD BULCH	5100	2163	NORTH ELK	24100
2342	WINDY CREEK	3740	2163	WINDY CREEK	5800
2343	PARISH	3740	2164	BUTLER CREEK	65330
2344	PUMA	8320	2164	RAIN ELK	37270
2345	GUMBARREL	6200	2167	CANYON CREEK	37270
2346	SHEPHERD	7240	2168	SHIZZLE CREEK	31720
2347	WINDY CREEK	3740	2168	SHIZZLE CREEK	31720
2354	CHIZOTA	21260	2172	HOLY CROSS	132400
SAN JUAN N.F.					
AREA CODE	AREA NAME	SQUARE ACRES	AREA NAME	SQUARE ACRES	
2280	LIZARD MOUNTAIN	2175	ADAM MOUNTAIN	5720	
2281	BAN MISEL	2175	ADAM MOUNTAIN	5720	
2282	SOUTH SAN JUAN	42320	MADISONVILLE	9100	
2284	TREASURE MTN	12320	RED TABLE MOUNTAIN	16880	
2285	TREASURE MTN	21910	RED TABLE	16880	
2286	MARTINEZ CREEK	3820	PORPHYRY MOUNTAIN	64780	
2287	MARTINEZ CREEK	3820	PORPHYRY MOUNTAIN	64780	
2288	DAVIS MTN	1325	YANCOO MOUNTAIN	2440	
2289	MONK ROCK	2240	ELK MOUNTAIN-COLLESLATE	132400	
2290	SOLDAD BARR	5040	RAGBODS	25100	
2291	WINDY PARK	12000	DRIFT CREEK	3630	
2292	REZONA	14500	DRIFT CREEK	3630	
2293	RUNLETT PARK	4410	SALDY MOUNTAIN	3800	
2294	FLORIDA RIVER	50820	SALDY MOUNTAIN	3800	
2295	HO MOUNTAIN	20910	MORRE PARK	9420	
2296	WINDY CREEK	3740	DICTIONER	27240	
2297	WINDY CREEK	3740	DICTIONER	27240	
2298	WINDY CREEK	3740	DICTIONER	27240	
2302	EAST ANIMAS	19700	CHICAGO STORE MOUNTAIN	4480	
2303	WEST NEEDLE	23550	CHICAGO STORE MOUNTAIN	4480	
2304	WINDY CREEK	3740	DEEP CREEK	11640	
2305	WINDY CREEK	3740	PITCHELL CREEK	5000	
2306	HERMOSA	14900			
2307	SHEEP MOUNTAIN	4150			
2315	RYHAN	9030			
HP IN FLORIDA					
AREA CODE	AREA NAME	SQUARE ACRES	AREA NAME	SQUARE ACRES	
2108	PASCOO PEAK	48860	HUD SWAMP-NEW RIVER	1949	
			SAVANNAH	13600	
			BIG BUM SWAMP		

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4211	KIMS MOUNTAIN	98800	1188	HARMOND CREEK	21100		
4212	JUMPOFF MOUNTAIN	22400	1188	ROLAND POINT	4400		
4217	SQUAN CREEK	10682	1187	NORTH FORK	32100		
4218	GREYLOCK	11870	1188	GRANDMOTHER MTH	39430		
4218	SPRING BASIN	5800	1187	PINCHOT BUTTE	12860		
4502	TAYLOR MOUNTAIN	17480	1150	MOQUITO FLY	20750		
4503	LEHMI RANGE	184250	1151	SIDDEE PEAK	7100		
4551	WHITE CLOUD BOULDER	39700	1188	WONDERFUL PK	5420		
4601	DIAMOND PEAK	89233	1300	HALLARD LARKINS	149120		
CLEARWATER N.F.							
AREA CODE		AREA NAME	GROSS ACRES				
1300		HALLARD LARKINS	138800	1302	MEADON CREEK-UPPER NORTH	6400	
1301		MOODOO	151400	1661	BUCKHORN RIDGE	4550	
1302		MEADON CREEK-UPPER NORTH	47200	1662	SCOTCHMAN PEAKS	20720	
1303		SIWASH	9900	1668	TROUT CREEK	8800	
1304		POT MOUNTAIN	50500				
1305		MOOSE MOUNTAIN	21400	KOOTENAI N.F.			
1306		BIG MORN NEITAB	261200	AREA CODE		AREA NAME	GROSS ACRES
1307		N. LOCMA SLOPE	130200	1661	BUCKHORN RIDGE	39	
1308		WEIR & POAT OFFICE CREEK	27200	1662	SCOTCHMAN PEAKS	508	
1309		WILDERNESS BORDER	9800				
1310		SECTION 18, WILDERNESS RD	500	NEZPERCE N.F.			
1311		LOCMA FACE	47100	AREA CODE		AREA NAME	GROSS ACRES
1312		ELDORADO CREEK	8800	1661	RACKLIFF GEDNEY	53000	
1313		RAMHIDE	5300	1662	MIDDLE FORK FACE	11200	
1808		LOLD CREEK	100	1663	RODDARD CREEK	13600	
1841		RACKLIFF GEDNEY	36000	1848	CLEAR CREEK	20700	
IDAH0 PANHANDLE N.F.							
AREA CODE		AREA NAME	GROSS ACRES	1845	MEADON CREEK	173100	
1121		LITTLE GRASS MTH	4500	1846	MIDDLE BARGANIN	12800	
1122		BLACKTAIL MTH	5180	1847	HALLARD	23300	
1123		UPPER PRIEST LAKE	1480	1848	DIXIE SUMMIT-NUT HILL	20700	
1125		SLKINKS	108810	1849	SILVER CREEK-PILOT MORN	61150	
1126		KOOTENAI PEAK	6700	1850	N FORK SLATE CREEK	14700	
1127		WHITE MTH	9880	1851	LITTLE SLATE CREEK	9200	
1128		MELMORARIN	13670	1852	JOHN DAY	10900	
1129		WHEELER PEAK	7500	1853	BIG CANYON A	16500	
1130		SEE TOP	11210	1854	SLOFTON CR-CORRAL CR	24300	
1131		EAST CATHEDRAL PEAK	22350	1855	SALMON FACE	9300	
1132		NABEE	36930	1857	KELLY MOUNTAIN	3700	
1133		TEPER CR	8280	1921	GORPEL HUMP	335400	
1134		SPY GLASS	4970	1922	RAPID RIVER	28100	
1135		SKITHIAN RIDGE	4010	PAYETTE N.F.			
1136		SPION KOP	31300	AREA CODE		AREA NAME	GROSS ACRES
1137		LOBY CREEK	11800	4002	SNOWBANK	2880	
1138		TROUBLE CR	8100	4051	NEEDLES	91960	
1139		GRANAN COAL	12000	4053	MEADON CREEK	22515	
1140		PONY PEAK	7200	4054	STANWELL PEAK	44837	
1141		MARLE PEAK	8820	4055	LICK CREEK	105771	
1142		STEVENS PEAK	4740	4056	PLACER CREEK	7161	
1143		BIR CREEK	79380	4057	BNITH CREEK	2257	
1144		STORM CREEK	9400	4058	CHIMNEY ROCK	8758	
				4059	CRYSTAL MOUNTAIN	13412	



