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GREAT BEAR WILDERNESS

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BEFORE THE

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SUBCOMMITTEE ON PARKS AND RECREATION

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OF THE

COMMITTEE ON

ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

NINETY-FIFTH CONGRESS

SECOND SESSION

ON

S. 3429

A BILL TO DESIGNATE THE GREAT BEAR WILDERNESS, FLAT-
HEAD NATIONAL FOREST, AND ENLARGE THE BOB MARSHALL
WILDERNESS, FLATHEAD AND LEWIS AND CLARK NATIONAL
FORESTS, STATE OF MONTANA

H.R. 13972

AN ACT TO DESIGNATE THE GREAT BEAR WILDERNESS, FLAT-
HEAD NATIONAL FOREST, AND ENLARGE THE BOB MARSHALL
WILDERNESS, FLATHEAD AND LEWIS AND CLARK NATIONAL
FORESTS, STATE OF MONTANA

OCTOBER 5, 1978

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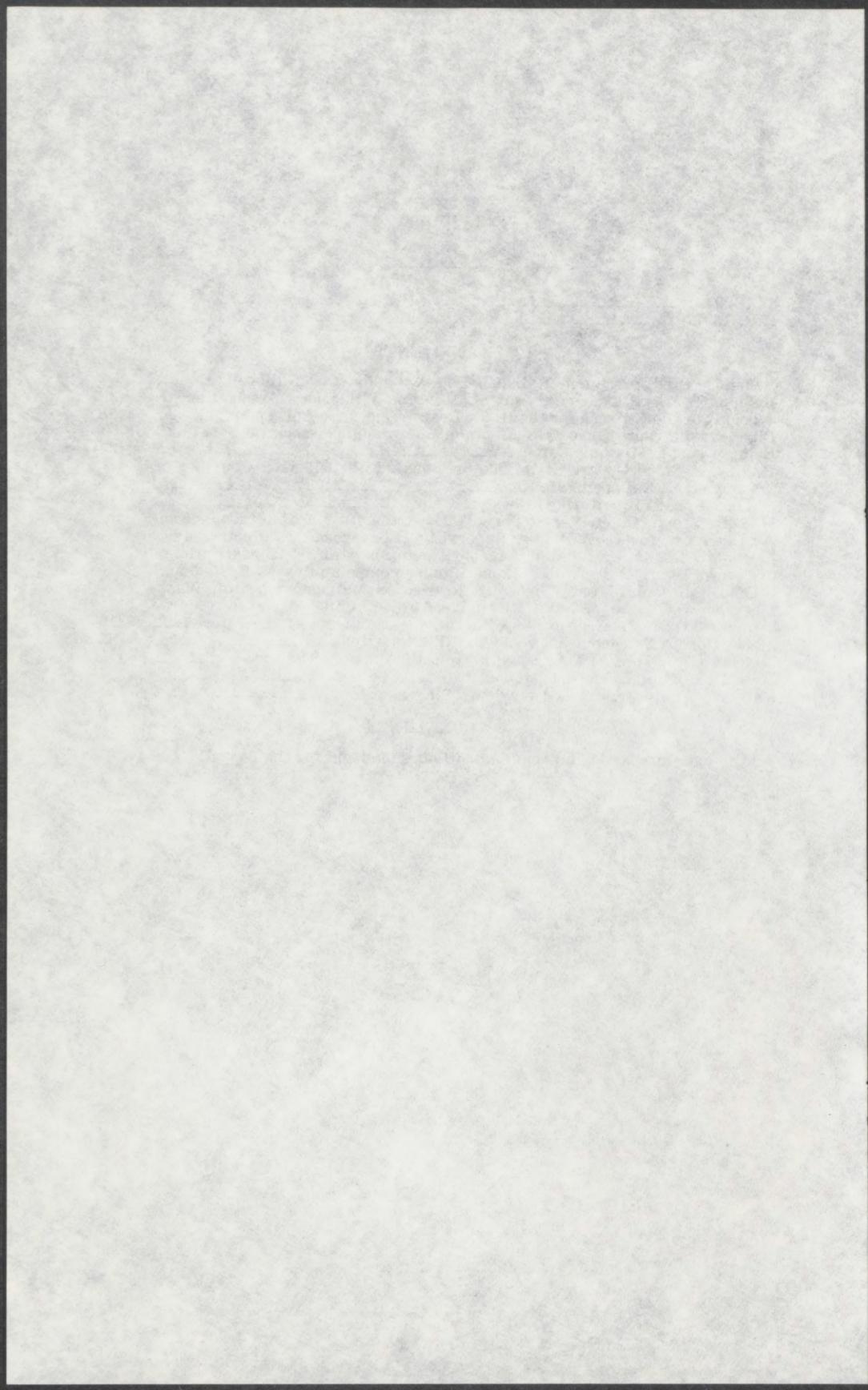
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GREAT BEAR WILDERNESS

THURSDAY, OCTOBER 5, 1978

U.S. SENATE,
SUBCOMMITTEE ON PARKS AND RECREATION,
OF THE COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9 a.m., in room 3110, Dirksen Office Building, Hon. John Melcher, presiding.

Present: Senators Melcher, Metzenbaum, and Hansen.

Also present: Thomas B. Williams and Laura L. Beaty, professional staff members.

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

Senator MELCHER. The subcommittee will come to order. Today we are having a public hearing in Washington on the Great Bear Wilderness Area. The Senate bill is S. 3429. The House has passed their companion bill, with a couple of modifications, and their number is H.R. 13972. It was passed on Tuesday of this week.

The Great Bear is one of the blocs of wilderness or protected land leading from Glacier down to the Bob Marshall and the Scapegoat Wilderness Areas. Part of what we are calling the Great Bear at this time is actually an addition to the Bob Marshall Wilderness, but it was included in the study area as the recommendation of the Forest Service.

The feeling of the people who had looked at this area for a long time was that it fit in very well. Senator Metcalf—and we have Donna with us today—long had an interest in completing this group, Glacier, Great Bear, Scapegoat, and the addition of this wilderness of Great Bear is going to form one of the finest groups of wilderness areas in the United States.

I recall, I suppose it was almost 2 years ago next week—or this week—that this bill and a number of other wilderness bills were caught in a parliamentary position in the House. There was no objection to the Great Bear at all but there was an objection to California wilderness and the Speaker refused to put it up as a separate bill with the rule on it. So we had to convince Bernie Sisk his objection to the California area should not be an impediment to holding up a whole series of wilderness, including Great Bear.

We are grateful to Bernie. He had to sacrifice his position on Kaiser Ridge in California, but he did, and the bill passed in the last days of the Congress in 1976. I am awfully glad it did. There was nothing wrong with Great Bear. It was just that it was mixed up with one bill that the delegation from California had objections.

The study period was a rather short study period, and the reason for that was the hearings developed on the studies that the Forest Service had a great deal of first-hand knowledge of it, there was not too much objection from the forest products industry. In fact, they testified it ought to be studied, but that they would like to make some modificatoins in the borders. But we did wait a long time, Chief, this summer for the bill to get up here. After it cleared the region I headquarters in Missoula, it seemed to be in town here a long time before the recommendation ever came up.

It came up I believe, in the middle of August. My colleagues in the House, Congressman Marlenee, Congressman Baucus, and our neighbor from Wyoming, Congressman Roncalio. This will complete the hearings, of course. Later on, we will complete the hearings, of course. Later on, we will hear about Spanish Peaks. This testimony generally concerns Great Bear, and we will go through it as fast as we can.

At this point, I would request that S. 3429 and H.R. 13972 be made a part of the record.

[The bills follow:]

S. 3429

IN THE SENATE OF THE UNITED STATES

AUGUST 17 (legislative day, AUGUST 16), 1978

Mr. JACKSON (for himself and Mr. HANSEN) (by request) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To designate the Great Bear Wilderness, Flathead National Forest, and enlarge the Bob Marshall Wilderness, Flathead and Lewis and Clark National Forests, State of Montana.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That, in furtherance of the purposes of the Wilderness Act
4 of 1964 (78 Stat. 890), the area generally depicted on a
5 map entitled "Great Bear Wilderness (Proposed)—Bob
6 Marshall Wilderness Addition", dated February 1978, which
7 is on file and available for public inspection in the Office
8 of the Chief, Forest Service, United States Department of
9 Agriculture, is hereby designated as the Great Bear Wilder-
10 ness (two hundred ninety three thousand five hundred and

1 seventy-one acres) within and as part of the Flathead Na-
2 tional Forest, Montana, and enlarges the Bob Marshall
3 Wilderness with an area comprising approximately sixty-six
4 thousand three hundred acres within and as a part of the
5 Lewis and Clark National Forest, Montana.

6 SEC. 2. As soon as practicable after this Act takes effect,
7 the Secretary of Agriculture shall file a map and a legal de-
8 scription of the Great Bear Wilderness and Bob Marshall
9 Wilderness Addition with the Energy and Natural Resources
10 Committee, United States Senate, and the Interior and In-
11 sular Affairs Committee, House of Representatives, and such
12 description shall have the same force and effect as if in-
13 cluded in this Act: *Provided, however,* That correction of
14 clerical and typographical errors in such legal description and
15 map may be made.

16 SEC. 3. The Great Bear Wilderness and Bob Marshall
17 Addition shall be administered by the Secretary of Agricul-
18 ture in accordance with the provisions of the Wilderness Act
19 governing areas designated by that Act as wilderness areas,
20 except that any reference in such provisions to the effective
21 date of the Wilderness Act shall be deemed to be a reference
22 to the effective date of this Act.

95TH CONGRESS
2D SESSION

H. R. 13972

IN THE SENATE OF THE UNITED STATES

OCTOBER 4 (legislative day, SEPTEMBER 28), 1978

AN ACT

To designate the Great Bear Wilderness, Flathead National Forest, and enlarge the Bob Marshall Wilderness, Flathead and Lewis and Clark National Forests, State of Montana.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That, in furtherance of the purposes of the Wilderness Act
4 (78 Stat. 890), the area generally depicted on a map entitled
5 "Great Bear Wilderness (Proposed)—Bob Marshall Wilder-
6 ness Addition", dated September 1978, which is on file and
7 available for public inspection in the Office of the Chief,
8 Forest Service, United States Department of Agriculture, is
9 hereby designated as the Great Bear Wilderness (approx-
10 mately two hundred ninety thousand, five hundred seventy-
11 one acres) within and as part of the Flathead National
12 Forest, Montana, and enlarges the Bob Marshall Wilderness
13 with an area comprising approximately sixty thousand acres
14 within and as part of the Lewis and Clark National Forest,
15 Montana.

1 SEC. 2. As soon as practicable after this Act takes
2 effect, the Secretary of Agriculture shall file a map and a
3 legal description of the Great Bear Wilderness and Bob Mar-
4 shall Wilderness Addition with the Energy and Natural Re-
5 sources Committee, United States Senate, and the Interior
6 and Insular Affairs Committee, House of Representatives,
7 and such description shall have the same force and effect as if
8 included in this Act: *Provided, however,* That correction of
9 clerical and topographical errors in such legal description and
10 map may be made.

11 SEC. 3. The Great Bear Wilderness and Bob Marshall
12 Addition shall be administered by the Secretary of Agricul-
13 ture in accordance with the provisions of the Wilderness Act
14 governing areas designated by that Act as wilderness areas,
15 except that any reference in such provisions to the effective
16 date of the Wilderness Act shall be deemed to be a reference
17 to the effective date of this Act.

Passed the House of Representatives October 3, 1978.

Attest:

EDMUND L. HENSHAW, JR.

Clerk.

Senator MELCHER. Senator Hansen, may we hear from you?

Senator HANSEN. I am sorry, Mr. Chairman, I was unable to be here promptly at 9 o'clock. I am very pleased to be here.

Senator MELCHER. Donna, welcome to the committee.

STATEMENT OF DONNA H. METCALF, HELENA, MONT.

Mrs. METCALF. I am Donna Metcalf of 1220 8th Avenue, Helena, Mont.

Mr. Chairman, I did not understand, and I do not understand, whether you consider the Spanish Peaks a part of what we are taking up with the Great Bear. It has been suggested to me, but I have never had any clarification about whether we are considering Spanish Peaks as being a part of, or added to, this legislation or not. So if my testimony sounds confused, it is because there has been some confusion in my own mind about it.

Mr. Chairman, I am here to urge the immediate passage by the Senate of H.R. 13972, which creates the Great Bear Wilderness and enlarges the Bob Marshall Wilderness, and which passed the House of Representatives by unanimous vote the day before yesterday.

I am here also to oppose any suggestions of further withdrawals of territory from Great Bear, or any proposals to combine its consideration with that of other wilderness areas.

The Great Bear Wilderness has had extensive public consideration and input, careful evaluations have been made and generous accommodations granted.

I find it wholly unreasonable that now, in some areas, it is suggested that we should yield also area 3 from the very heart of this wilderness.

In this relatively small segment of our State we are seeking to preserve a natural, wild environment of the highest quality. It is the distinct resource legally recognized in the 1964 Wilderness Act. We are unwilling to trade this resource for that of the small amount of available timber, or for that of unexplored and unproven gas and oil in what is a minor portion of the whole geological formation for such production.

I cannot stress too much the broad-based support that exists for this legislation. For over 20 years the public has shown intense interest in the potential of the area for wilderness.

The Senate itself first considered Wilderness status for the Great Bear when Senator Metcalf and Senator Mansfield introduced S. 392 on January 27, 1975, and the legislation today is consistent with the mandate established in the study agreed to by the Senate in the 94th Congress.

In field hearings, in editorials, in news articles, speeches, and letters, the people of our State have spoken overwhelmingly in favor of this legislation.

With your own support, Mr. Chairman, which you first expressed at the Senate committee markup of the Absaroka-Beartooth bill on January 25, 1978, the whole Montana congressional delegation favors it.

The Montana Fish and Game Department favors it. The Forest Service favors it. The administration favors it. The House of Representatives favors it. The people of Montana favor it.

It is now 9 days before the scheduled closing of this Congress. It has been suggested that the Spanish Peaks Wilderness proposal be attached to this legislation. The Spanish Peaks is an outstanding natural area. It deserves the same extensive process that has been applied to the Great Bear.

But the Great Bear is ready for passage and Spanish Peaks is not. The House has never held a hearing of any kind on the Spanish Peaks, and it will not find time to deal with an added wilderness segment in the closing days of this Congress.

Mr. Chairman, I hope we will not be caught in a time trap. We seek your leadership and skill in seeing that this excellent piece of legislation, the Great Bear Wilderness, which means so much to the people of Montana, gets the acceptance it merits, and is passed by the Senate without deletions, and without the encumbrance of Spanish Peaks.

Senator MELCHER. Thank you very much, Donna. In 1976, I think it was in March or April, in a meeting in Mike's office, whatever the meeting was for when it broke up Lee and I stayed together and he said I have two main, prime considerations for Montana this year. One is a portion of the Missouri to be designated as a wild and scenic river and the other is the Great Bear. I said I will do what I can on the wild and scenic river, but having Congressman Taylor, the subcommittee chairman in the House who handled wild and scenic rivers, he will be all for it, and he was.

As far as the Great Bear is concerned, from my subcommittee, I will tell you we will get it out. There will not be any problem with that. I said is it really good, Lee? And he said we need this as part of this chain from Glacier, Bob Marshall, and Scapegoat. He said very candidly we can get that out with no problem.

Then the wild and scenic rivers designation for the Missouri, which everybody thought was great, ended up in the last week in a real hassle in the House. We did get it up and passed. Congressman Taylor was extremely interested in it and very supportive. It, too, was caught up in some sort of parliamentary hassle.

The Great Bear was in a separate bill and it got hamstrung, as I mentioned earlier, in a bill along with a lot of other wilderness areas, only one of which had any controversy at all—Kaiser Ridge. But I very blithely and strongly said I will move it, I will get it out, Lee; don't worry about it.

It was a real hassle. As I said, Congressman Bernie Sisk withdrew his objection and we are grateful to him. I think Great Bear is important and I am delighted the study has been completed and it has passed the House. I frankly think we are in very good shape to move it. I know of no enemies it has in the Senate at all. They have waived the usual procedure, passed the Senate bill here, looked at any modifications or changes we might want to make. I do not think this committee wants to make too many changes.

Now on Spanish Peaks, a little later on in this hearing, Spanish Peaks has had a lot of input. It must have been 1968, President Johnson recommended it for inclusion in the wilderness area. There are some points about Spanish Peaks we will get into a little later.