4440	CAREY CREEK	8556	8403	RAYNOLDS PARR	8280
4461	FRENCH CREEK	127363	8404	TWO TOP	11790
4462	INDIAN CREEK	8406	8405	HEADWATER BUFFALO RIVER	16660
4463	FLAT CREEK	8408	8406	WARR RIVER NORTH	6360
4464	CUDDY MOUNTAIN	85708	8407	WARR RIVER SOUTH	32710
4465	SHEEP BULCH	6046	8408	WARR RIVER EAST	8120
4466	COUNCIL MOUNTAIN	16236	8409	SHAKE RIVER	8830
4921	GOSPEL HUMP	168020	8410	WEST SLOPE TETONS	180
4922	RAPID RIVER	123660	8411	SABER MOUNTAIN	114790
BALCON N.F.					
AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES
4202	CANAS CREEK	16800	8412	HOODY CREEK	9350
4501	NAPOLEAN RIDGE	7710	8413	PALISADES	11280
4502	TAYLOR MOUNTAIN	88108	8414	BALD MOUNTAIN	19460
4503	LENNI RANGE	194700	8415	BEAR CREEK	79200
4504	PANTHER CREEK	98878	8416	POKER PEAK	15600
4505	MCELENY	33625	8417	ITALIAN PEAK	162260
4506	JUREANO	31476	8418	GARFIELD MOUNTAIN	27510
4507	HAYSTACK MOUNTAIN	12300	8419	MOUNT JEFFERSON	17540
4508	RHELAN	16035	8420	LIONHEAD	16860
4509	DEEP CREEK	28170	STATE: IL		
4510	JESSE CREEK	19740			
4511	PERREAU CREEK	9160	SHANNEE N.F.		
4512	AGENCY CREEK	10220	AREA CODE	AREA NAME	GROSS ACRES
4941	BLUE JOINT MOUNTAIN	20000	9088	PANTHER DEN	950
4942	ANDERSON MTN	18340	9089	BURKE BRANCH	7267
4943	WEST BIG HOLE	70560	9100	GARDEN OF THE GODS	4192
4944	GOAT MOUNTAIN	33870	9101	RIPPLE HOLLOW	4278
4945	ITALIAN PEAK	92540	9102	MURRAY BLUFF	4846
4946	ALLAN MOUNTAIN	86670	9103	BURDEN FALLS	3880
BANTOOTH N.F.					
AREA CODE	AREA NAME	GROSS ACRES	STATE: KY		
4061	TEN MILE	22016			
4201	PIONEER MOUNTAINS	67700			
4564	WHITE CLOUD BOULDER	32388	DANIEL BOONE N.F.		
4582	LIME CREEK	16200	AREA CODE	AREA NAME	GROSS ACRES
4583	SOUTH BOISE-YUBA RIVER	167047	8038	TRUHLEROME	16181
4571	FIFTH FORK ROCK CREEK	6926	8160	COVE CREEK CAYE	4300
4572	THIRD FORK ROCK CREEK	12288			
4574	COTTONWOOD	12288			
4576	LOVE CEDAR	7882			
4578	MANOGANY BUTTE	22920	STATE: LA		
4579	THOROBRED	7332			
4582	CACHE PEAK	26801	KIBATCHIE N.F.		
4583	MT. HARRISON	11526	AREA CODE	AREA NAME	GROSS ACRES
4588	SUBLETT	7040	8014	KIBATCHIE HILLS	9120
			8120	CUNNINGHAM BRANCH	2100
TARDNEE N.F.					
AREA CODE	AREA NAME	GROSS ACRES	STATE: MT		
4180	POLE CREEK	2660			
4181	CARIBOU CITY	8360			
4601	DIAMOND PEAK	96400			



1328	FREEZEOUT MOUNTAIN	88100	1420	ELMOSH STUDY	11200
1349	MADISON	151840	1987	OUTRO	15160
1352	ANDERSON MOUNTAIN	10400	1404	STONY XEN	24800
1353	WEST BIG HOLE	139400			
1366	MOAT MOUNTAIN	91800			
1367	FAIRBANKS MOUNTAIN	91800			
1368	GARFIELD MOUNTAIN	32000			
1369	MOUNT JEFFERSON	4800			
BITTERROOT N.P.					
AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES
1001	NORTH BIG HOLE	1800	1488	BEAR-WARNING-SCAPEST-EVAN	538750
1002	BLODGETT CANYON	6400	1500	MILSLION ADDITION 1	360
1003	NORTH FORK LOST HORSE	7800	1503	MILSLION ADDITION 2	360
1004	TRABBERA CREEK	3500	1504	MILSLION ADDITION 3	360
1005	WELLS CREEK	2700	1505	MILSLION ADDITION 4	360
1006	WELLS CREEK	2700	1506	MILSLION ADDITION 5	360
1007	WELLS CREEK	2700	1507	MILSLION ADDITION 6	360
1008	WELLS CREEK	2700	1508	MILSLION ADDITION 7	360
1009	NEEDLE CREEK	1100	1509	LE BEAU	5409
1010	SARRISER	42600	1508	EAST SHORE	5190
1011	MEADON CREEK	12900			
1012	BLUE-JOINT XEN	41400			
FALLKITH N.P.					
AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES
1342	LOST WATER CANYON	10800	1511	NORTH ABBASDIA	140100
1343	RED LODGE CR HELLDARING	33480	1513	CRAZY MOUNTAINS	110220
1344	RED LODGE CR HELLDARING	33480	1514	BRIDGER	33000
1345	RED LODGE CR HELLDARING	33480	1515	REPUBLIC MOUNTAIN	12400
1346	COOR MOUNTAIN	11700	1516	REPUBLIC MOUNTAIN	12400
1347	WORTH ABBASDIA	74100	1517	NYALITE	198300
1348	WORTH ABBASDIA	74100	1518	MADISON	240800
1349	KING MOUNTAIN	11900	1519	DRY CANYON	1800
1350	TOMBUE RIVER BREAK	18000	1520	BOX CANYON	2000
1351	TOMBUE RIVER BREAK	18000	1521	BOX CANYON	2000
1352	TRUCKEE PLATEAU	2300	1522	BEF	2200
1353	TRUCKEE PLATEAU	2300	1523	BEF	2200
1354	TRUCKEE PLATEAU	2300	1524	BEF	2200
1355	TRUCKEE PLATEAU	2300	1525	BEF	2200
1356	TRUCKEE PLATEAU	2300	1526	BEF	2200
1357	TRUCKEE PLATEAU	2300	1527	BEF	2200
1358	TRUCKEE PLATEAU	2300	1528	BEF	2200
1359	TRUCKEE PLATEAU	2300	1529	BEF	2200
1360	TRUCKEE PLATEAU	2300	1530	BEF	2200
1361	TRUCKEE PLATEAU	2300	1531	BEF	2200
1362	TRUCKEE PLATEAU	2300	1532	BEF	2200
1363	TRUCKEE PLATEAU	2300	1533	BEF	2200
1364	TRUCKEE PLATEAU	2300	1534	BEF	2200
1365	TRUCKEE PLATEAU	2300	1535	BEF	2200
1366	TRUCKEE PLATEAU	2300	1536	BEF	2200
1367	TRUCKEE PLATEAU	2300	1537	BEF	2200
1368	TRUCKEE PLATEAU	2300	1538	BEF	2200
1369	TRUCKEE PLATEAU	2300	1539	BEF	2200
1370	TRUCKEE PLATEAU	2300	1540	BEF	2200
1371	TRUCKEE PLATEAU	2300	1541	BEF	2200
1372	TRUCKEE PLATEAU	2300	1542	BEF	2200
1373	TRUCKEE PLATEAU	2300	1543	BEF	2200
1374	TRUCKEE PLATEAU	2300	1544	BEF	2200
1375	TRUCKEE PLATEAU	2300	1545	BEF	2200
1376	TRUCKEE PLATEAU	2300	1546	BEF	2200
1377	TRUCKEE PLATEAU	2300	1547	BEF	2200
1378	TRUCKEE PLATEAU	2300	1548	BEF	2200
1379	TRUCKEE PLATEAU	2300	1549	BEF	2200
1380	TRUCKEE PLATEAU	2300	1550	BEF	2200
1381	TRUCKEE PLATEAU	2300	1551	BEF	2200
1382	TRUCKEE PLATEAU	2300	1552	BEF	2200
1383	TRUCKEE PLATEAU	2300	1553	BEF	2200
1384	TRUCKEE PLATEAU	2300	1554	BEF	2200
1385	TRUCKEE PLATEAU	2300	1555	BEF	2200
1386	TRUCKEE PLATEAU	2300	1556	BEF	2200
1387	TRUCKEE PLATEAU	2300	1557	BEF	2200
1388	TRUCKEE PLATEAU	2300	1558	BEF	2200
1389	TRUCKEE PLATEAU	2300	1559	BEF	2200
1390	TRUCKEE PLATEAU	2300	1560	BEF	2200
1391	TRUCKEE PLATEAU	2300	1561	BEF	2200
1392	TRUCKEE PLATEAU	2300	1562	BEF	2200
1393	TRUCKEE PLATEAU	2300	1563	BEF	2200
1394	TRUCKEE PLATEAU	2300	1564	BEF	2200
1395	TRUCKEE PLATEAU	2300	1565	BEF	2200
1396	TRUCKEE PLATEAU	2300	1566	BEF	2200
1397	TRUCKEE PLATEAU	2300	1567	BEF	2200
1398	TRUCKEE PLATEAU	2300	1568	BEF	2200
1399	TRUCKEE PLATEAU	2300	1569	BEF	2200
1400	TRUCKEE PLATEAU	2300	1570	BEF	2200
1401	TRUCKEE PLATEAU	2300	1571	BEF	2200
1402	TRUCKEE PLATEAU	2300	1572	BEF	2200
1403	TRUCKEE PLATEAU	2300	1573	BEF	2200
1404	TRUCKEE PLATEAU	2300	1574	BEF	2200
1405	TRUCKEE PLATEAU	2300	1575	BEF	2200
1406	TRUCKEE PLATEAU	2300	1576	BEF	2200
1407	TRUCKEE PLATEAU	2300	1577	BEF	2200
1408	TRUCKEE PLATEAU	2300	1578	BEF	2200
1409	TRUCKEE PLATEAU	2300	1579	BEF	2200
1410	TRUCKEE PLATEAU	2300	1580	BEF	2200
1411	TRUCKEE PLATEAU	2300	1581	BEF	2200
1412	TRUCKEE PLATEAU	2300	1582	BEF	2200
1413	TRUCKEE PLATEAU	2300	1583	BEF	2200
1414	TRUCKEE PLATEAU	2300	1584	BEF	2200
1415	TRUCKEE PLATEAU	2300	1585	BEF	2200
1416	TRUCKEE PLATEAU	2300	1586	BEF	2200
1417	TRUCKEE PLATEAU	2300	1587	BEF	2200
1418	TRUCKEE PLATEAU	2300	1588	BEF	2200
1419	TRUCKEE PLATEAU	2300	1589	BEF	2200
1420	TRUCKEE PLATEAU	2300	1590	BEF	2200
1421	TRUCKEE PLATEAU	2300	1591	BEF	2200
1422	TRUCKEE PLATEAU	2300	1592	BEF	2200
1423	TRUCKEE PLATEAU	2300	1593	BEF	2200
1424	TRUCKEE PLATEAU	2300	1594	BEF	2200
1425	TRUCKEE PLATEAU	2300	1595	BEF	2200
1426	TRUCKEE PLATEAU	2300	1596	BEF	2200
1427	TRUCKEE PLATEAU	2300	1597	BEF	2200
1428	TRUCKEE PLATEAU	2300	1598	BEF	2200
1429	TRUCKEE PLATEAU	2300	1599	BEF	2200
1430	TRUCKEE PLATEAU	2300	1600	BEF	2200
1431	TRUCKEE PLATEAU	2300	1601	BEF	2200
1432	TRUCKEE PLATEAU	2300	1602	BEF	2200
1433	TRUCKEE PLATEAU	2300	1603	BEF	2200
1434	TRUCKEE PLATEAU	2300	1604	BEF	2200
1435	TRUCKEE PLATEAU	2300	1605	BEF	2200
1436	TRUCKEE PLATEAU	2300	1606	BEF	2200
1437	TRUCKEE PLATEAU	2300	1607	BEF	2200
1438	TRUCKEE PLATEAU	2300	1608	BEF	2200
1439	TRUCKEE PLATEAU	2300	1609	BEF	2200
1440	TRUCKEE PLATEAU	2300	1610	BEF	2200
1441	TRUCKEE PLATEAU	2300	1611	BEF	2200
1442	TRUCKEE PLATEAU	2300	1612	BEF	2200
1443	TRUCKEE PLATEAU	2300	1613	BEF	2200
1444	TRUCKEE PLATEAU	2300	1614	BEF	2200
1445	TRUCKEE PLATEAU	2300	1615	BEF	2200
1446	TRUCKEE PLATEAU	2300	1616	BEF	2200
1447	TRUCKEE PLATEAU	2300	1617	BEF	2200
1448	TRUCKEE PLATEAU	2300	1618	BEF	2200
1449	TRUCKEE PLATEAU	2300	1619	BEF	2200
1450	TRUCKEE PLATEAU	2300	1620	BEF	2200
1451	TRUCKEE PLATEAU	2300	1621	BEF	2200
1452	TRUCKEE PLATEAU	2300	1622	BEF	2200
1453	TRUCKEE PLATEAU	2300	1623	BEF	2200
1454	TRUCKEE PLATEAU	2300	1624	BEF	2200
1455	TRUCKEE PLATEAU	2300	1625	BEF	2200
1456	TRUCKEE PLATEAU	2300	1626	BEF	2200
1457	TRUCKEE PLATEAU	2300	1627	BEF	2200
1458	TRUCKEE PLATEAU	2300	1628	BEF	2200
1459	TRUCKEE PLATEAU	2300	1629	BEF	2200
1460	TRUCKEE PLATEAU	2300	1630	BEF	2200
1461	TRUCKEE PLATEAU	2300	1631	BEF	2200
1462	TRUCKEE PLATEAU	2300	1632	BEF	2200
1463	TRUCKEE PLATEAU	2300	1633	BEF	2200
1464	TRUCKEE PLATEAU	2300	1634	BEF	2200
1465	TRUCKEE PLATEAU	2300	1635	BEF	2200
1466	TRUCKEE PLATEAU	2300	1636	BEF	2200
1467	TRUCKEE PLATEAU	2300	1637	BEF	2200
1468	TRUCKEE PLATEAU	2300	1638	BEF	2200
1469	TRUCKEE PLATEAU	2300	1639	BEF	2200
1470	TRUCKEE PLATEAU	2300	1640	BEF	2200
1471	TRUCKEE PLATEAU	2300	1641	BEF	2200
1472	TRUCKEE PLATEAU	2300	1642	BEF	2200
1473	TRUCKEE PLATEAU	2300	1643	BEF	2200
1474	TRUCKEE PLATEAU	2300	1644	BEF	2200
1475	TRUCKEE PLATEAU	2300	1645	BEF	2200
1476	TRUCKEE PLATEAU	2300	1646	BEF	2200
1477	TRUCKEE PLATEAU	2300	1647	BEF	2200
1478	TRUCKEE PLATEAU	2300	1648	BEF	2200
1479	TRUCKEE PLATEAU	2300	1649	BEF	2200
1480	TRUCKEE PLATEAU	2300	1650	BEF	2200
1481	TRUCKEE PLATEAU	2300	1651	BEF	2200
1482	TRUCKEE PLATEAU	2300	1652	BEF	2200
1483	TRUCKEE PLATEAU	2300	1653	BEF	2200
1484	TRUCKEE PLATEAU	2300	1654	BEF	2200
1485	TRUCKEE PLATEAU	2300	1655	BEF	2200
1486	TRUCKEE PLATEAU	2300	1656	BEF	2200
1487	TRUCKEE PLATEAU	2300	1657	BEF	2200
1488	TRUCKEE PLATEAU	2300	1658	BEF	2200
1489	TRUCKEE PLATEAU	2300	1659	BEF	2200
1490	TRUCKEE PLATEAU	2300	1660	BEF	2200
1491	TRUCKEE PLATEAU	2300	1661	BEF	2200
1492	TRUCKEE PLATEAU	2300	1662	BEF	2200
1493	TRUCKEE PLATEAU	2300	1663	BEF	2200
1494	TRUCKEE PLATEAU	2300	1664	BEF	2200
1495	TRUCKEE PLATEAU	2300	1665	BEF	2200
1496	TRUCKEE PLATEAU	2300	1666	BEF	2200
1497	TRUCKEE PLATEAU	2300	1667	BEF	2200
1498	TRUCKEE PLATEAU	2300	1668	BEF	2200
1499	TRUCKEE PLATEAU	2300	1669	BEF	2200
1500	TRUCKEE PLATEAU	2300	1670	BEF	2200
1501	TRUCKEE PLATEAU	2300	1671	BEF	2200
1502	TRUCKEE PLATE				