Senator HANSEN. Mr. Chairman, I think if I could make a political prediction—and most of the ones I have made have proven to be poor ones—but I would say the support you indicate in your statement cer-

tainly will be very seriously considered by the Senate, if I know anything about politics. I would not attempt to say what the Senate might do, but if I may be permitted a personal note, I can say the respect, esteem, and affection, continues on for Lee, and for you, and remains unabated. We are proud of you. We appreciate your coming here today to testify.

Senator METZENBAUM. Mr. Chairman, I know very little about the subject. But if Mrs. Metcalf says Senator Metcalf would have wanted this bill the way it is, that is enough for me. I have tremendous respect for the Senator. I am not sufficiently knowledgeable about the subject to say this is right and this is wrong. But if you tell me it is right, I accept your word, and I am prepared to help get this legislation enacted. I think that is the very least we can do in memory of the great service your husband gave his country. So I will be on your side.

Senator MELCHER. Thank you very much, Donna, and we really appreciate very much your being with us today.

Senator MELCHER. Chief McGuire.

STATEMENT OF JOHN MCGUIRE, CHIEF, FOREST SERVICE, DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY ROBERT WILLIAMS, SUPERVISOR, BEAVERHEAD NATIONAL FOREST, MONTANA; DICK SMITH, LAND MANAGEMENT PLANNING STAFF, FLATHEAD NATIONAL FOREST, MONTANA, RAY FRANKS, LAND MANAGEMENT PLANNING STAFF, REGIONAL OFFICE, MISSOULA, MONT.; DICK JOY, RECREATION MANAGEMENT STAFF, WASHINGTON, D.C.; AND MELVILLE R. MUDGE, PROJECT CHIEF, MINERAL RESOURCE STUDIES, GREAT BEAR PROPOSED WILDERNESS, DEPARTMENT OF THE INTERIOR

Mr. MCGUIRE. Thank you, Mr. Chairman, and members of the committee. With your permission, I will ask the Supervisor of the Beaverhead National Forest, Bob Williams, to join me at the table. Also, Dick Smith, the Great Bear study leader. In addition, here in the room are some other Forest Service people who can help explain the questions. Dick Joy will handle the map. Ray Franks is here from the land management planning staff in Missoula. I also am glad to see Mel Mudge, of the U.S. Geological Survey in Denver is here. He is quite familiar with the mineral situation in this area.

I notice you have a lot of witnesses today. If you wish I can brief my testimony, Mr. Chairman.

Senator MELCHER. Chief, I have skimmed through it. Chief McGuire's testimony will be made a part of the record.

I think we might as well get right into the points. First of all, you mentioned the utility corridor. There is nothing in the bill as passed about the utility corridor. There is something in the report that accompanies it. I only want to touch on that briefly. First of all, I know of no proposed development in Montana that would require large transmission lines that far north.

There is a proposal in Montana for Colstrip 3 and 4 transmission lines much further south. Colstrip 3 and 4, of course, is tied up in a series of court cases, but it is coming from the area of Montana where coal is already developed and further south there is coal developed in Wyoming.

It does not seem at all likely to me from anything I have been able to find out, proposals in Montana, that there would be transmission lines of the nature with relationship to Colstrip 3 and 4 that far north. If so, the corridor where the railroad and Highway 2 is, skirting the southern boundary of Glacier Park, can provide that corridor.

I realize the Forest Service has a rationale for saying if it were ever necessary it might be better environmentally to go across the wilderness area at Dirty Face Creek. But it would just split the wilderness area. That chunk would be wilderness, that narrow neck, and the other part would be wilderness.

I know the report says, and I think the Forest Service recommended or wrote that part, I read some of the documents you have sent up here, Chief, and if necessary the President can make that recommendation for a transmission line through any part of this area so far.

Mr. McGUIRE. That is right, Mr. Chairman. Also, it is uncertain whether a utility corridor would be needed for the transmission of power via a electric transmission line, or a coal slurry pipeline, or some other form.

Senator MELCHER. It could be other reasons for right-of-way.

Mr. McGUIRE. That is right.

Senator MELCHER. I think in all likelihood whatever will be asked of the Forest Service in this area for a new right-of-way will be a long time, too. In that regard, I have a concern. You recall in the Forest Management Act of 1976 we rewrote that right-of-way section, did we not?

Mr. McGUIRE. That was in the Federal Land Policy and Management Act of 1976. Title V of that act covers rights-of-way. We have just issued draft regulations under that new law.

Senator MELCHER. Or did we put that right-of-way correction re-draft in the Public Land Management—

Mr. McGUIRE. That is right, it was in the Federal Land Policy and Management Act of 1976.

Senator MELCHER. I hope we made it very clear there, Chief, that you have to consider esthetic values when granting of rights-of-way.

Mr. McGUIRE. That is right.

Senator MELCHER. I have concern with a few points here. I discussed it yesterday with Mr. Joy. If that boundary is too close to the highway or the railroad, you simply do not have the room to put a transmission line if you have to give a right-of-way in a manner that is esthetically acceptable.

Mr. McGUIRE. I think that is right. I think there would be very substantial tradeoffs, depending, again, on whether the power is moved by a transmission line or some other means.

Senator MELCHER. I know. You are talking about some sort of oil pipeline or gas pipeline. That is different.

Mr. McGUIRE. Exactly. Also you have a problem in that if you put a corridor in this area, it would have to cross numerous drainages. You would have substantial environmental impacts if you want to go that way.

These all have to be taken into account at some future time when proposals become more specific.

Senator MELCHER. I am going to ask Dick Smith, he may be the most familiar with this. Can you visualize along that part where the wilderness gets as close as it does, to Glacier, to Highway 2, how close is it?

Mr. SMITH. Mr. Chairman, the further you go up on the hill the more environmental damage you would do. You would have to get access into the corridor if you were building a transmission tower. Along that highway, where the flat piece of land is in the bottom, some of the transmission line, if built in there, would be visible from the highway. Other parts could be hidden.

If you went further up on the hill, it would all be in view of the highway. That is a very steep hill site.

Senator MELCHER. Why don't you get up by the map?

Mr. SMITH. Mr. Chairman, the most critical section as we viewed it would be right along here, along U.S. Highway 2, from where the Middle Fork enters the Flathead River right here and northeast along here. This is the narrowest part. If you went further back up the hill, it would be in full view of everybody on the highway.

Senator MELCHER. You are speaking of a hill now?

Mr. SMITH. Yes; this is a very steep ridge top that runs along here.

Senator MELCHER. How far back is the ridge top from the road?

Mr. SMITH. About 1 mile.

Senator MELCHER. Aren't you running the wilderness area, isn't that the boundary?

Mr. SMITH. The boundary would be down here closer to the road.

Senator MELCHER. Why?

Mr. SMITH. Visualize in your mind a V shape.

Senator MELCHER. Why would the boundary not be on the ridge top?

Mr. SMITH. That would put it back in here [pointing to map].

Senator MELCHER. I thought you said it was about a mile?

Mr. SMITH. It is.

Senator MELCHER. I do not follow this. Is this your recommendation or did you have that whole chunk out?

Mr. SMITH. This is our recommendation.

Senator MELCHER. Ordinarily you would take a topographical line and follow it in a wilderness area. You are not following the ridge?

Mr. SMITH. Not in that particular piece. There are some wilderness resources in here, high mountain lakes set up there, and trails into the wilderness over there.

Senator MELCHER. Am I missing the point? This is a slope that goes up from the road and you have a lake on that slope?

Mr. SMITH. Certain alpine basins that set in there, Senator, up to the ridge. The lake sets there.

Senator MELCHER. Between the ridge and the road?

Mr. SMITH. Yes. Right along here there are several lakes, right along here.

Senator MELCHER. They are within 1 mile?

Mr. SMITH. Yes.

Senator MELCHER. Where is the closest point, if that map is accurate, of the boundary on that map to Highway 2.

Mr. SMITH. I would say about a quarter of a mile.

Senator MELCHER. Why that close?

Mr. SMITH. We estimated that a quarter of a mile could provide room enough for any utility corridor that would go into there.

Senator MELCHER. What is the topographical feature that you bring it that close to the road?

Mr. SMITH. It is not on a topographical feature there; it is on a legal subdivision. It is on a legally surveyed land.

Senator MELCHER. We go round and round about this on a lot of wilderness areas. Nobody has ever agreed on it. No one policy fits all cases. It is my opinion if you have a topographical boundary, that that is a good reason. A topographical point is a good reason for putting the boundary there, but I have never known any good reason for bringing a wilderness area within one-quarter of a mile of Highway 2.

Mr. SMITH. I think the reason for it was that the lakes are there and the trails provide access into the high mountainous country there.

Senator MELCHER. I have not been on the ground up there and you have, and your opinion carries more weight than mine. We have a railroad there. You have Highway 2. Maybe you want to four-lane it sometime. I am looking in the future. As far as a utility corridor, first of all if you buried a gasline, after the grass grows over it and the trees, you don't have too many trees anyway, that is fine esthetically.

Probably the worst looking thing I can think of is the powerline belt and private utilities all do it the same way—the shortest distance between two points is a straight line—so you find the Forest Service giving them right-of-way on that basis. That is what we are trying to get away from.

I think the Chief interprets that part of the right-of-way the same way I do. You should put it in in such a way that when you end up it does not look too bad.

Mr. McGUIRE. That is right, Mr. Chairman. With the direction Congress has given us and the cooperation of the utilities, we are doing things differently than what we have done in the past.

Senator MELCHER. It is not a question of cooperation. I realize a startling change for both private and public utilities that all of a sudden have to stop figuring their transmission construction costs, maintenance, access roads, on the way they have been doing it for all of these years, but we have got too much of it that we have not controlled, and forest land is something we can definitely control.

I do not mean to be brusque with you. I don't suppose you mean by cooperation—

Mr. McGUIRE. I was looking at a high voltage transmission line in Colorado last week or the week before. We are trying to find ways of cutting down the shine, or gloss on the wires and the towers. We found that we did not have to do much near Denver because air pollution took care of it. But we had to find a chemical, in cooperation with the companies, in which we could dip the metallic parts to make them less reflective than they were in the past. Doing that, the line becomes far less conspicuous.

Senator MELCHER. All right. Enough of that. But it is debatable whether you are too close or not. I think when you come down to one-quarter of a mile, that is too close, in my judgment. You are going to find you will have to get a law passed in Congress to move it back half a mile some time in the future and I do see no particular advantage. There is no wilderness experience being one-quarter of a mile from Highway 2, is there?

Mr. McGUIRE. It is a matter of judgment, Mr. Chairman.

Senator MELCHER. I think your wilderness experience starts further away from Highway 2 than that.

Mr. McGUIRE. That is true. We picked an arbitrary distance. There is not a good topographic boundary. If you go up to the ridge top you get quite a ways away, if you go west. We did not see that as being necessarily better.

Most of the time we try to choose a topographical boundary better than this one, but in this case we did not think the tradeoffs warranted it.

Senator MELCHER. The best map I have got—and if you have a better one you can show me—I see a lake called Basin.

Mr. SMITH. That is called Devil's Creek.

Senator MELCHER. I see Devil's Hump, Devil's Creek, and Basin.

Mr. SMITH. That is Tranquil Basin.

Senator MELCHER. There is more lakes between there and Highway 2?

Mr. SMITH. Tranquil Basin is the main lake.

Senator MELCHER. Tranquil Basin, if this map is correct, is within 1½ miles, perhaps 1 mile, from Highway 2. That is what you are referring to?

Mr. SMITH. That is correct. Those lakes face into Bear Creek.

Senator MELCHER. Doesn't a transmission line blend better aesthetically between the bottom, using this as an example, between where Highway 2 is on the level part and the ridge, somewhere inbetween there?

Mr. McGUIRE. Again, it depends on the topography. A number of things intercept it. It also depends on how much right-of-way clearing has to be done. A lot can be done without much clearing as done in a typical right-of-way in the past.

Senator MELCHER. You are constrained by law how much right-of-way you can give.

Mr. McGUIRE. I am talking about clearing of vegetation between towers.

Senator MELCHER. You mean following the line?

Mr. McGUIRE. Yes; whether you have to cut a swath through the trees or not.

Senator MELCHER. I wish you wouldn't use that term. How high do these towers have to be?

Mr. McGUIRE. I think it varies with the topography and the voltage.

Senator MELCHER. Let's take a big line.

Mr. McGUIRE. About 200 feet.

Senator MELCHER. You are showing the biggest tower configuration, 1,100 kilowatt per alternate current, 225 feet.

Mr. McGUIRE. That is right. Those down on the flatter area may, in many places, not be visible above the trees.

Senator MELCHER. I see. On this particular structure it is 4½ per mile. Well, it surely is better looking if it is not on the top of the ridge.

Mr. McGUIRE. That is our feeling, Mr. Chairman.

Senator MELCHER. I think there are a lot of reasons to get away from Highway 2 and the railroad, safety reasons. I do not see any likelihood of that happening in that particular corridor from anything that we can anticipate in Montana, looking down the road 10 years.

Mr. McGUIRE. We do not see anything.

Senator MELCHER. I guess enough on that, Chief. We may want to talk a little further today about specific points.

Mr. McGUIRE. We will be glad to do that, Mr. Chairman.

Senator MELCHER. I would only say the language that is in the report from my point of view, while it is part of the act and we checked it out rather thoroughly yesterday, I would think Congress would retain a direct interest in any utility corridor that was established in a wilderness area, especially transmission lines.

It would be the first time and I think we will probably put up an argument for it, but Congress would want to be in on this prior to any decision.

Mr. McGUIRE. We have no objection to that position at all, sir.

Senator MELCHER. Your testimony is supportive of the House exclusions. There are 2 the House added, 6,300 acre and 3,000. You are testifying you have no objection to that?

Mr. McGUIRE. That is correct, Mr. Chairman.

Senator MELCHER. Those House deletions, did they get rid of the private land?

Mr. McGUIRE. There are still 29 acres of private land and 2 patented mining claims.

Mr. JOY. That has been excluded too.

Senator MELCHER. Everything is excluded then?

Mr. JOY. Yes, sir.

Senator MELCHER. Then that is taken care of by the House deletions?

Mr. JOY. Yes.

Senator MELCHER. There has been a lot of discussion in general of the overthrust belt for potential oil and gas. This is part of the USGS that the person here today will discuss with us. I don't think I have any more questions at this time, Chief.

Of course, we will hear from other witnesses and we may have some questions.

Mr. McGUIRE. We will be glad to stay, Mr. Chairman.

Senator MELCHER. Mel Mudge is not one of our witnesses but we would like to ask him to come forward.

The USGS report on this, if my memory is right on this, is good potential for gas primarily?

Mr. MUDGE. Yes; that is correct.

Senator MELCHER. You base that on geological structures?

Mr. MUDGE. We base that on geologic studies in the area and comparing it with Alberta, Canada, where there are numerous gasfields.

Senator MELCHER. Just looking at the geology of it, or did you file one of those finders?

Mr. MUDGE. Most of it is fieldwork on the ground. We did take samples in which we analyzed for their potential, of the shales as being potential source for hydrocarbons and we examined the rocks to see if they were of potential. We studied structures on the surface but we were unable to study the structures in the subsurface. That requires seismic work beyond our scope.

Senator MELCHER. Whatever samples you take are really not any depth at all? You don't drill much?

Mr. MUDGE. No. These are surface samples.

Senator MELCHER. How does it rate in comparison to other forest land in the area?

Mr. MUDGE. The overthrust belt as it is referred to covers all of the forest land. Actually, you draw an arbitrary western boundary and this is very arbitrary coming down through here. All of this area has a very good potential for hydrocarbons, mainly natural gas.

Senator MELCHER. When you say overthrust belt, I have no knowledge at all, personal knowledge at all, in this field, and I have asked some people who do have some practical knowledge what is an overthrust belt. Every time I ask what is the overthrust belt, I get a different definition. The one I hear most commonly is you are usually referring not going clear up to the divide, they are referring to some of those first hills.

Mr. MUDGE. That was the definition originally defined by Eugene Stubbs in 1970. He had worked only the plains east of the mountains and he called this the disturbed belt. Subsequently, we studied all of the area west of that clear over to the Swan Valley. We found the disturbed belt is based on the definition of thrust, altered and folded rocks and those do extend clear back. Even actually all of the area here is in a thrust plate and has been translated eastward by thrusting.

Some people would carry the definition further west.

Senator MELCHER. To lower elevations?

Mr. MUDGE. Based on the definition of being involved in thrusting and folding. The original definition covered only this area.