1417	HOUNT BALDY	18700	1733	TOLGATE - SHEEP	29400
1418	GRABBY MOUNTAIN	4300	1734	MIDDLE FORK JUDITH	92000
1419	ELLR CANYON	19900	1735	HOUNT HIGH	33000
1420	ELKHORN STUDY	74000	1737	HIGHWOOD - BALDY	19000
			1738	HIGHWOOD	24300
IDAH0 PANHANDLE N.F.					
AREA CODE	AREA NAME	GROSS ACRES	1739	SIS SHOUBES	131700
1401	BUCKHORN RIDGE	1090	1741	BLUFF MOUNTAIN	37600
1402	SCOTCHMAN PEAKS	13500	1742	SPRING CREEK	21400
1403	NORTHWEST PEAK	9350	1742	BOY CANYON	14300
			1743	CASTLE MOUNTAINS	31100
ROOTENAI N.F.					
AREA CODE	AREA NAME	GROSS ACRES	1744	NORTH FORK OF SMITH	800
1141	MAPLE PEAK	899	1745	CALF CREEK	12000
1402	TUOHUCK	2200	1746	EAGLE PARR	6300
1403	THOMPSON BETON	9700	LOLD N.F.		
1401	BUCKHORN RIDGE	2934	AREA CODE	AREA NAME	GROSS ACRES
1402	SCOTCHMAN PEAKS	9219	1142	STEVENR PEAK	700
1403	NORTHWEST PEAK	8700	1140	ROLAND POINT	700
1404	TROUT CREEK	32600	1192	HONDERFUL PK	1000
1405	CATARACT	18215	1301	MOODOO	91800
1406	MT HENRY	21000	1302	HEARDN CREEK=UPPER NORTH	7000
1407	BRIZZLY PEAK	9850	1020	SILVER KING	13500
1408	GOLD HILL	17202	1005	BEAR=MARSHL=SCAPEST=SHAN	123100
1409	RICHARDS MOUNTAIN	16215	1701	CATARACT	9900
1470	CABINET FACE WEST	7400	1704	MARSHALL PEAK	9000
1471	CABINET FACE EAST	14150	1705	CUBC=IRON	24200
1472	BERRAY MOUNTAIN	8013	1706	BUNNANCE RIDGE	11800
1473	GOVERNMENT MOUNTAIN	8011	1700	TEEPER=SPRING CREEK	30300
1474	LONE CLIFF SNEADS	10244	1791	HOUNT BURHHELL	18900
1475	MCHEELEY	8902	1792	CHERRY PEAK	23000
1476	MCRAY CREEK	11776	1790	SILT EDGE SILVER CR	11200
1477	RAKINA CREEK	10900	1795	PATRICKS KN03N= CUTOFF	26000
1478	EAST FORK ELK CREEK	6423	1796	SOUTH STEGEL=0 CUT OFF	19100
1479	BOUNDARY MOUNTAIN	3072	1790	NORTH STEGEL	10200
1480	WARE	2304	1798	MARBLE POINT	13000
1481	CABINET FACE EAST, (WEST)	1200	1799	SHEEP MTN STATE LINE	40700
1482	CHIPPEWA CREEK	1037	1800	STAR MOUNTAIN	10400
1483	TEN LAKES	30000	1801	BATTLEWARE	49700
1484	RODERICK	1500	1803	BURDETTE	13500
1700	CURE=IRON	301	1805	LOLO CREEK	10400
			1806	HELWEE CREEK	1100
LEWIS AND CLARK N.F.					
AREA CODE	AREA NAME	GROSS ACRES	1807	QUINN	68200
1485	BEAR=MARSHL=SCAPEST=SHAN	120000	1808	STONY MTN	32100
1501	CRAZY MOUNTAINS	20900	1809	GARDEN POINT	6900
1721	SANTODITH	15500	NEBRASKA N.F.		
1726	TENDERFOOT-DEEP CREEK	112000	AREA CODE	AREA NAME	GROSS ACRES
1727	PIELON CREEK	50000	2001	PINE RIDGE	7040
1728	PATNE GULCH	8900	2002	SOLDIER CREEK	6080
1729	SAMHILL CREEK	12800			
1730	TW MOUNTAIN	8500			
1731	BLR BALDY	88200			
1732	GRANITE MOUNTAIN	11300			



STATE - NC	CAROLIN M.F.			AREA NAME	GROSS ACRES	AREA NAME	GROSS ACRES
HP IN. NO. CAROLINA	AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES	GROSS ACRES
8031	3031	LATIS PARK	3031	3031	LATIS PARK	3031	3031
8032	3032	COLUMBIAN	3032	3032	COLUMBIAN	3032	3032
8033	3033	WHEELER PK WLD CONTIG	17700	3033	WHEELER PK WLD CONTIG	17700	17700
8034	3034	CRUGER BASIN	28840	3034	CRUGER BASIN	28840	28840
8035	3035	CANJILON MOUNTAIN	7800	3035	CANJILON MOUNTAIN	7800	7800
8036	3036	BIERS MESA	12200	3036	BIERS MESA	12200	12200
8037	3037	PECOB WLD CONTIG AREAS	15000	3037	PECOB WLD CONTIG AREAS	15000	15000
8038	3038	COMALES CANYON	4900	3038	COMALES CANYON	4900	4900
8039	3039	OSTER MESA	3100	3039	OSTER MESA	3100	3100
8040	3040	CIBOLA M.F.		3040	CIBOLA M.F.		
8041	3041	MT. TAYLOR	6360	3041	MT. TAYLOR	6360	6360
8042	3042	RANGER CABIN	6380	3042	RANGER CABIN	6380	6380
8043	3043	CERRO ALERNA	1810	3043	CERRO ALERNA	1810	1810
8044	3044	MADRE MOUNTAIN	21600	3044	MADRE MOUNTAIN	21600	21600
8045	3045	SCOTT MESA	13500	3045	SCOTT MESA	13500	13500
8046	3046	SOAT SPRINGS	3150	3046	SOAT SPRINGS	3150	3150
8047	3047	RYAN HILL	3000	3047	RYAN HILL	3000	3000
8048	3048	WASHINGTON	1910	3048	WASHINGTON	1910	1910
8049	3049	WHITE CAP	2860	3049	WHITE CAP	2860	2860
8050	3050	APACHE RID	117650	3050	APACHE RID	117650	117650
8051	3051	SAN JOSE	17800	3051	SAN JOSE	17800	17800
8052	3052	SANJOA MTH PROP WLD CONT	800	3052	SANJOA MTH PROP WLD CONT	800	800
8053	3053	RANGER CABIN	8380	3053	RANGER CABIN	8380	8380
8054	3054	CORONADO M.F.		3054	CORONADO M.F.		
8055	3055	WHITE MOUNTAIN N.F.		3055	WHITE MOUNTAIN N.F.		
8056	3056	CARR MOUNTAIN	4800	3056	CARR MOUNTAIN	4800	4800
8057	3057	MILD RIVER	4200	3057	MILD RIVER	4200	4200
8058	3058	FLOROM POND	8500	3058	FLOROM POND	8500	8500
8059	3059	PENGEWASSET	74500	3059	PENGEWASSET	74500	74500
8060	3060	SANONCH JAMBESON	3550	3060	SANONCH JAMBESON	3550	3550
8061	3061	PREZIOZTALDOVY - EXT	14300	3061	PREZIOZTALDOVY - EXT	14300	14300
8062	3062	MATREVILLE	4200	3062	MATREVILLE	4200	4200
8063	3063	KLAMMAN MOUNTAIN	5000	3063	KLAMMAN MOUNTAIN	5000	5000
8064	3064	CHERRY MOUNTAIN	11300	3064	CHERRY MOUNTAIN	11300	11300
8065	3065	MT. HOLP-GORDON POND	11500	3065	MT. HOLP-GORDON POND	11500	11500
8066	3066	JOBLILUNK	3200	3066	JOBLILUNK	3200	3200
8067	3067	MERRARGE	5000	3067	MERRARGE	5000	5000
8068	3068	WHITFIRE CANYON	2800	3068	WHITFIRE CANYON	2800	2800
8069	3069	BURN ROBINSON PEAK	18100	3069	BURN ROBINSON PEAK	18100	18100
8070	3070	MOJAN MURBARO	1600	3070	MOJAN MURBARO	1600	1600
8071	3071	MELL HOLE	18800	3071	MELL HOLE	18800	18800
8072	3072	LOHER SAN FRANCISCO	25800	3072	LOHER SAN FRANCISCO	25800	25800
8073	3073	THE HUB	7770	3073	THE HUB	7770	7770
8074	3074	GRUBBY SPRINGS	3770	3074	GRUBBY SPRINGS	3770	3770
8075	3075	GRUBBY MOUNTAIN	1370	3075	GRUBBY MOUNTAIN	1370	1370
8076	3076	PRICO BOX	4000	3076	PRICO BOX	4000	4000
8077	3077	GRUBBY MOUNTAIN	2800	3077	GRUBBY MOUNTAIN	2800	2800
8078	3078	ASPER MOUNTAIN	22100	3078	ASPER MOUNTAIN	22100	22100
8079	3079	RAGON TORSIVE	11300	3079	RAGON TORSIVE	11300	11300
8080	3080	GRUBBY MOUNTAIN	4180	3080	GRUBBY MOUNTAIN	4180	4180
8081	3081	OSILA CREEK	4180	3081	OSILA CREEK	4180	4180
8082	3082	OSILA BOX	24350	3082	OSILA BOX	24350	24350