Senator MELCHER. In your view, then, the definition is somewhat broadened?

Mr. MUDGE. By our additional studies since 1970.

Senator MELCHER. How high does it go up across the divide?

Mr. MUDGE. It goes across the whole area.

Senator MELCHER. There was some production east of the Bob Marshall. I think the report says it was drilled and found gas—and capped. Five wells.

Mr. MUDGE. That is correct.

Senator MELCHER. The report also said it was not economical, with only five wells, to produce or have potential production of some 5 or 6 million cubic feet.

Mr. MUDGE. 6.3 million.

Senator MELCHER. 6.3 million cubic feet a day. How was that based?

Mr. MUDGE. An actual test they made at the time, in the early fifties, on the wells.

Senator MELCHER. What happened to those wells? Those would be economically feasible now, wouldn't they?

Mr. MUDGE. They would be if there was a pipeline to there.

Senator MELCHER. The question is gathering it.

Mr. MUDGE. That is right. Those are capped. We don't know if they have been shut in, capped, or plugged.

Senator MELCHER. It is all the same as far as I am concerned. But you mean by plugged—

Mr. MUDGE. They would have to redrill the hole.

Senator MELCHER. If it is capped, they left the cap in place?

Mr. MUDGE. Yes.

Senator MELCHER. Who owns it?

Mr. MUDGE. I am not sure whether the original companies have those leases. I know the area has been leased but I am not sure who has those leases.

Senator MELCHER. Do we have that information? Are those wells owned by somebody? They are on Forest land?

Mr. McGUIRE. One is on Forest land, Mr. Chairman.

Senator MELCHER. I see. The other four are on private or State land?

Mr. MUDGE. That is right. Private.

Senator MELCHER. You don't know whether that one on private land is owned by—whether the one on Forest land is owned by somebody? What would constitute ownership, keeping the lease renewed?

Mr. McGUIRE. That is the way we work, yes. It probably has an expiration date on it. We can provide that information on the one well, Mr. Chairman.

Senator MELCHER. Our information shows Northern Natural Gas had Blackleaf Federal B, Northern Natural Gas had Blackleaf Federal A. When they used the word Federal, I don't know whether that means they are on Forest land or not.

Mr. MUDGE. We could supply that information for you.

Senator MELCHER. The process of keeping ownership would just be renewing the lease, would it not? That is all that is involved?

Mr. MUDGE. Yes.

Senator MELCHER. What is the best portion of this area we are talking about today? I don't mean necessarily in the area but around the area. What is the best potential?

Mr. MUDGE. Basically, sir, this area right through here would be the best potential.

Senator MELCHER. I mean around the area.

Mr. MUDGE. Outside as well?

Senator MELCHER. East side, the west side, whatever.

Mr. MUDGE. The east side, there has been a number of test wells there but they have been dry holes. This area all through here has never been tested. Our geological data indicates there actually is an area in here that has very favorable source rocks as well as revenue rocks.

Senator MELCHER. One of these wells costs several million dollars, going several thousand feet.

Mr. MUDGE. Going as deep as 12,000.

Senator MELCHER. What are the depths of those wells going east there?

Mr. MUDGE. I am estimating 5,000 to 10,000–11,000.

Senator MELCHER. Those five varied, if this information is accurate, in the 2,000–3,000-foot up to 9,000. Is that typical of this area?

Mr. MUDGE. The structures in Blackleaf Canyon where the three wells are and are analogous to those that produce large amounts of natural gas in Alberta, Canada. The structure east of the other two are similar type structure, only smaller.

Senator MELCHER. Thank you very much, Mel. We might have further questions. I hope you can stay.

[The prepared statement of Mr. McGuire follows:]

STATEMENT OF JOHN R. McGUIRE, CHIEF, FOREST SERVICE, DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the committee, I am pleased to testify today on S. 3429 which is identical to the Administration's proposal of August 11, 1978, for designation of a Great Bear Wilderness and expansion of the existing Bob

Marshall Wilderness, both of which are in Montana. I will comment also on H.R. 13972 as just passed by the House to designate a Great Bear Wilderness of 290,571 acres and an addition to the Bob Marshall Wilderness of 60,000 acres.

The Act of October 19, 1976 (90 Stat. 2633) directed the Secretary of Agriculture to reviews as to its suitability for preservation as wilderness, a proposed Great Bear Wilderness consisting of 393,000 acres. It also directed the Secretary to determine whether a utility corridor within or contiguous to the study area is necessary and if such corridor is necessary, to identify potential corridor routes.

We recommended designation of a Great Bear Wilderness of 293,571 acres on the Flathead National Forest and an addition to the existing Bob Marshall Wilderness of 66,300 acres on the Lewis and Clark National Forest. This would represent a total addition to the National Wilderness Preservation System of 359,871 acres. The study determined that 26,660 acres are not suitable for wilderness and that a utility corridor through the proposed wilderness should not be recommended at this time.

The Great Bear Wilderness Study Area, was determined actually to contain 371,160 acres. In addition, 15,400 acres of contiguous, undeveloped areas were also reviewed, making a total study area of 386,560 acres. The study area lies astride the Continental Divide. It adjoins the north and east boundaries of the Bob Marshall Wilderness (949,356 acres). The Glacier National Park, containing a proposed wilderness of 928,000 acres, lies just to the north, across a developed transportation corridor.

The study area is characterized by high, rugged topography and a primitive environment essentially devoid of man's influence. A wide variety of fish and wildlife, including the threatened grizzly bear and endangered Northern Rocky Mountain wolf, are present. The Middle Fork Flathead River, a designated Wild and Scenic River, flows through the area. Due to the high elevation and history of fire occurrence, much of the area is not forested or contains non-timber producing forest land. The 120,460 acres of timber producing forest land contains about 480,664,000 board feet of mature merchantable sawtimber, and pole-size timber, mainly lodgepole pine, which if harvested over the next 40 years, as planned for similar regulated forests in the Flathead National Forest, could yield as much as 12 million board feet of timber annually. Subsequent potential annual yield on this land if managed intensively, could increase to about 18 million board feet. This forest land has been in a "deferred" status since 1970 pending consideration for wilderness and wild and scenic river designations.

The U.S. Geological Survey and the Bureau of Mines, in the Department of the Interior, have conducted field studies and written two reports about the minerals, gas, and oil potential of the study area. There is a moderate potential for copper and silver along the western boundary. The study area appears to have a good potential for discovery of natural gas and a lesser potential for oil. However, without seismic surveys and possibly drill holes, the real potential is unknown. The Administration concludes that the wilderness values outweigh the gas and oil potentials at this time, and should be given the priority.

The need for future east-west utility corridors from eastern Montana and Wyoming to the Pacific Northwest is recognized, but feasibility studies of alternative routes have not yet been made. There are so many uncertainties associated with such a corridor that no logical direction is apparent for the relatively small portion (5 percent of a total length of 900 miles) that might possibly pass through or near the study area. Nevertheless, the Forest Service and Bonneville Power Administration jointly reviewed one alternative corridor through the study area and one that would circumvent the study area. It was concluded that until more is known about the specific requirements and feasibility of a utility corridor there is insufficient justification at this time for excluding any part of the study area for such use. This view was strongly supported by public response and by the Montana Department of Natural Resources. Furthermore, if at any future time the President should determine it to be in the public interest to establish a power transmission corridor in the Great Bear Wilderness, such a corridor could be permitted under the provisions of Section 4(d)(4) of the Wilderness Act.

We had recommended exclusion of 26,660 acres. Of this, 440 acres reflect the impact of timber harvest and access activity. Another 22,720 acres contain numerous, small exclusion defined for better wilderness boundary identification as indicated on the map and in the attached supplement. One area of 3,500 acres was recommended for exclusion because of a conflict with avalanche control activities at the Teton Pass Ski Area.

On Tuesday October 3, the House of Representatives added a 3,000 acre exclusion along the western boundary, in the Mt. Baptiste area, for mineral values (copper and silver) and a 6,300 acre exclusion for snowmobile use west of Teton Pass Ski area. We would have no objection to these further exclusions. We do concur, therefore, with the House enactment of a Great Bear Wilderness of 290,571 acres and an addition to the Bob Marshall Wilderness of 60,000 acres.

The major costs associated with our recommendation are in values foregone, such as possible timber harvest, natural gas exploration and development, and mechanized recreational opportunities. All lands in the proposed wilderness are federally-owned except for 29 acres of private land in two patented mining claims which are no longer active. Acquisition by purchase or exchange may prove desirable.

The proposed Great Bear Wilderness and the addition to the Bob Marshall Wilderness meet the test of suitability, availability, need, and manageability for such designation. Their suitability for wilderness is comparable to that of the well-known Bob Marshall and Selway-Bitterroot Wildernesses. They will be valuable additions to the National Wilderness Preservation System.

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

Senator MELCHER We will have a panel for our next witnesses, all from Montana. Bill Bishop, Arnold Bolle, Ben Van Sant, and Don Marble. I want to encourage all of you to tell us whether you want to read your statement or submit it and summarize.

STATEMENT OF C. A. (BILL) BISHOP, VICE PRESIDENT, MONTANA WILDERNESS ASSOCIATION, ON BEHALF OF THE CITIZENS FOR THE GREAT BEAR WILDERNESS, POLSON, MONT.

Mr. BISHOP. My statement is very short. I am Bill Bishop from Polson, Mont. I am the spokesman for the Citizens for the Great Bear Wilderness, an organization headquartered in Bigfork, Mont., and working for the designation of the area surrounding the middle fork of the Flathead River as wilderness. In private life I am a small businessman, an insurance agent, who has to meet a payroll and therefore I think I have a sympathy and understanding of some of the problems. In addition to being a founding member of the Citizens for the Great Bear Wilderness, I am currently a vice president of the Montana Wilderness Association, and at the same time the vice president of our local chamber of commerce. Although this seems odd—and in fact hilarious to some of my friends in both groups—I do not believe the two positions are mutually exclusive, and I am firmly convinced that society's generally accepted goal of improving the quality of life can be and is effectively pursued by thinking people in both types of organizations.

As K. Ross Toole said in his statement of support: "I need not describe the Great Bear Wilderness to you." I have personally ridden and hiked through its magnificence. Its beauty and critical ecological significance have been attested to by experts, of which I certainly am not one. In addition, thorough study by the Forest Service has determined that high logging and road costs and unstable soil make timber harvest difficult and impractical, that the formerly proposed utility corridor can be provided for by the President, if and when the need arises, and that the speculative oil and gas potential in the area is outweighed by its clearly apparent wilderness values, especially since "the Great Bear is only one small segment of the 600-mile long overthrust belt."

So the main areas of concern have been addressed and answered, and we are pleased that the long and democratic process seems to be coming to an end with a House bill that passed unanimously and the opportunity here today to join together in support of S. 3429.

And this proposal is one on which many divergent factions can and do agree. First, the Forest Service, with which we seldom fully agree, has achieved what the Kalispell Interlake called in its landmark endorsement a "masterpiece of compromise." The interlake, in the heart of timber country, does not endorse wilderness very often.

More predictably, the Missoulian and the Great Falls Tribune, the other papers close to the scene, have come out strongly for the bill. Other gratifying expressions of support include the statement by Representative Marlenee that he "fully supports" the legislation. Although I think he initially approached the proposal with some misgivings, he studied it thoroughly and was present with us at Choteau, Mont., last month when the House Subcommittee on Indian Affairs and Public Lands held a hearing at which well over three-quarters of the people supported the administration proposal. Again, perhaps more predictably, Representative Baucus has repeatedly stated his support for the Great Bear Wilderness.

And, of course, the Forest Service has indicated that it has received overwhelming public support for its proposal.

Frankly, with the weight of such evidence and support, we felt the bill would be quickly passed and we were surprised when we were notified of this hearing. But we are deeply committed to this issue and have come, at considerable personal expense, to again urge you to pass as expeditiously as possible and without entangling amendments, the bill which we are considering here today.

Thank you for the opportunity to testify.

Senator MELCHER. Thank you, Bill.

Mr. Marble?

STATEMENT OF DONALD R. MARBLE, ATTORNEY, CHESTER, MONT.

Mr. MARBLE. My name is Donald R. Marble. I reside in Chester, Mont., which is a small town located on the high prairie approximately 110 miles to the east of the Great Bear Wilderness area. I am here to present my support for the administration's proposed Great Bear Wilderness as presented in H.R. 13972 and S. 3429.

I am the local county attorney and engaged in the private practice of law in that area.

My family and I live in the area just to the east of the proposed wilderness area and have done so for many years. We are familiar with the area and the areas surrounding it. On a clear day, we can see the Great Bear Wilderness area 110 miles to the west over the prairie. We have a great interest in the area.

For over 10 years I have been involved in protecting this area and have come to fear the great pressures that have or soon will be presented for development of the area. I was privileged to testify for the study bill in Washington a few years ago and am pleased that we now will have an opportunity to finally enact the laws to protect this area for the future.

There are many good reasons to protect this area by including it in the National Wilderness System. The most obvious reason is to pro-

tect the area from the onslaught of helter-skelter development that is engulfing our beautiful State. Another very good reason to establish a perpetual monument to our beloved Senator Lee Metcalf, who devoted himself to the protection of this area.

Support is very strong in Montana to establish the Great Bear Wilderness as a tribute to the late Lee Metcalf and to do it this year by this Congress.

There is no reason to not establish the Great Bear as an addition to the National Wilderness System. Oil and gas development which is a very speculative matter is not now practical from an environmental damage standpoint. Drilling to test for the presence of oil or gas using present techniques will cause unacceptable damage to this pristine area. If development were to ever come to Great Bear, it should be in the future when technology can guarantee no adverse effects on the pristine character of the area.

Such development is not now reasonable since there are large areas still to be explored and developed on the surrounding prairies by our local oil and gas people. Development in the Great Bear would be extremely expensive and could only be done by large out-of-State interests or multinational interests. Our local people would not benefit from development of oil and gas in the Great Bear.

The oil and gas resources, if any, will not spoil, and will only get better with age. Congress could allow oil and gas exploration later if that were deemed necessary in the best interests of the Nation. Drilling in the overthrust is a very expensive proposition. The American Quasar test in the Beaverhead area of Montana was very expensive, about \$750,000 as reported in the November 17, 1977, issue of the Montana Oil Journal. As the Journal said: "The current venture proves again that drilling in the overthrust * * * is no place for the faint of heart." They said this was the most expensive dry hole in the history of Montana since it only went about 2,000 feet, as I recall. This is quite true when you realize that the cost to the casing point of a test well out on our prairie would be about \$40,000 to \$60,000 if done by an independent operator, less than one-tenth the cost.

Obviously, only the very big outfits can afford these costs. At the House field hearing in Montana recently, Don Allen, of the Montana Petroleum Association, estimated drilling costs of \$1.5 million in the Great Bear—20 times the cost of drilling a test hole on the prairie.

From what I can determine, area 3 of the Great Bear—the only area which is considered to have some potential—has been subjected to filing for oil and gas leases by Gulf Oil Corp. Gulf is certainly not one of our local independent operators and as I recall is heavily involved on a multinational basis. My point is that opening up area 3 to oil and gas development will provide little or no help to our local citizens and operators.

Another point bears mentioning. Area 3 comprises an area of only about 15 miles north and south of an overthrust area from the Canadian border south over 600 miles, a very small part of the total overthrust—about 2 percent of the overthrust, really.

Further, the overthrust area spreads out on the prairie to the east. Drilling in this overthrust area could perhaps be carried on to the east on the prairie. The administration concluded correctly that the rec-

reational and wilderness values outweighed the oil and gas argument. There is plenty of overthrust for the majors to drill in.

Please enact the Great Bear this year. Do it now as a lasting tribute by the 95th Congress to our own Senator Lee Metcalf. As Representative Marlence stated, the protection of the Great Bear: "Will also provide lasting tribute to the memory of the late Senator Lee Metcalf, who conceived this legislation and fought so hard to preserve this great natural wonder of Montana."

I have a few extra comments. One thing about the corridor along U.S. 2 to the south, I travel that road quite a bit, I can guarantee to you one-half mile or one-quarter mile horizontal distance encompasses a tremendous surface area because it is so rugged and steep. I think the border running as close as one-quarter mile to U.S. 2 is reasonable and necessary when you consider the rough and rugged terrain of the area. A quarter-mile horizontal distance is a lot of land up in that country.

I also wanted to make some comments on Spanish Peaks, Senator.

Senator MELCHER. Don, I will ask for clarification, but I think the measurement is on the ground. How is it, Chief?

Mr. McGUIRE. It is like laying a grid over the map. As the witness says, it is steep country. You may have much more area involved than the horizontal measurements but the surveyors go horizontally.

Senator MELCHER. Has there been footage spots, do you know what we are talking about in feet, Dick?

Mr. SMITH. No; we haven't done that.

Mr. MARBLE. Senator, I do have some comments on the Spanish Peaks. I don't know if you are interested in those.

Senator MELCHER. Sure.

Mr. MARBLE. As with Donna Metcalf, I am really not sure whether Spanish Peaks has anything to do with Great Bear. When I came back, I was prepared to speak on Great Bear but I did check into Spanish Peaks a little bit with the Montana Wilderness Association who I am here to represent.

I noticed there was some publicity that maybe it would be part of the Great Bear, but I don't know. I hope not. As far as I can determine, Spanish Peaks is a primitive area of about 9,000 acres alined in a massive range. Because of the lack of time to investigate this, I could not come up with better figures but as far as I could determine there is no Spanish Peaks House bill or congressional hearings. There is some litigation involved in the area, I understand, involved in the powerlines, not in Spanish Peaks but part of the area we are interested in.

So the area, I don't mean just Spanish Peaks, but the total de facto wilderness area being studied under S. 393. It is not timely to pass or consider Spanish Peaks area by itself now until the total area has been studied, until there have been field hearings in Montana on the matter. We think any action now just on Spanish Peaks would be inappropriate. We vigorously oppose action now in the Spanish Peaks only since it is contiguous with the much larger area being studied.

As I said, we hope the Spanish Peaks matter will not be attached to Great Bear. We are afraid that would impede passage of the Great Bear proposal. That is why we are here today.

Senator MELCHER. On Spanish Peaks, we have the administration recommendation going back several administrations. They may want

to modify that later on today. Later on today we will want to ask them if there have been any modifications. There are none to my knowledge. The only active proposal I know on Spanish Peaks is a bill I introduced last summer, year ago last summer. The Presidential recommendation was 10,000 or 15,000 acres. The Forest Service agreed it belonged in there. It is greater than what the previous position had been.

It is something the Montana Wilderness Association has testified on also. Their testimony at that time, in April 1977, April or May, in Bozeman, was to the effect they would like to include Jack Creek along with that, and there was Senator Metcalf's Spanish Peaks bill which did include a large portion of Jack Creek.

It is not something that has not been looked at quite a bit. It has been looked at for a long time but constantly shoved aside. A little later on we will be getting back to the Forest Service on some things connected with that, on Jack Creek and the proposal for Spanish Peaks which is a primitive area. Not all of it, but most of it.

Mr. Bolle.

STATEMENT OF ARNOLD BOLLE, MISSOULA, MONT.

Mr. BOLLE. My name is Arnold Bolle from Missoula, Mont. As of July 1, I am retired, a private citizen again. I have been with the school of forestry for 23 years, 11 of them as dean.

I am familiar with the Great Bear area. I have been in there a number of times. I have lived in many other wilderness areas, too. I am concerned with the health of the timber industry in the State of Montana. I will also be interested in the proper allocation of lands. I have had an opportunity to study the Forest Service proposal and maintaining the the area as planned.

My statement is in longhand. I did not have an opportunity to have it reproduced.

Senator MELCHER. I am sorry to interrupt you. It will be necessary for the full committee to take some action at this time. So we will suspend the hearing at this point, probably for 20 minutes or so.

[Short recess.]

Senator MELCHER. The subcommittee will come to order and we will resume the hearing. I might say I am sorry about the interruption but it was unavoidable, and there may be a further interruption for a vote later on. But we will try, if you are willing, to go right forward and complete the hearing with the other witnesses.

Mr. BOLLE. I want to say I have studied the proposal. I am in agreement with it. I will make just a few points I think are significant to emphasize a few things. The fact the area qualifies as wilderness and the best evidence of that is that it has been wilderness since its inception and in fact has remained a wilderness. There has been no commodity interest or value enough to develop it. The Forest Service has administered it since its inception, for 70 years or so.

It was available therefore. It is thoroughly feasible to be administered and has been administered so designation as wilderness would make very little difference in cost of management of operations. But any change of these would commit the Government to increase costs of administration.

I would also like to say a little about the timber in the area. There has been some timber harvesting up on the upper edges. The Forest Service in its statement says the amount of allowable cut that would be affected is approximately 8.7 million board feet. But then it says: "If accessible", which there are some real questions about. The other is "if economically feasible". I would like to elaborate on that a little bit.

As far as accessibility, this is a very high-cost area. It is far from building centers. The further they go over the ridge, the more cost there will be there. There is another reason for high cost. That is it is a very critical area. I would like to point out in 1974 I was in charge of a study for the Environmental Protection Agency on the possible effects of nonpoint pollution and in this report we concluded the Forest Service—the effect of the harvest using traditional methods caused considerable erosion into the Morrison Creek and into the Middle Fork. As a result of the system, the sale had to be canceled and the system considerably modified, particularly some of the harvesting could not use roads and helicopter logging was recommended.

In order to justify this, the stumpage cost had to be considerably reduced. The point is, there is every reason to question the economic feasibility of timber harvesting in this area and that very likely this would consist of deficit sales where the Government would have to pay, it would cost the Government more than it would get out of the timber.

At the RARE II conference in Missoula in August, Howard York, who presented the administration's viewpoint on the separation or allocation under RARE II, made the point since we are not interested in spending more of the taxpayers' money on public land than will be returned, some areas now designated as commercial timber very likely are among those that have the lowest return related to cost.

Then, in response to a question, he said the point has been made if you spend more than you return, that has to be inflationary. He was concerned more area be made available for timber harvest as a result of the RARE II process, but also that this be done at a net profit to the Government because at cost it would defeat the purpose.

The real question of economic feasibility here has not been answered, and I think there is every reason to consider it, that this would be sold at a loss. The point here, while it may be perfectly justifiable in some areas, additional values are received from this kind of subsidy, then this may be justified. But in this area it would be subsidizing the timber industry that was going at a net loss and at the same time losing important wilderness values which this area has.

Therefore, I think the present boundary of the Forest Service has set it up, has been on this critical area 3. There is another concern I have in this area and that is because of these facts that nontraditional methods have to be used, high-cost systems, that this is a high-cost supply area. This is marginal or submarginal area. It might be in the immediate past price of timber which was the highest on record, that high harvesting costs could be accommodated.

But I say when the prices are normalized—and they are beginning to do so now—this would be a real handicap to the timber industry to try to operate under these high-cost supply areas. We are somewhat marginal in the competition now. I think expanding these marginal areas could result in some serious closures of industry in the future.

I support the Forest Service position on elimination of the corridor. I think the concern of gas and oil has been well covered. The fact is these areas are not locked up forever.

As national need arises, Congress can reconsider these areas because it is axiomatic that no Congress can obligate another and the decision can then be made to meet national need. This trea has been under study for a long time. I have been involved in it for a number of years myself. I think it is a critical area to be resolved. I think all interests have had a chance to be heard. I think the study analysis and review of the Forest Service has been very thoughtfully and very well done considering all angles very thoroughly. I certainly hope action will be taken to pass this bill in this session.

Just one word on Spanish Peaks. I did not have a chance really to look into it. I think it is important this not be considered at this time because there has been no chance, no advance warning, no notice to prepare. It is very difficult to do. I know this also has been under consideration for a long time and there is a great concern about the timber. I think there are some means of handling this. There are a number of things under way. RARE II is considering some of the area. S. 1392 is considering other parts of the range. Burlington Northern are in the process of considering 177,000 acres of land exchange.

Senator MELCHER. How many acres?

Mr. BOLLE. 177,000, is that right?

Senataor MELCHER. I do not know. We will ask the Forest Service.

Mr. BOLLE. I have that figure. I got it from a news release, I think. But the area is well protected under primitive area status now. I think considering it now might delay action on the Great Bear.

Senator MELCHER. Thank you.

Mr. Van Sant.

STATEMENT OF BEN VAN SANT, JR., FORMER RESIDENT OF ESSEX, MONT.

Mr. VAN SANT. Senator Melcher, my name is Ben Van Sant, Jr., a former resident of the Flathead Valley currently living in Washington, D.C. Thank you for the opportunity to speak at this hearing. This testimony is my own. I do not represent any wilderness or environmental group. I come before you today as a concerned citizen of Montana. I do believe, however, that my opinions and conclusions on the Great Bear Wilderness Areas are shared by thousands of Montanans who realize the tremendous value of the proposed Great Bear Wilderness area.

I have submitted (1) a copy of a short "fairy tale" dealing with the plight of the State of Montana and her natural resources, and (2) the lyrics of a song, written by a resident of Alaska, on the difficulty in expressing to people not familiar with the West the feeling of living and working out West, and (3) a copy of the preamble and article IX from the Montana State Constitution, adopted in 1972.

I lived in Essex, Mont., a small town sandwiched in between Glacier National Park and the proposed Great Bear Wilderness, from December 1975 until March 1976 as an employee of the Izaak Walton Inn. During this 2½ month period, I skied and worked just about every day in the shadow of some of the peaks included in the proposed wilderness. It was during my stay in Essex that I first learned of the Great Bear.

In the winter and spring of 1977, I attended meetings of the Montana Wilderness Association concerning the proposed wilderness. As a member of MWA, I attended a Forest Service workshop in Kalispell, Mont., in February 1977. Besides our group, there were representatives of the lumber companies, the oil companies, the natural gas companies, Montana Power, the Bonneville Power Administration, snowmobiling clubs, and various individuals who were concerned about the Federal Government "locking up" yet another chunk of lumber-rich, mineral-rich land.

In July of this year, I began visiting the offices of Montana's congressional delegation to find out the status of the Great Bear proposal. Since July, I have tried to educate myself on the issues concerning the Great Bear—that is, the feasibility of a power corridor through the area, the potential harvest, the oil and natural gas potentials, et cetera.

After many hours of research, I came away with the belief that there is no reason why the proposed Great Bear Wilderness of 359,817 acres should not become the Great Bear Wilderness, established 1978.

On Tuesday of this week, the House of Representatives passed H.R. 13972 to designate the Great Bear Wilderness—Flat head and Lewis and Clark National Forests—and enlarge the Bob Marshall Wilderness. The bill was passed by unanimous consent, under a suspension of the rules, at the request of Representative Teno Roncalio of Wyoming.

I hope that your subcommittee recognizes the 2 years of hard work conducted by the Forest Service under the Great Bear Study Act of 1976, the efforts of the late Senator Lee Metcalf, Representative Max Baucus, Representative Ron Marlenee, and Representative Roncalio to establish the Great Bear Wilderness.

Addressing myself to the question of the suitability of area 3 as wilderness, I would like to quote from the remarks of Representative Baucus as recorded in the Congressional Record of October 3, 1978, page H-11397.

A request to leave the area unclassified to permit oil and gas exploration seems unnecessary. The Great Bear area is only a small part—a pinhead on the map—of the entire overthrust currently being explored. There is ample opportunity to test the area's potential as an oil and gas producer outside the boundaries of this wilderness proposal. There is no need, either, to exclude lands north of the Middle Fork River in the Schafer Meadows area because of a wilderness airstrip there. The Wilderness Act provides for the inclusion of pre-established uses of this type. The use of the airstrip for its present purposes should be continued.

I have had a unique perspective on this legislation. I would like at this time to thank Senator Melcher for his diligent efforts to study the Great Bear before the Senate Energy and Natural Resources Committee. Unlike a lot of Montana politicians who have been quick to jump on the wilderness bandwagon, he has taken a more considered approach on this issue.

Let me urge you to do everything in your power to speed up legislation so I can go back to Montana and go hunting in Great Bear Wilderness.

In closing, I would like to thank the many people who work here on Capitol Hill, House and Senate Members, and their staffs, for helping me sit before this committee today and be able to speak out with a degree of familiarity with the issues surrounding the proposed Great

Bear Wilderness. But the most important person to me is Mr. Sid Goodrich of Essex, my former employer, who through his Izaak Walton Inn, brought together many people from all over Montana in support of the Great Bear.

Thank you for hearing my testimony.

[The documents follow:]

"CONVERSATION BY THE POND"

(A modern day fairy tale written by Ben Van Sant, Jr.)

SETTING

A small trout pond on a tributary of the Middle Fork of the Flathead river in northwestern Montana.

CAST OF CHARACTERS

Mr. (Sitting) Duck—Montana of today.

Mr. Grizzly Bear—Montana of the future.

Mr. Eagle—U.S. Government.

Vultures—Oil, Gas, & Coal Companies.

Mr. Wolverine—State of Washington.

Mr. Coyote—State of California.

Wolves—Montanans opposed to.

Mr. Elk—State of Colorado.

Mr. Big Horn Sheep—State of Wyoming.

Mr. Otter—State of Idaho.

Mr. Goose—Canada.

The Mighty Hunter—As himself.

Mr. DUCK [looking very dejected]. Well, they got my wife last week.

Mr. GRIZZLY BEAR. Who's 'they'?

Mr. DUCK. Mr. Eagle, caught her by surprise, I guess. She never knew what hit her.

Mr. GRIZZLY BEAR. Damn shame. Those know-it-all eagles. Think they can run everything, don't they?

Mr. DUCK. Yea, but it looks like the vultures had something to do with it.

Mr. GRIZZLY BEAR. 'Zat right? I've heard alot about vultures helping out the eagles, and vice versa. Wing in wing in alot of deals I guess you could say.

Mr. DUCK. Yea, it's been a rough week. On Monday, it was a wolverine tried to do me in. Tuesday, Mr. Coyote thought he had me, but boy, did I fool him (laughs). And as if I didn't have enough troubles, a pack of wolves were after me on Wednesday. Thank goodness my big ol' buddy Mr. Elk was in the neighborhood. I say Mr. Big Horn and Mr. Otter the same day, we all agreed to help each other out when we can. I'm not much on fighting, but I can take care of myself.

Mr. GRIZZLY BEAR. Glad to hear about that. Seems they're coming from all directions these days.

Mr. DUCK. Amen, brother. Mr. Eagle, of all creatures, he used to have some respect in the community.

[At this time Mr. Goose alighted on the pond, to join the conversation.]

Mr. GOOSE. I heard that about Mr. Eagle, he really does talk out of both sides of his beak sometimes.

Mr. DUCK. Amen to that too.

[Now the Mighty Hunter comes stumbling out of the forest, scaring everybody in different directions.]

MIGHTY HUNTER. I coulda swore I saw a duck, a goose, and a big ol' griz' talking down by the pond. What in the world would they have to talk about?

The end

"NIGHT RIDERS LAMENT"

While I was out a-ridin',
that grave yard shift midnight to dawn—

The moon was as bright as a reading light,
for a letter from an old friend back home.

He asked me—

Why do you ride for your money?
Why do you rope for short pay?
You're not going anywhere,
and your losing your share.
You must have gone crazy out there.

(Well, I saw that and I thought—)

Ah, but—

He's never seen the Northern Lights,
Never seen a hawk on the wing,
Never seen the Spring hit the Great Divide
and he's never heard that crazy loon sing.

Well, I read up the last of my letter,
tore the stamp for Black Jim.

When Billy rode up to relieve me,
he just looked at my letter and grinned.

He asked me—

Why do they write for their money?
Why do they work for short pay?
They ain't goin' nowhere
and they're losing their hair,
Man, they all must be crazy back there.

(Well, I listened to Billy and came back to the same conclusion I'd reached
earlier—)

You see, Billy—

They've never seen the Northern Lights,
Never seen a hawk on the wing,
Never seen the Spring hit the Great Divide,
and they've never heard that crazy loon sing.

THE CONSTITUTION OF THE STATE OF MONTANA

(As adopted by the Constitutional convention March 22, 1972 and as ratified
by the people June 6, 1972)

PREAMBLE

We the people of Montana grateful to God for the quiet beauty of our state,
the grandeur of our mountains, the vastness of our rolling plains, and desiring to
improve the quality of life, equality of opportunity, and to secure the blessings
of liberty for this and future generations do ordain and establish this
constitution.

ARTICLE IX.—ENVIRONMENT AND NATURAL RESOURCES

SECTION I. PROTECTION AND IMPROVEMENT.—(1) The state and each person shall
maintain and improve clean and healthful environment in Montana for present
and future generations.

(2) The legislature shall provide for the administration and enforcement
of this duty.

(3) The legislature shall provide adequate remedies for the protection of the
environmental life support system from degradation provide adequate remedies
to prevent unreasonable depletion and degradation of natural resources.