69706

## NOTICES

3153	ELK MOUNTAIN	4110	4351	EIGHT MILE	5480
3156	T BAR	7080	4352	NY MORIAN	97108
3158	CANON CREEK	4370	4353	BEZEL	8741
3158	CONT. TO GILA WILDSPRING	89280	4354	NORTH SHEL	33533
3158	STONE CANYON	2140	4355	BUCK CREEK MOUNTAINS	13167
3158	MAMOD MOUNTAIN	2180	4357	CAVE CREEK	4594
3160	POVERTY CREEK	10240	4358	COOPER	13790
3161	DEK CREEK	28360	4359	BUZELER BEAK	81113
3162	CONT. TO BLACK & ALDO MLD	18110	4360	COOPER	10110
3162	LARGO	38110	4361	BLACK SPRINGS	46109
3166	BAVYERS PEAK	64200	4362	WHITE PINE	42277
3168	MEADOW CREEK	38160	4363	MOND MOUNT	18263
3168	CONTIGUOUS TO BLUE RANGE	8090	4364	SHILLBACK	40220
			4365	WILSON MOUNTAIN	29480
			4366	COTTONWOOD	29480
			4367	BUCK MOUNTAIN	35180
			4368	RED MOUNTAIN	33300
			4369	SILHOLTER	12860
			4370	WILSON MOUNTAIN	18170
			4371	GRANT BASIN	13170
			4372	GRANT BASIN	13170
			4373	JANBIDGE	98900
			4374	LINE CREEK	12360
			4375	ELK MOUNTAIN	14020
			4376	COOPER MOUNTAIN	34490
			4377	COOPER MOUNTAIN	34490
			4378	BATTLEWAKE	23640
			4379	ROBINSON CANYON	8700
			4380	ROCKY SULK	8580
			4381	MEADOW CREEK	11700
			4382	SHILLBACK	11700
			4383	HEARITY MOUNTAIN	63330
			4384	HAPPY CAMP	18150
			4385	LOG CREEK	20400
			4386	WILSON CREEK	7130
			4387	WILSON CREEK	7130
			4388	WHITE ROCK	29181
			4389	WILDMORE	7084
			4390	INDEPENDENCE MOUNTAIN	37781
			4391	WINTACK	70119
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			462		

3993 LINCOLN CREEK		8899	879A	MT SIDELL		4979
TOiyARE N.F.			MALHEUR N.F.			
AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES	
4851	WELLINGTON MILLS	20485	8231	UTLEY BUTTE	12022	
4852	LOBDELL	20430	8232	MYRTLE=SLVIEB	13244	
4853	WILEY	8890	8233	ALDRICH MTN	5026	
4854	DESERT CREEK PEAK	12970	8234	MALHEUR RIVER	5609	
4855	BALD MTN	7380	8235	SHANEYBAY	8028	
4857	SWEETWATER	12200	8236	DRY CABIN	13269	
4858	DEVILS BAYE	80	8237	MCCLELLAN MTN	23658	
4860	LONG	6800	8238	STRAWBERRY MTN	48810	
4861	SUGARLOAF	8900	8239	GLACIER MTN	21908	
4863	BULLER	13270	8240	MONOHMY ROCK	13720	
4866	MT WICKS	10350	8241	NORTH FORK MALHEUR RIVER	18855	
4868	LONG VALLEY	48610	8242	BALDY MTN	6728	
4867	ARC DOME	10270	8243	DIXIE MTN	17082	
4866	HUNTER CREEK	5710	8244	HIPPLE BUTTE	12904	
4867	CARBON RANGE	18870	8245	FOX CREEK	7327	
4869	EXCELSIOR	118370	8246	FLAG CREEK	7433	
			8247	CEDAR GROVE	100	
			8251	JUMP-OFF JOE	3908	
			8252	GREENHORN MTN	13129	
STATE 0R			MT. HOOD N.F.			
DESCHUTES N.F.	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES	
6103	MT WASHINGTON NSA	7300	8090	EAGLE	41200	
6106	HALDO	9700	8091	LAKE	9000	
6107	CHARLTON	9280	8092	SIG BEND	10200	
6108	HAIGEN PEAK	28820	8093	MT HOOD ADDITIONS	43761	
6109	COWHORN	22450	8094	HIND CREEK	8088	
6111	ODELL	18100	8095	BALCON RIVER	9200	
6132	HINDIGO THIELSEN	22300	8096	TWIN LAKES	5385	
6191	METOLIN BREAKS	10700	8097	SADGER CREEK	27302	
6192	SISTERS	36800	8098	BULL OF THE HOODS	43725	
6193	BEARHOLLOW	8100	8099	CLALLIE	9673	
6194	BEND WATERSHED	16100				
6195	WEST 9 SOUTH BACHELOR	32500	OCHOCO N.F.			
6196	NORTH PAULINA	23000	AREA CODE	AREA NAME	GROSS ACRES	
6197	SOUTH PAULINA	10800	0211	GREEN MOUNTAIN	6630	
6198	MT JEFFERSON	2400	0212	HILL CREEK	15950	
			0213	BRIDGE CREEK	6325	
			0214	LOOKOUT MOUNTAIN	15200	
			0215	ROCK CREEK	9286	
FREMONT N.F.			0218	SILVER CREEK	11670	
AREA CODE	AREA NAME	GROSS ACRES	0219	BROADWAY	8600	
0221	ANTLER	5413	0220	CANTONS	24422	
0222	HANAN TRAIL	8063				
0223	BRATTAIN BUTTE	5800	ROGUE RIVER N.F.			
0224	DEADHORSE RIM	13615	AREA CODE	AREA NAME	GROSS ACRES	
0225	GEARHART MOUNTAIN	4114	0130	ROGUE IMPROVA DIVIDE	13774	
0226	COLMAN RIM	8207	0134	HAJARA	3876	
0227	DRAKE-MCDOWELL	6268	0135	SPENWOOD	7880	
0228	RICK-CREEK	18100	0141	SPHAGNUM BOB	6927	
0705	CRANE MOUNTAIN	23296				