(From Amendments to the Constitution of Montana.)

ARTICLE IX.—ENVIRONMENT AND NATURAL RESOURCES

SECTION II. RECLAMATION.—(1) All lands disturbed by the taking of natural
resources shall be reclaimed. The legislature shall provide effective requirements
and standards for the reclamation of lands disturbed.

(2) The legislature shall provide for a fund, to be known as the resource-indemnity trust of the state of Montana, to be funded by such taxes on the extraction of natural resources as the legislature may from time to time impose for that purpose.

(3) The principal of the resource indemnity trust shall forever remain inviolate in an amount of one hundred million dollars (\$100,000,000), guaranteed by the state against loss or diversion.

Senator MELCHER. Thank you all very much. I have a question to ask each of you. On the snowmobiling in wilderness which in general is prohibited under the terms of the act. This committee has just been involved with several months of consideration of the Alaska Lands bill. In that bill, the snowmobiling and vehicles, whatever types are used, will continue to be used.

I recognize snowmobiles cause a lot of noise and some people do not like them because of that. Do you have other objections or any objections from the noise? I understand the noise.

Mr. VAN SANT. I used to live in Minnesota. They have a lot of snowmobiling out there. I do not like snowmobiles but I know a lot of people who do. One of the things I have heard people do in the snowmobiles is jumping from bar to bar, drinking, parties, snowmobile parties. This is a concern of mine. There are not adequate regulations concerning snowmobile drivers using alcoholic beverages. There have been many serious and fatal accidents in Minnesota.

I am not familiar with Montana's safety record. I know as an employee of the Izaak Walton Inn, we did not cater to snowmobilers. We catered to cross-country skiers, although there were snowmobilers. My feeling is in the Great Bear there is plenty of land, the Middle Fork corridor has already been set aside for snowmobiling.

Any special wording in the Great Bear legislation about snowmobiling would just detract from the bill. The same thing has happened in the wilderness area in Minnesota and is quite a mess.

Mr. BOLLE. I have done quite a bit of snowmobiling myself and cross-country skiing. There is quite a difference between the Alaska situation and ours. In Alaska the snowmobile is largely to replace the dog teams and is a matter of necessity in getting around. I do not think it is that important in wilderness areas. I think very few humans have legitimate business up there. It is largely a matter of pleasure and for that there are many alternative areas. I know the people at Choteau claim it is the only area that has snow—I can't quite visualize that up in that area because there is an awful lot of snow up there all of the time. I would hate to see those concessions made.

I think, too, snowmobiling, as I have seen it, is a fad that seems to be dying out to some extent. I do not think it is used nearly as much as it was 2 or 3 years ago.

Senator MELCHER. It is true snowmobiles in Alaska have replaced dog teams for many people. But the bill we have just passed in our committee does not permit it for necessity, it permits it for anybody, for hunting or for any other purpose.

Mr. BISHOP. I do have a comment, Mr. Chairman, I think one other point is that an area such as Great Bear, the use of snowmobiles does have one other bad effect, and that is potential harassment of winter big game. By virtue of being in steep country, the snowmobiles pretty much have to use valley floors and that is wintering big game country.

In addition to that, it would even be dangerous in some cases, I think—and I do own a snowmobile—to take the machines up higher in the mountains. So essentially the use of snowmobiles is pretty much confined to valley floors. I think there is a great concern for the wintering herds.

Mr. MARBLE. Senator, it is my impression the House bill as passed did exclude some areas on snowmobile concern. I think the problem has been taken into consideration there. Up at Ryan's Pass, a complex of roads called the Skyline Road, it is quite a system of roads used by the snowmobile people. It is not part of the Great Bear but it is right in the area. It gives a good road complex for snowmobilers to use. I do not see any need to allow snowmobiling in the Great Bear. As far as I am concerned, according to reports of the Forest Service, the area is actually used very little for snowmobiling, and there are some snowmobiling right in there, down by U.S. 2, right along U.S. 2.

Senator MELCHER. The snowmobiling people will testify in a little bit, a representative of the Montana Snowmobilers Association. They have provided us ahead of time with the routes they use. The Challenge area, but it also shows going up Morrison Creek to an area that I guess would be Schafer Meadows. The fact is we are going to leave the Schafer Meadows airstrip in there to accommodate that use. So my question really goes to that point. How much traditional use do you want to leave? There was a time when we never permitted snowmobiling in a wilderness area except the Boundary Canoe area in Minnesota which was a special condition on that one when that went into wilderness condition in the original act in 1964. Now it is being rehassled.

We have passed another bill which will limit snowmobiling in Boundary Waters. I do not know if that will be adopted by Congress this session. I think we will find that in the Anderson-Humphrey bill.

I have one more question and this one for you, Arnie. Is the only proper successful method of checking the bark beetle thinning? I am not talking about clearcutting. We don't permit that any more, we hope.

Mr. BOLLE. Yes, it really is. There are no sprays that are permissible.

Senator MELCHER. Is it successful? Like in lodgepole.

Mr. BOLLE. I would say it is questionable to control the disease. Its main purpose is salvage of timber.

Senator MELCHER. The people, for instance, near Missoula, and I have some personal knowledge of that, are getting rid of it they think by thinning. But there is not too much lodgepole in there. It is mostly ponderosa. Is it easier to control by thinning in ponderosa as compared to lodgepole?

Mr. BOLLE. It is very difficult in both. By the time they are shown, recognized, they have gotten in there and left. By the time the tree is dead, by that time it is really too late to capture the beetles. Although it is done, and if it is done in a logical fashion, yes, it can be done. When the trees are first attacked. It takes an expert really to identify it.

Senator MELCHER. There are a lot of people buying those 10-acre plots. Their concern is to control it. They think they are. I am not sure they are or not.

Mr. BOLLE. Most of them are not. They could if they called in an expert in time. Usually they are not aware of it until it is too late. We are called in for that frequently, our faculty. Usually by the time the landowner notices the infestation, the tree is already gone, died, and the hatched insects have moved on somewhere else.

If they catch it early enough, get to those trees and burn them before the insects submerge again, this can be very involved though and quite expensive.

Senator MELCHER. Is the factor of sunlight significant to the beetle?

Mr. BOLLE. In what way?

Senator MELCHER. The beetle survives if the forest is thinned enough to get some sunlight.

Mr. BOLLE. I don't think it matters much. I have seen them attacked under other conditions. Certainly ponderosa pine—and they are widely spaced in the Sun—and open trees will be attacked.

Senator MELCHER. Is there any way of stopping infestation from spreading from where it is by a well-thinned belt before it has any beetles?

Mr. BOLLE. In my estimation not. I am not an expert in entymology but I have seen those where the infestation is as widespread as it is in the Gallatin, it is usually associated with mature trees that are not able to resist infestation. Or following periods of drought or something that leaves them more susceptible.

Senator MELCHER. Does the western bark beetle, that is the one we are talking about, is that indigenous to the United States?

Mr. BOLLE. Yes.

Senator MELCHER. It is not found in Europe?

Mr. BOLLE. It may be found. But it is indigenous, it is there. There is usually some evidence of it in most mature stands.

Senator MELCHER. In Europe, too?

Mr. BOLLE. I could not tell you about that.

Senator MELCHER. They seem to do a better job of silvaculture there. I don't believe it is such a problem in our State forests.

Mr. BOLLE. Yes, it is. It is more a problem associated with mature forests. One of the reasons may be many of the Federal forests are younger. They keep the rotation period shorter. Most of the damage is in mature forests.

Senator MELCHER. Most to my knowledge is in the Blackfoot area. That has been logged previously. I don't know how far back. But the ponderosa was infested with the beetle, maybe 4 or 5 inches.

Mr. BOLLE. Yes, in stands I have seen this too.

Senator MELCHER. These are in stands—

Mr. BOLLE. Sometimes the Ips beetle, which is caused—in fact, some people cut off the trees and leave the slash line and they breed in the slash and attack live trees. It is a common thing in small areas.

Senator MELCHER. If it isn't burned, they will survive?

Mr. BOLLE. Yes.

Senator MELCHER. Would it be the same in lodgepole?

Mr. BOLLE. Very similar, yes.

Senator MELCHER. The difference is the lodgepole might be more the same age?

Mr. BOLLE. Yes.

Senator MELCHER. Thank you all very much.

Mr. BOLLE. Could I make one statement in connection with the annual allowable cut? The fact of not opening up this area. The same amount of timber I think could be grown if funds were provided for more intensive management on more productive sites closer to hill areas.

This has been mentioned several times before. The President's Panel on Timber and the Environment a few years ago emphasized the point very strongly that we could increase our timber production and a better slice by more intensive management. I think the deficit sale costs to the Government, if turned into this intensive management on productive sites, near the mill centers, I think could make up this deficit pretty readily.

Senator MELCHER. I don't know which President's panel that was, but I appreciate your participating in any current discussion. In our argument with the President, why don't they ask for the money or accept the money and then use it instead of spending quite a bit of time, and I assume money, drawing up reports? They don't have much. They have reduced the area needing replanting and thinning by about half, by pencil, in the last 2 years. We have authorized \$200 million a year and we are trying to appropriate close to that, but we constantly have to exceed the President's budget year after year. And it is not just President Carter; it was President Ford and President Nixon, and then our view, when we approach them, we appropriate the money, why don't you spend it because it is an investment.

Mr. BOLLE. This is an important thing to consider. This investment in production. It would greatly relieve the pressure on trying to bring in marginal or submargin areas.

Senator MELCHER. We agree with you completely. Thank you very much.

Mr. BISHOP. May I pose a question to you? I was interested in the actions of the full committee which was an unexpected bonus of my short trip here today. I will be returning home. With the impending adjournment of Congress, I was wondering, I think it is the sense of the bulk of the people that a bill of some nature should be passed. I was concerned and interested in the methodology that you might propose between now and adjournment to get the legislation passed. It looks like a real difficult problem.

I was wondering how a person goes about getting it done.

Senator MELCHER. I am glad you brought it up. When you go home you are going to be asked that. That is a pertinent question. Will it be passed?

What we would propose to do would be the next meeting of the full committee, that they agree to the bill. We don't think there will be any problem. Then, take it up on the floor at the first opportunity which we have agreed can be almost any day. That can be very fast.

I think one of you mentioned you were surprised there was another hearing. I think Arnie said why do anything on Spanish Peaks. There has not been a House hearing. I am not so sure about that. It seems one time we did have a House hearing. I suppose it was several years ago. I even held one hearing in the field in Bozeman myself 1½ years ago.

The best way to make sure you get things done around here is to have a hearing. That is a big objection for anybody who wants the logic. We

have not held a hearing. I believe this is the only hearing we have held where we have had the Chief, as is customary, present the proposal on behalf of the Forest Service and the administration.

Mr. VAN SANT. Do you know when the next meeting of Senator Jackson's committee will be?

Senator MELCHER. It won't meet again today, I don't think.

Mr. VAN SANT. Sometime next week?

Senator MELCHER. It is subject to call of the Chair and we have several bills we intend to clear yet, which could be tomorrow morning, I am not sure.

Mr. VAN SANT. There will definitely be another meeting before the end of the session of the Congress?

Senator MELCHER. There will be several in my best guess. We do have three or four more bills. This is not the only subject, not just wilderness. There are three or four bills we expect to clear up before we are done and we may find more than that. I cannot tell you at this time when there will be another meeting of the committee, but it could be as early as tomorrow morning.

I don't think we will have one on Saturday. The Senate will meet on Saturday but the committee will not. It will probably be Monday or Tuesday. We want to make sure all of the procedural hurdles have been taken care of.

Thank you all very much.

Senator MELCHER. Mr. Meek?

**STATEMENT OF ROBERT A. MEEK, CONSULTING GEOLOGIST,
BILLINGS, MONT.**

Mr. MEEK. Thank you, Senator. I have a written statement which I submitted for the record, but seeing the interruptions and so forth, if I may, I would like to read my statement to make sure it gets out in front of all of the people who are here today.

Mr. Chairman and members of the committee, thank you for the opportunity to appear before this Senate subcommittee today and explain to you the oil and gas potential of the Great Bear Wilderness area in western Montana, specifically areas 2, 3, and 6.

First allow me to introduce myself and give you a brief résumé of my education and experience.

My name is Robert A. Meek. I was born in Borger, Tex., and raised in Tulsa, Okla. I am a graduate of the University of Oklahoma with B.S. and M.S. degrees in geology. My career as a geologist in the oil and gas industry began in January 1957, when I was employed by Continental Oil Co. My experience with them included exploration and production geologic studies in Kansas, Louisiana, Oklahoma, and Wyoming.

I worked in their Billings, Mont., office from January 1961, to May 1, 1967. Later in May 1967, I moved to Calgary, Alberta, Canada, and joined Hudson's Bay Oil & Gas Co., Ltd. The next 2 years included geological work in the provinces of Western Canada. In May 1969, I returned to Billings, Mont., and joined Oil Resources, Inc., an independent oil and gas company. My 7 years with Oil Resources included work in Wyoming, Montana, Utah, and the provinces of Saskatchewan and Alberta. In July 1976, I became a consulting geolo-

gist. For the past 2 years and at present, I represent the Polumbus Petroleum and W. R. Grace companies as a consulting geologist and manager of the Billings, Mont., office.

I am a member of the Canadian Society of Petroleum Geologists, the Montana Geological Society, the American Association of Petroleum Geologists, and the Independent Petroleum Association of America.

I am a past president of the Montana Geological Society and currently serve as a member of the AAPG Environmental Committee. In 1976, I served as a member of the Natural Gas Steering Committee for the Montana Energy Advisory Council. I am testifying today as a representative of the Montana Petroleum Association, a division of the Rocky Mountain Oil & Gas Association, the Independent Petroleum Association of America, and the Independent Petroleum Association of the Rocky Mountain States.

The Great Bear Wilderness area is in the northern Rocky Mountains in the northern disturbed belt of Montana. It is a small portion of the disturbed belt of Western North America, that extends generally north-south for approximately 4,000 miles. The disturbed belt has been mapped from the northern tip of Alaska southward into Mexico and represents an area of folded and thrust faulted sediments. [See fig. 1.] Geologically, the region is diverse and complex.

The search for, and the discovery of, oil and gas in Montana's disturbed belt has had limited success to date for various reasons. The limited success was gas that was discovered in the 1950's in the Blackleaf Canyon area and southeast of Glacier Park [fig. 2]. These wells were never produced because of the low gas price and lack of a market.

Gas economics, the complex geology, and the inability of seismic techniques available at that time to resolve the geology, discouraged further exploration. It was simply easier to find more economic oil and gas in numerous other areas, both foreign and domestic. Times have changed. The disturbed belt, because of recent significant discoveries of oil and gas to the south in southwestern Wyoming and northeast Utah, is receiving much attention.

New improved seismic techniques that result in better data quality are helping to improve exploration efforts so that the tough oil and gas can be found and produced. Major reserves are being found that justify the high cost and risk.

The discovery well of Pineview Field in 1974 in northeast Utah had an initial production rate of 553 barrels of oil per day from the Triassic-Jurassic Nuggett sandstone at a depth of 9,900 feet. The pay thickness is reportedly 133 feet. Seismic profiles show very clearly a complicated overthrust structural closure. An offset well found additional pay in the overlying Twin Creek-Jurassic limestone and was completed for over 1,000 barrels of oil per day.

The discovery well of Ryeckman Creek field in southwest Wyoming in 1976 tested oil and gas from the Nuggett sand at depth of 7,455 to 7,880 feet. The well is reported to have 497 feet of pay.

This week in southwest Wyoming, Chevron tested gas at a rate of 25,000 million cubic feet gallons per day on a drillstem test of the Nuggett sand from the interval 8,325-68 feet. An unmeasured amount of condensate was also recovered with the gas. The rate of flow on the drillstem test is the highest reported thus far at a Wyoming well in the current overthrust belt play.

Another indicated wildcat discovery of August 16, 1978, 11¼ miles southwest of the Chevron well, is a well of Reserve Oil & Gas that flowed oil at an approximate rate of 700 barrels a day on a drillstem test of the Nuggett. Drilling and development continues at a rapid pace in this portion of the disturbed belt.

The disturbed belt of southern Alberta also contains major accumulations of hydrocarbons, mostly gas. There are eight major gas fields that account for 5.7 trillion cubic feet of recoverable reserves. [See table 1.] These fields produce gas from reservoirs at depths of 7,000 to 12,200 feet. The traps are overthrust, thrust faulted anticlines or thrust fault blocks. The reservoirs are mostly of the rundle group of Mississippian age with some gas from the Wabamum formation of Devonian age. The three southern-most fields of this trend are Pincher Creek, Waterton, and Lookout Butte, and they are just north of the intentional boundary or just across the line from Glacier Park. [See figure 3.]

The Natural Gas Steering Committee for the Montana Energy Advisory Council estimated that Montana has 7.06 trillion cubic feet of potential undiscovered natural gas reserves; five TCF would be in Montana's disturbed belt.

They further emphasized that in their opinion, four TCF of the five TCF are within Glacier Park.

"Montana's Natural Gas Supply Crisis", a staff report by Thomas W. Frizzell, of the Montana Environmental Quality Council, printed November 1, 1976, mentions Glacier Park, wilderness areas and other pristine environments as containing a large portion of western Montana's undiscovered natural gas reserves. The four TCF estimated to be in the Glacier Park represents 80 percent of the disturbed belt potential of undiscovered gas reserves. The four TCF represents 57 percent of the total State potential undiscovered gas reserves. This four TCF or 57 percent in Glacier Park can never be discovered or produced under the present National Park regulations. Much of the remaining one TCF is also unaccessible due to forest and wilderness area problems or restrictions. Therefore, it is vital that this potential gas supply be recognized for what it is and where it is, and that consideration be given to developing this potential supply.

The Great Bear Wilderness areas 2, 3, and 6, are southeast of Glacier Park and north and northwest of the Bob Marshall Wilderness. Areas 2, 3, and 6 have high potential for accumulation of significant reserves of hydrocarbons. The potential for natural gas discoveries is probably somewhat better than that for oil. The area contains numerous potential hydrocarbon reservoir and source rocks. Structural traps can be inferred from a comparison of the surface geology to the gas producing areas northward in southern Alberta, Canada. Detailed seismic surveys are required, however, to resolve the complex structural geologic picture at depth and to locate drillsites. [See figure 12.]

The area contains potential hydrocarbon reservoirs of Devonian, Mississippian, Jurassic, and Lower Cretaceous ages. Correlative reservoirs of Mississippian age produce most of the gas to the north in southern Alberta. Oil and gas is produced from rocks of all of the above ages to the east on the Sweetgrass Arch. All of the potential reservoir units are overlain by shale, a common cap-rock or vertical seal for hydrocarbons. [See figure 4.]

Potential source rocks for hydrocarbons in the area include Jurassic and Cretaceous marine shales. Four wells drilled east and north of the Great Bear Wilderness study area in the 1950's, found gas in the Sun River member of the Castle Reef dolomite. These wells tested gas at rates of from 500 MCFD plus 13 barrels condensate to 6,293 MCFGD. [See table 2.] The Sun River is correlative with the upper rundle of southern Alberta. [See figure 4.] One of the well tested 280 MCFGD from the Three Forks formation which is correlative with the Wabamun formation that produces gas in Waterton Field.

Oil and gas technology and good environmental pollution control practices are being proven daily. Specific examples of current, recent drilling and/or production operations in complex geological and environmentally sensitive areas are the disturbed belt of Montana, southern Alberta, northeast Utah, southwest Wyoming, eastern Idaho, and western Colorado.

Also, in the Bighorn Basin of Montana and Wyoming and in the Upper Souris Waterfowl Refuge in North Dakota. Other areas are the Los Angeles basin and the North Slope of Alaska. Offshore examples include California, the Texas-Louisiana gulf coast, Alaska's Cook Inlet, the North Sea, and the Baltimore Canyon.

Successful operations such as these provide the credibility necessary for exploration in Montana's areas of significant hydrocarbon potential. Areas 2, 3, and 6 of the proposed Great Bear Wilderness area have favorable geological qualifications for the potential of significant reserves of oil and gas. It is strongly recommended that areas 2, 3, and 6 be omitted from the wilderness designation.

Senator MELCHER. Thank you, Bob.

Mr. MEEK. If I may, I would like to make a couple of additional comments to that statement which were raised in the form of a couple of questions relating to this hearing, relating to well costs in some of the wells drilled in the area.

The present status of the well costs in the disturbed belt will vary with the area in which that well is located, and the depth at which it is drilled. The companies that will be participating in drilling in such an area are aware of these costs, and they are only going to drill wells when they feel the reserves justify that risk and that cost.

A recent example of a well in a very sensitive area is one Exxon built on the North Slope of Alaska, the Point Thompson unit that cost over \$20 million. Some of the recent wells drilled in Montana the last year or so, have cost over \$500,000 to \$2 million-plus. The cost depends on the depth to which the well was drilled. Those wells in Montana were primarily to casing costs or dry well costs. If they were completed, there would be additional costs.

Additional questions relating to some of the gas wells drilled in the 1950's, I know from checking the records, the Oil and Gas Commission in Billings, at least, four of those five wells have been plugged. I would have to assume since they were drilled in the fifties, and most of those leases were probably 10-year leases that they have expired by their own terms. A well cannot hold a term longer than its lease unless it is in production.

Senator MELCHER. Can it be renewed?

Mr. MEEK. It can be renewed if it is a least that is renewable. It may have changed category in the meantime. It is my understanding,

one of the wells was drilled in the Blackleaf Canyon, a well that tested 6.2 million. An attempt was made by Burlington Northern last year to drill a well in that area, and they could not obtain a lease to get as close to that location as their plans called for. They were forced to move approximately 1 mile to the northeast. As a result, rather than redefining and redeveloping the gas accumulation, they crossed a couple of faults and got a dry hole.

Senator MELCHER. I have a couple of questions. Perhaps for purposes of our hearing record, they might as well be asked right now. There are lease applications for much of this area, either in the wilderness, proposed wilderness area, or outside. There have not been any applications for—leases effectuated from those applications, as I understand it?

Mr. MEEK. That is right.

Senator MELCHER. You mentioned areas 2, 3, and 6. Six, by the House action as they passed it, is deleted from wilderness designation. Now, what is the likelihood, as you understand it, of any lease becoming available either in the deleted area or in the surrounding forest land where there are applications for leases?

Mr. MEEK. As I understand your question, you are asking—I understand those leases might be issued.

Senator MELCHER. Yes.

Mr. MEEK. I am afraid we are not optimistic about those leases being issued quickly. The industry wishes they would be. But I think these leases being issued are being held up pending committee things, such as the Great Bear and other Forest Service proposals, until apparently the questions get a little better resolved there. They are holding off on those leases.

There have been applications made on those leases.

Senator MELCHER. We will get into this again with the Forest Service. We will ask the Forest Service to respond to some of these points. The USGS report on this area, I think they used the term "good potential." You use the term "high potential." Is there a difference?

Mr. MEEK. I have not discussed this with Mel Mudge as to how good his "good" is. But I do know from having served on this committee during Montana's natural gas crisis, we had a group of geologists on that committee, and we all thought the potential was high.

Just from reading Mel's report, I guess I would have to think a little higher than his report states.

Senator MELCHER. I guess you represent what we call the independents?

Mr. MEEK. Yes, sir.

Senator MELCHER. When an independent, or a group of independents, gets involved in a lease, are you looking at a lease of maximum size, which I believe was 2,560 acres or are you interested in smaller leases, smaller acreage?

Mr. MEEK. Particularly in gas you would like to have the large acreage, because as a rule your spacing is larger. One well per 640 acres, or one well per section.

Senator MELCHER. When you say larger, does that mean you hope they are to the maximum?

Mr. MEEK. Yes.

Senator MELCHER. 2,560 acres?

Mr. MEEK. Yes.

Senator MELCHER. What is the comparable payment to leases by private landowners in the area?

Mr. MEEK. What have leases brought to private landowners in the area?

Senator MELCHER. Yes. The bonus.

Mr. MEEK. There is little private land in the area. The acreage cost, as I recall, would range from probably \$3 to \$5 on the low side to maybe 10 or 12 on the high side.

Senator MELCHER. Has there been in this overthrust belt closer to Helena reports of rather high bonuses to your knowledge? Are those payments to private landowners quite high?

Mr. MEEK. Senator Melcher, if you are not involved with a particular block of land that has been acquired, you really don't know what the price involved is. I am sure if you heard this, there is a good chance it is true. But I have no specific knowledge. I do know of some sizable blocks that have been put together and acquired on private land, but I do not know the amount of dollars involved.

Senator MELCHER. Do independents make a bid in conjunction with the majors from time to time?

Mr. MEEK. Yes. As a matter of fact, if you recall a few years ago we had some discussions on the North Slope. That was with Oil Resources, an independent company. We were involved in a block of land there, primarily operated by Pennzoil and some major companies which has recently resulted in a discovery being drilled by Exxon where we all pooled a bunch of that land in the Point Thompson area.

Senator MELCHER. I see. There is an interplay there. The well might be drilled by Exxon but there might be 100 independents associated with it.

Mr. MEEK. It would be a group, yes.

Senator MELCHER. If there was a lease granted in some of this area, let's take six—it has been deleted—if some of that were leased, what would be the procedure in surface disturbance?

Mr. MEEK. The first thing that would have to be done if you had an oil and gas lease in the disturbed belt, would be to do some seismic work to define if and where you had a drillsite. The prospect at depth is the one that needs to be defined. In an area such as the disturbed belt with thrust faulting, displacement of rocks, surface location, and where you would like to be at total depth may be considerably removed from each other.

You would have to at the first step come in and do some seismic work and try to find the geology in the subsurface and first determine if you have a drillsite and, second, where it is.

Senator MELCHER. The seismic work consists of drilling some holes and recording what the geology is underneath.

Mr. MEEK. There are different techniques that can be used. That is one. Your conventional seismic approach drills the holes. Another approach is wider size which does not require holes being drilled. There are techniques that have been used in Idaho, western Montana, of it laying on the surface.

Senator MELCHER. How do they do that?

Mr. MEEK. I believe there was a company that used this technique. Lay their primer on the surface, just like they would if they drilled holes, except in this area being prime accord gave them good seismic data, they felt they could do the work without drilling the holes. This

has been tried in other areas and it does not work. It is a technique that can work in some areas but not all.

Senator MELCHER. The surface disturbance that could be expected in a lease of 2,560 acres would vary then according to the technique that was used?

Mr. MEEK. That is right.

Senator MELCHER. If you did it the old traditional way, I believe it is the old traditional way of drilling a hole, how many holes would you put in before you would make a determination? I know it is likely to vary, but what is likely to happen?

Mr. MEEK. Maybe the best way to answer that is some of the fields across the line in southern Alberta, which we feel are the type of thing we would expect to find in this area, are rather narrow, linear-type trends. Some of those fields, for example, Waterton, is less than 1-mile wide, about 2 miles long. You would have to have a series of north-south east-west seismic lines across that trend to locate the reversal and adequately map the subsurface.

If the seismic work were the conventional type where you drill holes, when those holes are drilled they are filled and restored to the surface. Seismic work is being done just about anyplace where there is good potential for oil and gas to be found. It is most helpful where your traps are structural and we are anticipating structural traps in this area because they are structural both in the south, in Wyoming and Utah, and in southern Alberta.

Senator MELCHER. The procedure after you have done the seismic work, if it looks good, would be to drill a test well?

Mr. MEEK. That is right.

Senator MELCHER. That would be at one point in the lease.

Mr. MEEK. Right.

Senator MELCHER. If that were unsuccessful, you might drill another test well or two on several other sites; is that correct?

Mr. MEEK. That is correct. It would depend on the size of your seismic survey and how many perspective drill sites you are able to map.

Senator MELCHER. The procedures followed once a lease is issued, first of all, they are advertised for bid and so on. You have to have a block put together at that time, or do you get the lease first, and then put your block of money together to actually do that work, or how does that work?

Mr. MEEK. You usually have your acreage before you—are you talking about money to drill these wells?

Senator MELCHER. Yes.

Mr. MEEK. As a rule you have your acreage acquired so you have something to possibly interest an investor or another company.

Senator MELCHER. That would be probably before you did your seismic work.

Mr. MEEK. Yes. You would have to have a lease or somebody else would have to have a lease that you had a seismic option on to be able to go in and shoot it.

Senator MELCHER. How long does this take, in terms of years, from the time of issuance of the lease until you have had one, two or three test wells?

Mr. MEEK. The recent example of the exploration and development in the northeast Utah and southwest Wyoming areas, about 1974, was the recent renewal of interest in the overthrust belt in that area which

was created without disturbing the field, and once it was discovered, they had additional seismic work done, it had an increased effect going on—

Senator MELCHER. How long did that take?

Mr. MEEK. It started in 1974, successful development. This is 1978. It is still an active area. As I said in my statement, as recently as last week Chevron, after 4 years, has gotten a bigger test on a well than any of the wells previously found in the thrust belt.

Senator MELCHER. Then generally speaking once a lease is issued it takes 2 or 3 years to find out?

Mr. MEEK. That is right. You would probably spend a year doing some seismic work. If you are fortunate, you might get a well drilled the following year. If you had a 5-year lease, you are forced to get the exploration done as fast as you can to, within that 5-year period, establish production or you have lost your lease.

Senator MELCHER. So you are looking at something of about 5 years on a practical standpoint?

Mr. MEEK. Yes. A 10-year lease, you have more time. But I think most of these are 5-year leases.

Senator MELCHER. In your priorities of these areas, do you have any favorite or are they equally one as good as the other?

Mr. MEEK. As you mentioned, area 6 has already been deleted. I knew it was a possibility but I did not know for sure if it had been so I included it in my testimony. Area 2 and area 3 are both highly prospective. It is difficult to say one is more prospective than another until you have gone in and done some work.

Senator MELCHER. I think it is important, or it is important to me at least, the available leases, whenever the Forest Service does start some leasing—and by the way, I think it should—I think there should be some Forest Service leases, but as Congressman Baucus says, he pointed out there is a lot of the overthrust or disturbed belt—whatever the right term is—that is outside of this wilderness area.

I would hope there is some consideration given, first of all, to resolve RARE II for the Forest Service, if we can, and some multiple uses of the forest land can be practiced including some leases. I would hope a lot of this potential leasing would pay attention to roads, existing roads, in order to be practical, No. 1, and No. 2, not to be bypassing what might be just as good a potential in unroaded areas and requiring a new road.

In reaching that area 6, there is a road. I am sure with a lease we would not be faced with some more roads. How much roading is required for the seismic work?

Mr. MEEK. Actually, road as such is not required for the seismic work. Those vehicles can get around—

Senator MELCHER. When you put down a test well you have to have a road?

Mr. MEEK. You do have to have access in and out. The only time a road is required, the road that remained after production, you would have to have access out to that well over an extended period of time. During the time the well was drilling. But if it was a dry hole, that area ought to be restored back to its original state and it would no longer be a road except for that temporary thing.

Senator MELCHER. So for seismic work and a dry hole. First of all for seismic work it is not really a road at all?

Mr. MEEK. It is access in and out.

Senator MELCHER. Yes.

Mr. MEEK. If you started a well in there in June, and in September the well was plugged, the location had been restored. We go through this in other parts of the State right now which are not in the overthrust belt on Federal lands.

Senator MELCHER. Is there such a thing as an independent set-aside in leases in the Forest Service? Is there a procedure in the bidding, of letting, advertising leases for independents?

Mr. MEEK. There is no distinction at all.

Senator MELCHER. Thank you very much, Bob. There may be other questions, I don't know. You have presented us with a very fine presentation here and backed up with very useful data.

Mr. MEEK. I would like to make one final comment, Senator Melcher. That is with people outside of the industry when they wonder what it is that causes you to feel good about an area, feel it has potential, I would just like to say I would not be here presenting this testimony if there were not many individuals, many companies, who feel this potential is real. All they want is the opportunity to prove it.

It is like the Baltimore Canyon situation a few months ago. The companies wanted an opportunity to go in there, do the shooting, do the drilling. Now you are starting to see some results. You have seen some dry holes. You have seen Texaco got one discovery which they are testing and trying to follow up.

The overthrust belt in Montana is somewhat in that same category.

Senator MELCHER. That brings up one more question then. The independent operators in Montana, Wyoming, our part of the country, don't get involved in offshore business, do you?

Mr. MEEK. Yes, they do. They are very often not the operator of a well but they very often are part of the group.

Senator MELCHER. Very expensive, isn't it?

Mr. MEEK. Yes.

Senator MELCHER. If you think these wells are expensive, what do those wells cost?