2015	HORBECK	8400	813A	INDIAN MOUNDS	13847
2016	BEAVER PARK	5040	8137	STARK PROPERTY	3258
<b>NEBRASKA N.F.</b>					
<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>	<b>STATE</b>	<b>UT</b>	
2006	INDIAN CREEK	2470			
2010	RED SHIRT	8520			
2011	CHEYENNE RIVER	8800	ARMLEY N.F.		
<b>STATE: TN</b>					
<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>	<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>
4001	LEIDY	108793	4002	SHALE CREEK	26580
4003	MINERS GULCH	18400	4004	BLAKE CREEK	1280
4005	LIGHTNING RIDGE	5660	4006	MILL HOLE	21920
4007	CART HOLLOW	11140	4008	RED CANYON	9560
4009	MAHOGANY DRAW	7400	4010	HEARTOP	12160
4011	GOBLIN CREEK	12400	4012	BLAS CANYON	16470
4001	DEATH VALLEY CREEK	9750			
<b>STATE: TX</b>					
<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>	<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>
4026	CARIBOU N.F.		4159	CLARKSTON MOUNTAIN	6880
4022	MOLICHUCKY	3300			
4020	UPPER BALD RIVER	14900			
4021	WICHORY FLAT BRANCH	4500			
4022	BIG LAUREL BRANCH	6000	DIXIE N.F.		
4023	POND MOUNTAIN ADDITION	2300			
4024	LAUREL FORK	2200	4251	PINE VALLEY MOUNTAIN	111395
4025	UNAKA MOUNTAIN	4700	4252	CEDAR BENCH	7000
4026	DEVIL'S BACKBONE	4100	4253	ASHOON GORGE	8500
4027	LITTLE FROG MOUNTAIN	4700	4254	RED CANYON NORTH	9100
4028	BRUSHY RIDGE	4000	4255	HORSE VALLEY CREEK	14700
			4256	DEER CREEK	46225
			4257	CABO BLUFF = TABLE MTN	93440
			4258	TABLE CLIFF-HENDERSON CY	15080
			4259	THE BOX = DEATH HOLLOW	31800
			4260	RED CANYON SOUTH	4335
<b>STATE: TX</b>					
<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>	<b>AREA CODE</b>	<b>AREA NAME</b>	<b>GROSS ACRES</b>
8017	WINTERS BAYOU	806	8301	WAYNE WONDERLAND	14700
8018	RIS CREEK	4331	8302	THOUSAND LAKE MOUNTAIN	39300
8019	BIG SLOUGH	4893	8303	SOLOMON BASIN	16120
8020	CHAMBERA FERRY	4817	8304	JOHNS PEAK-MT ALICE	9700
8021	GRAHAM CREEK	7766	8305	MILBARD MTN	33240
8022	JORDAN CREEK	7379	8306	MT HARVINE	6000
8024	BOLTON PENINSULA	1748	8307	FISHLAKE MTN	24920
8130	TURKEY HILL	2919	8308	UH PLATEAU-MT TEARILL	14480
8131	BOGGY CREEK	1068	8309	SIGNAL PEAK	43020
8132	HARMON CREEK	2025	8310	HARTSVILLE PEAK	22300
8133	FOUR NOTCH	4850	8311	CIRCLEVILLE MTN	10520
8134	RIS HOOKS	1321	8312	BULLION-DELANO	18400
8135	ALABAMA CREEK	13117			

4313	TURMAR MTN	37820	4732	LITTLE SOUTH FORK	19390	
4314	DOS VALLEY	26100	4733	WEST FORK	48750	
4315	PAVANT	72000	4734	YAT CREEK	16500	
4316	FLAT CANYON	10800	4735	DON SPRING MGN	7500	
4317	TUMBLE PEAK	51800	4736	CHIPMAN CREEK	7400	
4318	NORTH PARK	51800	4737	WILLOW CREEK	20500	
4319	DAK CREEK	45200	4738	ROCK CANYON BUCKLEY MTN	42200	
4324	TIBADORE	10100	4739	PUMP RIDGE	26800	
4325	LANGDON	14000	4740	REC MOUNTAIN	1900	
4331	MYTODE	11720	4741	REC MOUNTAIN	1900	
MANTI LABEL N.F.s						
	AREA CODE	AREA NAME	ACRES	ACRES		
4801		CEDAR KNOLL	24500	4742	DIAMOND FORK	32800
4802		COAL MOLL	3500	4743	TIE FORK	24935
4803		COAL MOLL	3500	4744	WHITE RIVER	32800
4804		RENNISON CREEK	12300	4745	WOLF CREEK	13800
4805		PRICE RIVER	27400	4746	BANTAM	12800
4806		DAK CREEK	18700	4747	HOP CREEK RIDGE	4480
4807		ROLFSON-STAKER	7200	4748	VERNON	18200
4808		WOLF CREEK	13800	4749	SOUTH FORK	24500
4809		EAST MOUNTAIN	3100	4750	WOLF CREEK	13800
4810		SENTRY MOUNTAIN	4850	4751	WOLF CREEK	13800
4811		SHOULDRON-ROCK CANYON	17900	4752	GOLDEN RIDGE	10800
4812		SIG-MORSEBROCK CANYON	18500	4753	MEPHINE MOUNTAIN	26000
4813		BULLWOCK CANYON	11800	4754	WOLF CREEK	13800
4814		WOLF CREEK	13800	4755	WOLF CREEK	13800
4815		STRAIGHT CANYON	4300	4756	WOLF CREEK	13800
4817		SIG-NEAR CREEK	3100	4757	WALLBURG	4720
4819		BLACK MOUNTAIN	9500	WATCH N.F.s		
4820		BIRCH CREEK	17800	AREA CODE	AREA NAME	
4821		WOLF CREEK	13800	4801	LETOY	18000
4822		MUDY CREEK-MELSON MGN	4900	4802	SMALL CREEK	19820
4824		WHITE MOUNTAIN	7900	4803	SWAN CREEK MTN	10500
4826		HURONIA PEAK	8200	4804	SIABON	8900
4827		WILCOT KNOLL	2600	4805	NOBLETT	4200
4828		WOLF CREEK	13800	4806	WOLF CREEK	13800
4829		LEVAN PEAK	22600	4807	LAKEB	4200
4832		MORSE-MOUNTAIN-MORSE PEAK	25200	4808	GRONIGARY	11600
4833		MT PEALE	10200	4809	OLYMPUS	26000
4834		BIG CREEK	2058	4810	MT ABE	17800
4835		WOLF CREEK	13800	4811	FRANCIS	17200
4836		DUNN-MORSEBROCK CANYON	18000	4812	STANBURY	55100
4837		HARMON-NOTCH CANYON	20000	4813	MOUNT MADRI	69200
4838		ARCH CANYON	13000	4814	MT LOGAN	82000
BARTOON N.F.s						
	AREA CODE	AREA NAME	ACRES	ACRES		
4864		RAZI RIVER	2600	4761	MELLEN MOLL	14000
4865		CLEAR CREEK	13084	4762	WILLARD	17400
UNYTA N.F.s						
	AREA CODE	AREA NAME	ACRES	ACRES		
4761		NOBLETT	4025	4763	LETOY PEAK	15000
				4764	UPPER SOUTH FORK	18500
				4765	WOLF CREEK	13800
				4766	WOLF CREEK	13800
				4767	WEST FORK BLACKS FORK	8500