Mr. MEEK. I don't know what the wells in the Baltimore Canyon cost. I have not seen any figures published yet. But some in the Texas-Louisiana gulf coast are multimillion dollar wells; \$20 million is not high for one of the wells there.

Senator MELCHER. \$20 million?

Mr. MEEK. Yes.

Senator MELCHER. Half a million is a high priced well, but it doesn't cost much compared to the offshore and North Slope.

Mr. MEEK. That is right. The cost is relative to what you find. If the reserves you find are significant and they make the cost of the well commercial, that is what it all amounts to. You are not spending \$500,000 drilling a well that will not give you \$200,000 worth of production.

At the same time, if you spend \$20 million on a well and get 5 to 10 times that return production, it is the rate of return and production. A lot of these facts are not known when you start. There is a lot of risk. That is part of the industry. If the industry is willing to take that risk, all we are asking is the opportunity to go drill the wells.

Senator MELCHER. Thank you.

[The attachments to Mr. Meeks statement follow:]

SOUTHERN ALBERTA - DISTURBED BELT GAS FIELDS

<u>FIELD NAME</u>	<u>LOCATION</u> (Discovery Well)	<u>PRODUCING FORMATION</u>	<u>AVG. DEPTH OF PRODUCTION</u>	<u>AVG. PAY THICKNESS</u>	<u>RECOVERABLE RESERVES</u>	<u>AVG. POROSITY</u>
LOOKOUT BUTTE Sept., 1959 TFB	LSD 11-31-1-28W4	Rundle (Miss.)	12,200'	182'	220*BCF	6.5%
PINCHER CREEK Sept., 1948 TFB-ANT	LSD 15-24-3-29W4M	Rundle (Miss.)	12,000'	381'	330 BCF	4.16%
WATERTON 1957 Overthrust	LSD 4-21-4-1W5M	Rundle (Miss) Wabamun (Dev)	11,000'	152'	2261 BCF	5.7%
SAVANNA CREEK 1955 Thrust Faulted Ant.	LSD 12-20-14-4W5M	Rundle (Miss) L. Manville (Cret)	7,500'	175'	151 BCF	3.0%
TURNER VALLEY 1924 Faulted Overthrust Ant.	LSD 12-7-20-2W5M	Rundle (Miss)	7,000'	140'	719 BCF	8.0%
		Rundle (Miss)	9,000'	156'	130,000,000 Bbls Oil	
SARCEE 1954 Struct. Overthrust	LSD 6-23-3W5M	Rundle (Miss)	9,700'	110'	140 BCF	10.5%
JUMPING POUND 1947 Overthrust	LSD 5-7-25-4W5M	Rundle (Miss)	9,800'	140'	620 BCF	8.3%
JUMPING POUND WEST 1961 Overthrust	LSD 11-5-26-26W5M	Rundle (Miss)	10,000'	120'	1315 BCF	6.3%
					5756 BCF OR 5.7 TRILLION CUBIC FEET	

*BCF = Billion Cubic Feet

TABLE 1

SHUT-IN GAS WELLS IN THE
NORTHERN DISTURBED BELT OF MONTANA

<u>WELL NAME</u>	<u>LOCATION</u>	<u>PRODUCING FORMATION AND DEPTH</u>	<u>INITIAL POTENTIAL FLOWING</u>
Northern Natural Gas Co. #1 Blackleaf-Federal "B"	NESW Sec. 19 T26N-R8W	Sun River Member Of Castle Reef Dolo (Miss) 5280'-5300'	969 MCFGD
Northern Natural Gas Co. #1 Blackleaf-Federal "A"	SENE Sec. 13 T26N-R9W	Sun River Member Castle Reef Dolo (Miss) 3794'-3830' 1000 BTU; 80% Methane, 11% CO ₂ ; SPG = .738	6293 MCFGD
Texaco #1 Government-Pearson	SWSW Sec. 26 T27N-R9W	Three Forks Formation Jefferson Group (Dev) 2068'-3360'	280 MCFGD
Union Oil #1 Morning Gun	SWSW Sec. 18 T31N-R11W	Sun River Member Castle Reef Dolo (Miss) 8962'-9087'	500 MCFGD + 13 Bbls. Condensate
Great Northern Drilling #1 Two Medicine	SENE Sec. 19 T31N-R11W	Sun River Member Castle Reef Dolo (Miss) 8895'-9018'	771 MCFGD + 13.6 Bbls. Condensate

TABLE 2

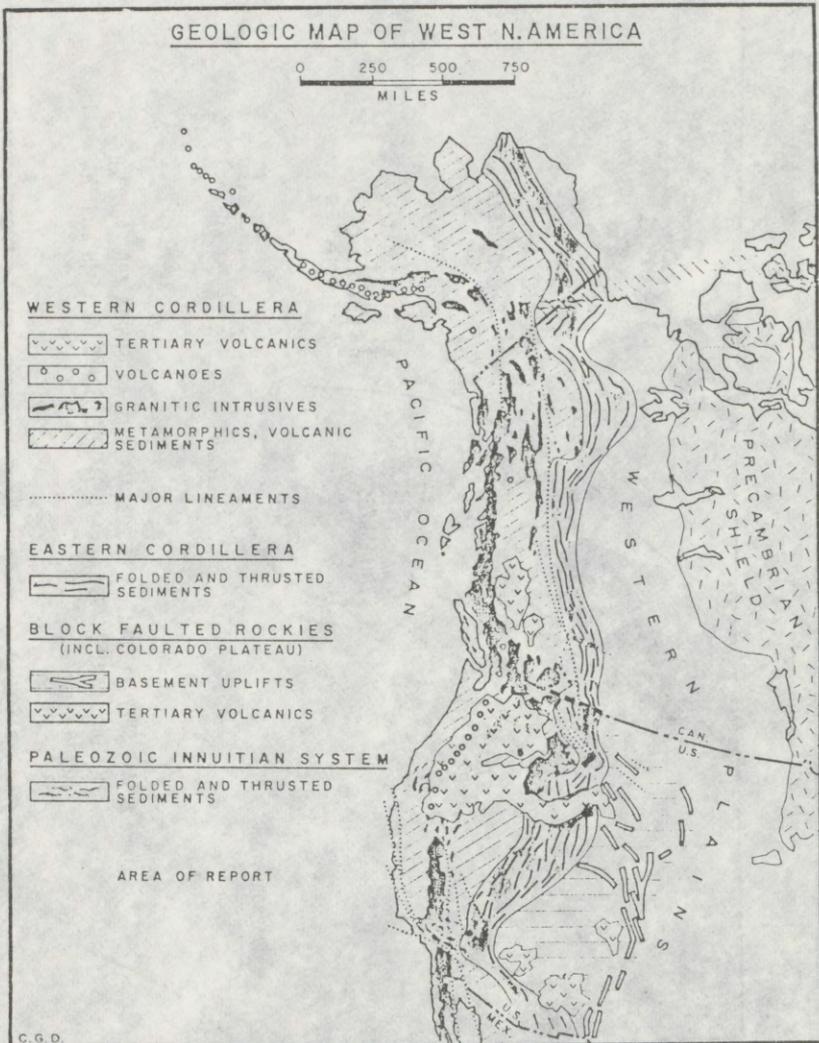


FIG. 1.— Geologic map of western North America, showing location of report-area.

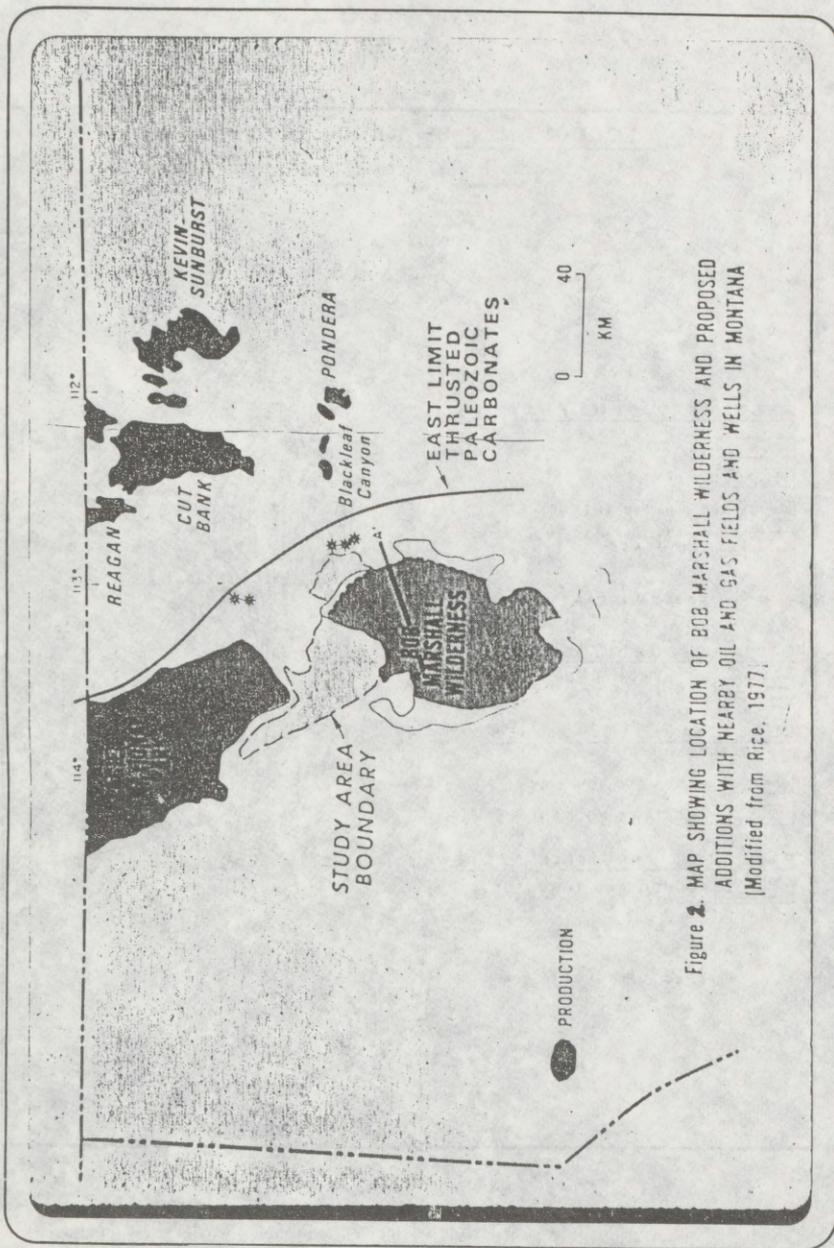


Figure 2. MAP SHOWING LOCATION OF BOB MARSHALL WILDERNESS AND PROPOSED ADDITIONS WITH NEARBY OIL AND GAS FIELDS AND WELLS IN MONTANA (Modified from Rice, 1977).

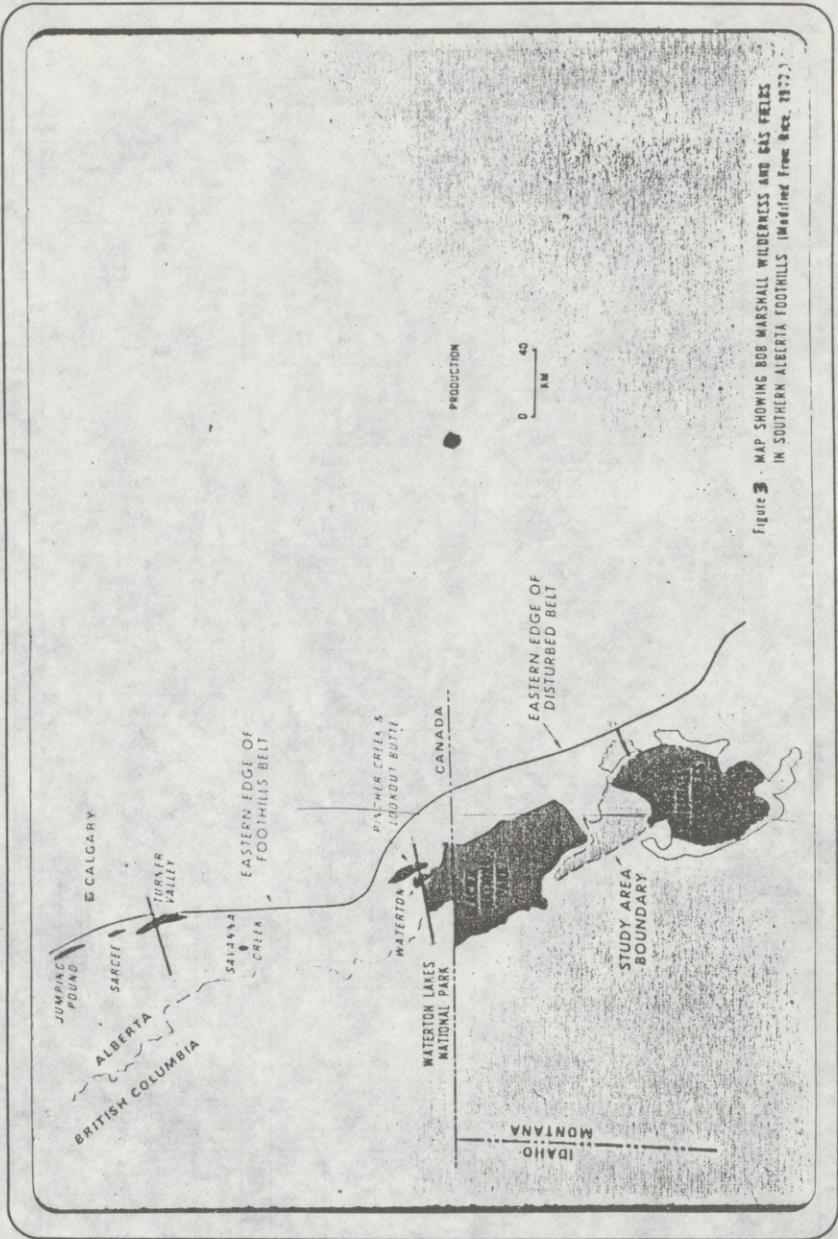


Figure 3. MAP SHOWING BOB MARSHALL WILDERNESS AND GAS FIELDS IN SOUTHERN ALBERTA FOOTHILLS (Modified From Bess, 1977.)

CORRELATION OF STRATIGRAPHIC UNITS
MONTANA THRUST BELT - SWEETGRASS ARCH
SOUTHERN ALBERTA FOOTHILLS

SYSTEM	SERIES	MONTANA THRUST BELT	SWEETGRASS ARCH	SOUTHERN ALBERTA FOOTHILLS		
CRETACEOUS	UPPER		WILLOW CREEK FM. (PART)	WILLOW CREEK FM. (PART)		
			ST. MARY RIVER FM.	ST. MARY RIVER FM.		
			HORSE THIEF SS.	BLOOD RESERVE SS.		
			BEARPAW SHALE	BEARPAW SHALE		
			TWO MEDICINE FM.	JUDITH RIVER FM. CLAGGETT SHALE	BELLY RIVER GROUP	
			VIRGELLE SS.	VIRGELLE SS. EAGLE SS. VIRGELLE SS. MBR.		
	LOWER	MARIAS RIVER SHALE	TELEGRAPH CREEK FM.	TELEGRAPH CREEK FM.	ALBERTA GROUP	
			KEVIN MBR.	KEVIN MBR.		WAPIABI FM.
			FERDIG MBR.	FERDIG MBR.		CARDIUM FM.
			CONE MBR.	CONE MBR.		BLACKSTONE FM.
		BLACKLEAF FM.	FLOWEREE MBR.	FLOWEREE MBR.	BLAIRMORE GROUP	
			VAUGHN MBR.	BOOTLEGGER MBR.		MILL CREEK FM. CROWSNEST MBR.
TAFT HILL MBR.			VAUGHN MBR.	BEAVER MINES FM.		
FLOOD MBR.			TAFT HILL MBR.	GLADSTONE FM.		
KOOTENAI FM.		SUNBURST SS. MBR.	SUNBURST SS. MBR.	KOOTENAY FM.		
		UN-NAMED FM.	CUT BANK SS. MBR.			
		MORRISON FM.	MORRISON FM.			
		SWIFT FM.	SWIFT FM.			
MID. LOW.	ELLIS GROUP	ELLIS GROUP				
	RIERDON FM.	RIERDON FM.				
	SAWTOOTH FM.	SAWTOOTH FM.				
TRIASSIC						
PERMIAN						
PENN.						
MISSISSIPPIAN	UPPER	SUN RIVER MBR.	SUN RIVER DOL.	SPRAY RIVER FM. ROCKY MTN. FM. ETHERINGTON FM.		
	LOWER	CASTLE REEF DOL.	MISSION CANYON LIMESTONE	MOUNT HEAD FM.		
		ALLAN MOUNTAIN LIMESTONE	LODGEPOLE LIMESTONE	TURNER VALLEY FM. SHUNDA FM. PEKISKA FM.		
DEVONIAN	UPPER	THREE FORKS FORMATION	BAKKEN FM.	BANFF FM.		
		BIRDBEAR MBR.	THREE FORKS FM.	EXSHAW FM.		
			POTLATCH FM.	PALLISER FM.		
			BIRDBEAR FM.	ALEXO FM.		
	LOW	MAYWOOD FM.	DUPEROW FM.	SOUTHEAR FM.		
CAMBRIAN		SOURIS RIVER FM.	CAIRN FM.			
		RED LION FM.	YAHATINDA FM.			
			PIKO FM.			