## NOTICES

STATES VA				COLVILLE N.F.			
AREA CODE	AREA NAME	GROSS ACRES	AREA CODE	AREA NAME	GROSS ACRES		
GEORGE WASHINGTON N.F.							
8001	JACKSON CREEK	350	8001	JACKSON CREEK	350		
8002	CLACKAMAS MOUNTAIN	518	8002	CLACKAMAS MOUNTAIN	518		
8003	PROFANITY	3164	8003	PROFANITY	3164		
8004	RICH MOLE	10495	8004	RICH MOLE	10495		
8042	KAT MARY'S	15340	8042	KAT MARY'S	15340		
8043	RAMFORD MOUNTAIN	1800	8043	RAMFORD MOUNTAIN	1800		
8044	RAMBETTS CRAFT STUDY AREA	10819	8044	RAMBETTS CRAFT STUDY AREA	10819		
8045	WILSON CREEK	2617	8045	WILSON CREEK	2617		
8046	LITTLE RIVER	7900	8046	LITTLE RIVER	7900		
8047	WIA SCHLOSS	13260	8047	WIA SCHLOSS	13260		
8171	DOLLY ANNE	13275	8171	DOLLY ANNE	13275		
8172	ELLSWORTH RIVER	13275	8172	ELLSWORTH RIVER	13275		
8173	NEARBY CREEK	3460	8173	NEARBY CREEK	3460		
8183	BARBOUR CREEK	520	8183	BARBOUR CREEK	520		
8184	MOOP HOLE	13510	8184	MOOP HOLE	13510		
JEFFERSON N.F.							
8048	BEAR TOWN	10562	8048	BEAR TOWN	10562		
8049	LITTLE DRY RUN	2998	8049	LITTLE DRY RUN	2998		
8050	LEWIS FORK	5771	8050	LEWIS FORK	5771		
8051	MORRINE BRANCH	380	8051	MORRINE BRANCH	380		
8052	WILSON CREEK	3260	8052	WILSON CREEK	3260		
8053	LITTLE WILSON CREEK	3260	8053	LITTLE WILSON CREEK	3260		
8160	DEVILS FORK	5807	8160	DEVILS FORK	5807		
8161	515 STONEY CREEK	415	8161	515 STONEY CREEK	415		
8162	BARBOUR CREEK	1778	8162	BARBOUR CREEK	1778		
8163	MOOP HOLE	685	8163	MOOP HOLE	685		
8164	THUNDER RIDGE	2550	8164	THUNDER RIDGE	2550		
8165	MILL CREEK WEA	6000	8165	MILL CREEK WEA	6000		
8187	MOUNTAIN LAKE WEA	11927	8187	MOUNTAIN LAKE WEA	11927		
8188	PEETERS MOUNTAIN WEA	8183	8188	PEETERS MOUNTAIN WEA	8183		
STATES VT							
GREEN MOUNTAIN N.F.							
9041	BREADLOAF	19850	9041	BREADLOAF	19850		
9042	WILDER MTN	6900	9042	WILDER MTN	6900		
9043	DEVILS DEN	830	9043	DEVILS DEN	830		
9044	WILSON MOUNTAIN	2660	9044	WILSON MOUNTAIN	2660		
9045	LIVE BROOK ADDITION	6120	9045	LIVE BROOK ADDITION	6120		
9046	WOODPOND	12460	9046	WOODPOND	12460		
SIZFORD BIRCHNOT N.F.							
8032	COUSAR LAKES	23510	8032	COUSAR LAKES	23510		
8033	GOAT ROCKS	13950	8033	GOAT ROCKS	13950		
8034	SLACKS VIEW	3230	8034	SLACKS VIEW	3230		
8035	WATSON	1700	8035	WATSON	1700		
8036	TATTOON	1700	8036	TATTOON	1700		
8037	DIXON MTK	5850	8037	DIXON MTK	5850		
8038	DAVIS MTK	7110	8038	DAVIS MTK	7110		
8039	PONEY	2818	8039	PONEY	2818		
8040	MOOSE LAKE	6700	8040	MOOSE LAKE	6700		
8041	ANDERSON	28120	8041	ANDERSON	28120		
8042	MT ADAMS	7230	8042	MT ADAMS	7230		
8043	STRANBERRY	6870	8043	STRANBERRY	6870		
8044	MT MARGARET	2790	8044	MT MARGARET	2790		
8045	INDIAN WEA	2790	8045	INDIAN WEA	2790		
8046	BEAR CREEK	10350	8046	BEAR CREEK	10350		
8047	SILVER STAR	7000	8047	SILVER STAR	7000		
8048	KIPUSA	5880	8048	KIPUSA	5880		
8049	MOOSEHOLE	580	8049	MOOSEHOLE	580		
8050	ANDERSON	12460	8050	ANDERSON	12460		
IGAPO PANHANDLE N.F.							
9047	LITTLE GRASS MTK	3160	9047	LITTLE GRASS MTK	3160		
9048	SOUTH FORK MTK	2030	9048	SOUTH FORK MTK	2030		
9049	SALMO PRIEST	2030	9049	SALMO PRIEST	2030		
9050	GRASSY TOP	12460	9050	GRASSY TOP	12460		





STATE	AREA CODE	AREA NAME	SEDES ACRES	AREA CODE	AREA NAME	SEDES ACRES
	6850	MIDDLE MOUNTAIN	19240	6116	HANE FORK RIDGE	18950
	6951	LITTLE ALUMINUM MT.	18000	6115	WINDY MOUNTAIN	17900
	9326	EAST FORK OF GREENHARTER	6610	6113	SUNSHINE CREEK	3700
	9327	DOLLY RODA ROARING PLAIN	16275	6613	WEST SLOPE TETONS	6900
	9328	TURKEY MOUNTAIN	8480	6001	PALISADES	24450
	9329	SPICE RUN	8320	6002	GREEN-SHEPHERD	18000
	9330	WINDY MOUNTAIN	8320	6003	WATER-LAVER	20300
	9331	CHAMBERSY ADDITION	8640	6004	TOPNOTICE	20710
MEDICINE HORN N.F.*						
	2067	DEER CREEK	2067	2067	DEER CREEK	2067
	2068	WINDY MOUNTAIN	1990	2068	WINDY MOUNTAIN	1990
	2069	LABONIE CANYON	2370	2069	LABONIE CANYON	2370
	2070	LABONIE PEAK	2680	2070	LABONIE PEAK	2680
	2071	EAGLE PEAK	1740	2071	EAGLE PEAK	1740
	2072	POCK CREEK	1900	2072	POCK CREEK	1900
	2073	WINDY MOUNTAIN	1790	2073	WINDY MOUNTAIN	1790
	2074	SNOW RANGE	3500	2074	SNOW RANGE	3500
	2075	LISBY FLATS	1440	2075	LISBY FLATS	1440
	2076	EAGLE ROCK	670	2076	EAGLE ROCK	670
	2077	PIN MOUNTAIN	700	2077	PIN MOUNTAIN	700
	2078	WINDY MOUNTAIN	1790	2078	WINDY MOUNTAIN	1790
	2079	SHEEP MOUNTAIN	1930	2079	SHEEP MOUNTAIN	1930
	2080	PLATTE RIVER NB-1	3300	2080	PLATTE RIVER NB-1	3300
	2082	SAVAGE RUN	1730	2082	SAVAGE RUN	1730
	2083	WINDY MOUNTAIN	1790	2083	WINDY MOUNTAIN	1790
	2084	WINDY MOUNTAIN	1790	2084	WINDY MOUNTAIN	1790
	2085	COON CREEK	1230	2085	COON CREEK	1230
	2086	ENCHAPMENT RIVER	1260	2086	ENCHAPMENT RIVER	1260
	2087	HURON PARK	6040	2087	HURON PARK	6040
	2088	BRIDGE PEAK	7800	2088	BRIDGE PEAK	7800
	2089	WINDY MOUNTAIN	1790	2089	WINDY MOUNTAIN	1790
	2091	JACK CREEK	2400	2091	JACK CREEK	2400
	2092	SINGER PEAK	3200	2092	SINGER PEAK	3200
	2093	BIG SANDSTONE CREEK	9700	2093	BIG SANDSTONE CREEK	9700
	2094	LITTLE SANDSTONE CREEK	5000	2094	LITTLE SANDSTONE CREEK	5000
	2095	BATTLE CREEK	8900	2095	BATTLE CREEK	8900
BLACK HILLS N.F.*						
	2018	IRVING HABA	1280	2018	IRVING HABA	1280
	2019	SAND CREEK	12400	2019	SAND CREEK	12400
BRIDGE-TETON N.F.*						
	4101	CORRIDOR	26156	2089	WINDY MOUNTAIN	1790
	4102	SHREVEPORT	31328	2091	SUNSHINE CREEK	3700
	4103	WINDY MOUNTAIN	17900	2092	HEADWATERS SUNLIGHT CR.	4900
	4104	MONUMENT RIDGE	17360	2093	HEADWATERS SUNLIGHT CR.	2600
	4105	JENNY CREEK	11110	2094	TROUT CREEK	3510
	4106	GRASSACK	27150	2095	WINDY MOUNTAIN	1790
	4107	SALT RIVER RANGE	25270	2096	WINDY MOUNTAIN	1790
	4108	WINDY MOUNTAIN	17900	2097	SLEEPING GIANT	5800
	4109	NORTH FORK SHEEP CREEK	20540	2098	WINDY MOUNTAIN	1790
	4110	SOUTHERN WINDING RANGE	56800	2099	SOUTH FORK	6200
	4111	GANNETT SPRING CREEK	64400	2100	SOUTH FORK	6200
	4112	COMMISSARY RIDGE	17920	2101	PINEY PARK	3000
	4113	ROBERT PARK REST	7840	2102	PINEY PARK	3000
				2103	PINEY PARK	3000

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2052	WOOD RIVER	51120
2053	CASTLE ROCK	4280
2054	TELEPHONE DRAIN	15140
2055	CARBON LAKE	5080
2056	SOUTH DUNOIR	7300
2057	SOUTH DUNOIR	7300
2058	DUNOIR	14240
2059	WEST DUNOIR	5960
2060	SHERIDAN PASS	4330
2061	WINDY HOLLOW	5620
2062	NE POPO AGIE	5620
2063	SE POPO AGIE	5090
2064	LITTLE POPO AGIE	7240
2065	CANYON CREEK	7400
2066	WINDY HOLLOW	5620
2067	MIDDLE FORK	8840
2068	WASH SPRING CREEK	5720
2069	TORHOTEE PASS	6500
2070	SOUTH BEARTOOTH HIGHWAY	111600
2071	BEARTOOTH	4130
2072	NORTH BEARTOOTH	4130
2073	NORTH BEARTOOTH	4130
2074	REEF	16740
TARDHEE N.F.		
AREA CODE	AREA NAME	GROSS ACRES
4611	WEST BLUPE TETONS	4112
4612	PALISADES	9110
PUERTO RICO		
CARRISSEAN N.F.		
AREA CODE	AREA NAME	GROSS ACRES
8007	EL CACIQUE	8730

59716

## NOTICES

The following listed areas were not included on the inventory listing, because they had been allocated to nonfederal uses by a completed land management plan. These areas will, however, have implementation of development activities delayed so that they may have their wilderness attributes considered again. This consideration will take place concurrently with evaluation of the forested areas listed above.

STATE	Area Number	Area Name	National Forest	ACRES
Arkansas	J46	Redbump	Ouchita	5,200
Colorado	367	Swright Cr.	Arapaho-Roosevelt	8,460
Colorado	A28	St. Louis Peak	Arapaho-Roosevelt	5,690
Colorado	ZIX	Cook Creek	Arapaho-Roosevelt	7,270
Florida	EAR	Janiper Prairie	Florida	13,540
Iowa	BA4	Steel Mt.	Berie	63,957
Kentucky	D39	Clifty	Daniel Boone	17,265
Montana	BA4	Bitterroot	Bitterroot	81,200
Montana	BA0	Stony Mt.	Bitterroot	50,400
Montana	Y4G	Allan Mt.	Bitterroot	113,900
Montana	F7A	Swan River Island	Flathead	550
N. Carolina	L4H	Upper Wilson	N. Carolina	6,590
N. Carolina	L4H	Last Cove	N. Carolina	5,708
N. Carolina	L4O	Harper Cr.	N. Carolina	7,193
N. Carolina	L4U	Fishback Mts.	N. Carolina	2,436
N. Carolina	025	So. Mountains	N. Carolina	63,546
N. Carolina	008	Linnville Dry Ed.	N. Carolina	6,428
N. Dakota	D80	Nagpie	Little No. 36,240	
N. Dakota	D4Y	Bonanza-Cottonwood	Little No. 18,400	
N. Dakota	D4L	Long Butte	Little No. 13,080	
N. Dakota	D4P	Horse Cr.	Little No. 15,020	
N. Dakota	D4O	Cheney Cr.	Little No. 8,180	
N. Dakota	D4K	Bell Lake	Little No. 11,980	
N. Dakota	D80	Ash Conlee	Little No. 34,620	
N. Dakota	D4U	Twins Buttes	Little No. 11,980	
N. Dakota	D8E	Magnus	Little No. 7,480	
N. Dakota	D81	Elmley Pistas	Little No. 21,120	
N. Dakota	D8J	Bullies Butte	Little No. 19,130	
N. Dakota	D8G	Nagpie I	Little No. 18,440	
S. Carolina	W46	Parliament	S. Carolina	7,386
Tennessee	-	Seaver Dam	Cherokee	2,000
Texas	016	Little Lake Creek	Texas	2,7000
Utah	A4H	Dry Fork Add.	Ashley	17,000
Washington	089	Pine Mountain	Olympic	232
TOTAL				690,259

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September 20, 1977

Senate Energy & Natural Resources Committee  
3106 Dirksen Senate Office Building  
Washington, D.C. 20510

Dear Sirs:

Associated California Loggers, representing the independent contract loggers in California, wishes to offer the following comments on the Forest Service Roadless Area Review and Evaluation II (RARE II).

We believe that enough wilderness acreage is already preserved in the nearly 10% of California's natural forests that has been set aside in the National Wilderness Preservation System. Furthermore, resource planning that is already scheduled under the Renewable Resources Planning Act (RPA) of 1974 will be disrupted by sudden changes in projected amounts of wilderness. California can meet its established RPA goals for the year 2020 without adding further wilderness acreage.

The forest products industry leads the list as rural California's most important manufacturing industry. One million board feet of National Forest timber provides an average of 10 logging and sawmill jobs, with two more service jobs related to each of those. In addition, the U.S. Treasury receives an annual \$110 million from timber harvesting in California. One quarter of those funds are funneled back to the counties to support local programs. How can rural California sustain its economy with a continually shrinking allowable cut on National Forest lands?

It is also important to note that timber from California's National Forests can build housing for well over one-half million people a year. With housing becoming an increasingly unaffordable commodity for many lower and middle class Americans, we cannot risk a decrease in available timber which might send prices even further out of reach.

Associated California Loggers is extremely concerned about the resource mismanagement, loss of jobs and revenue, and decrease in economic stability which may come about as a result of RARE II. We urge you to delete any proposed additions to the RARE II survey in an effort to protect the country's most important resource--it's people.

Sincerely,

DAVID A. SNODDERLY  
Executive Director

BAS:kd

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