KEY: ● OIL
 ✨ GAS
 ✨ PROSPECTIVE INTERVALS

Figure 4 - Correlation of Stratigraphic Units Montana Thrust Belt - Sweetgrass Arch - Southern Alberta Foothills (after Rice, 1977)

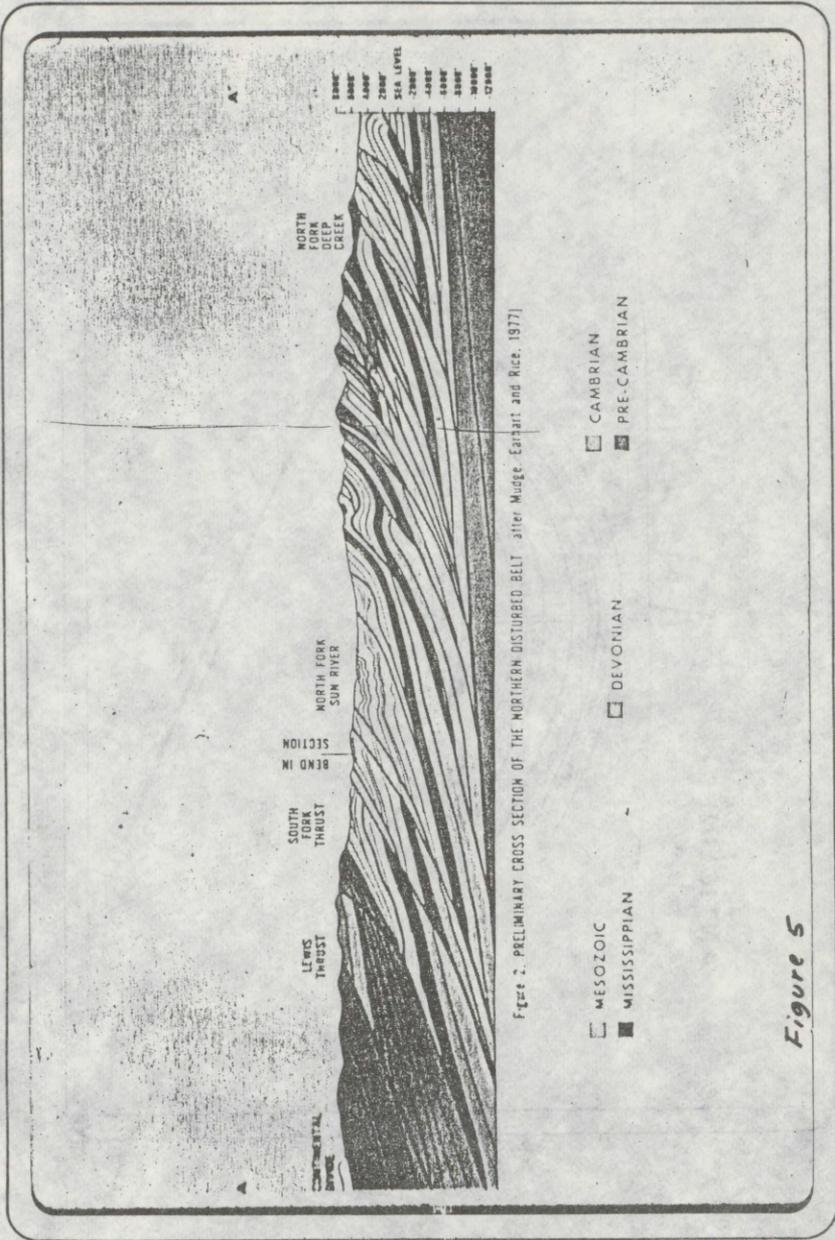


Figure 5

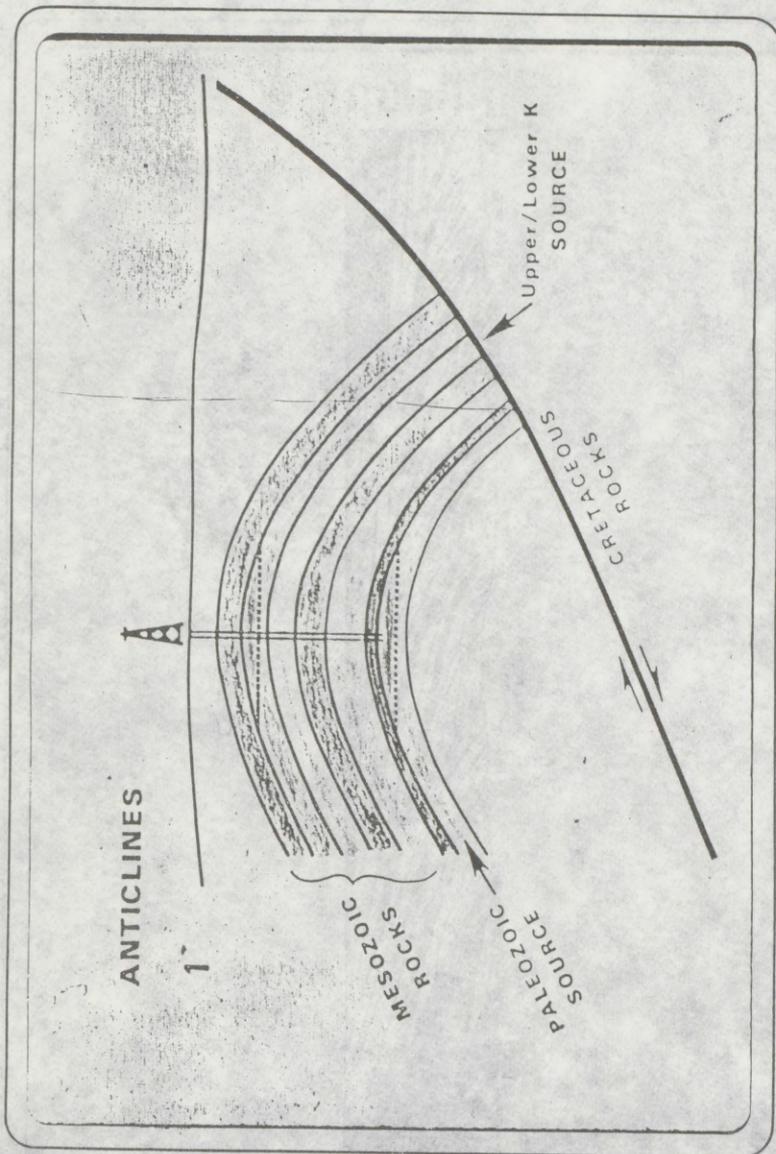


Figure 6 - Prospective Structural Traps Associated with Thrust Belt Tectonic Style.

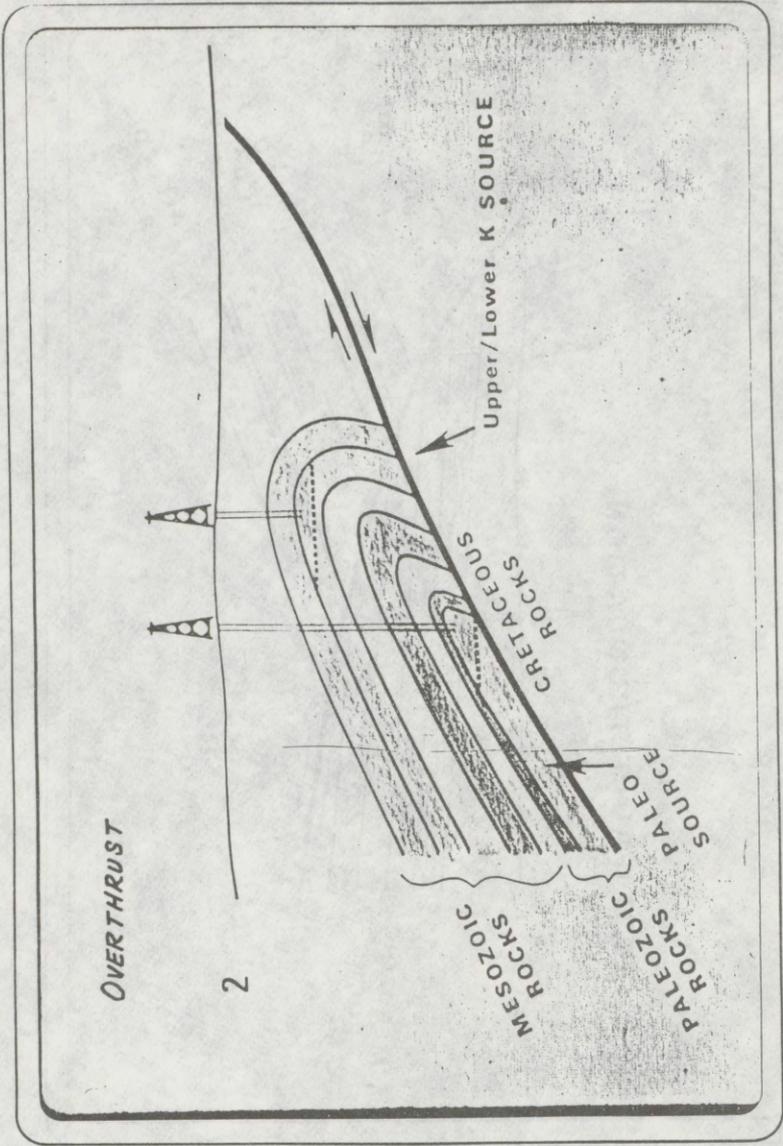
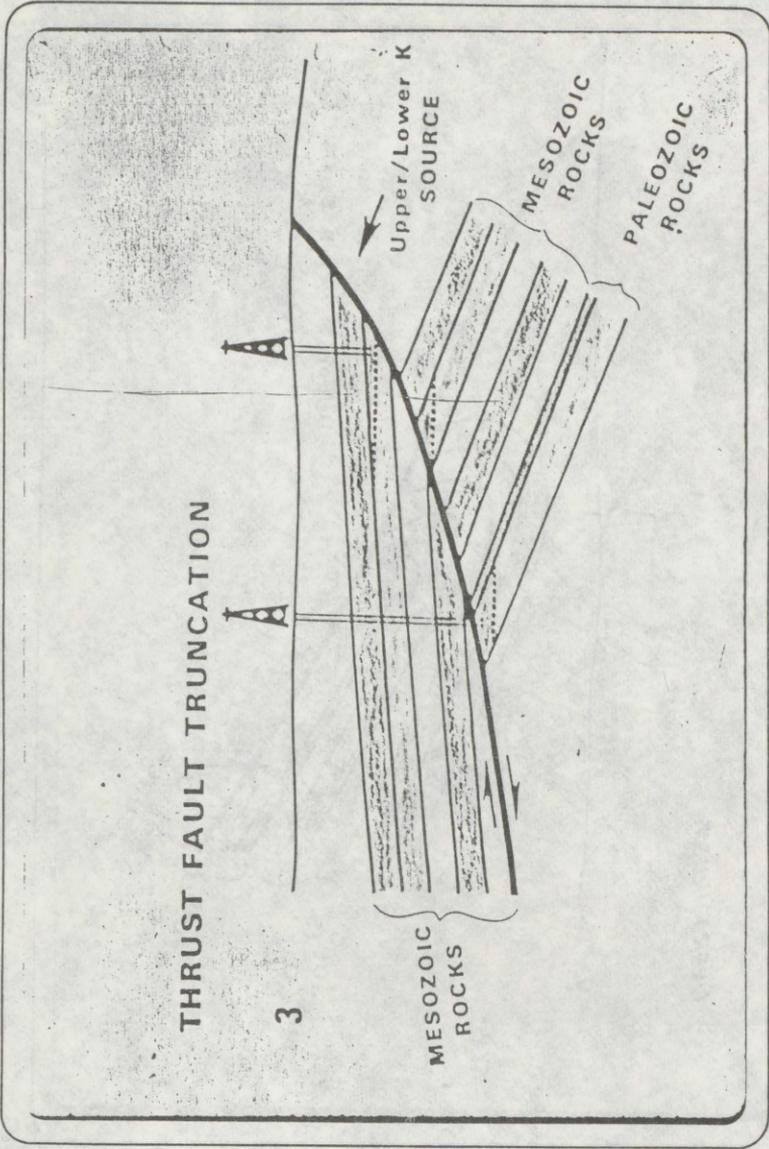


Figure 7



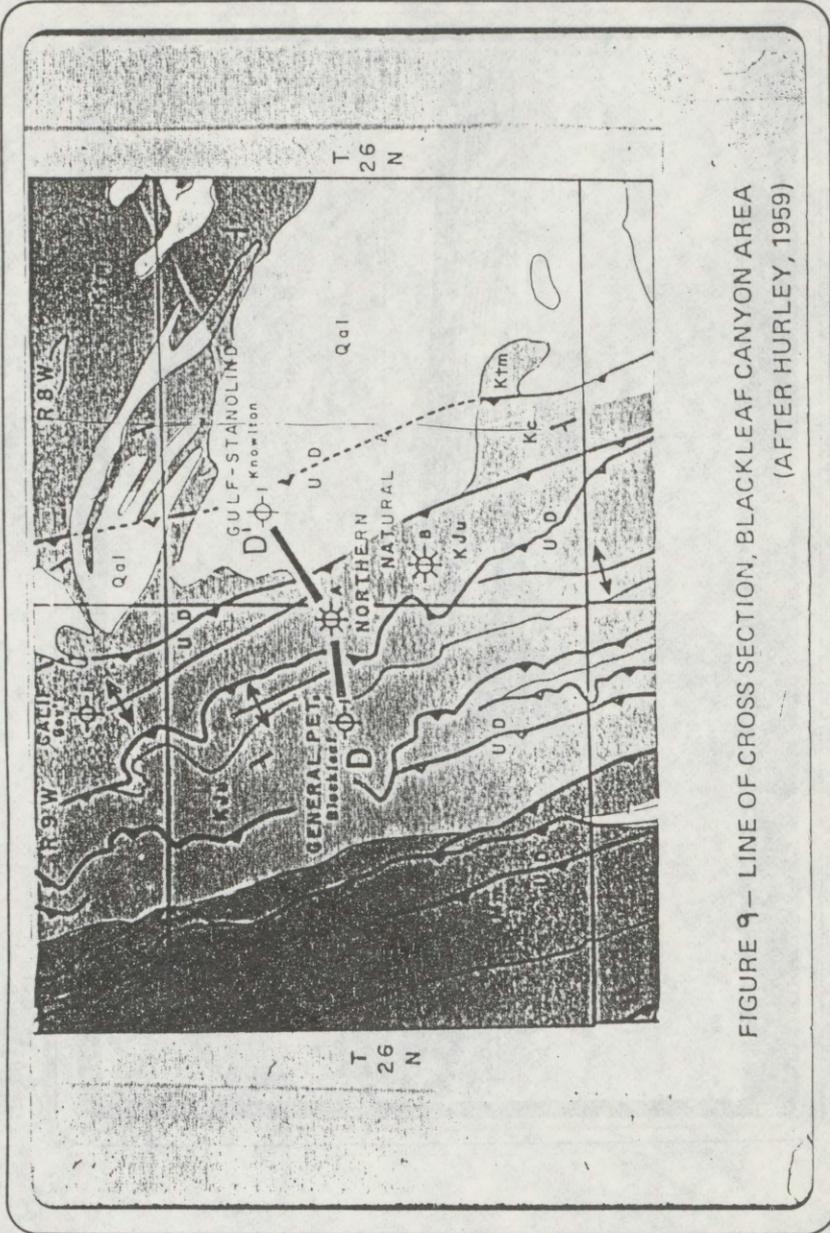
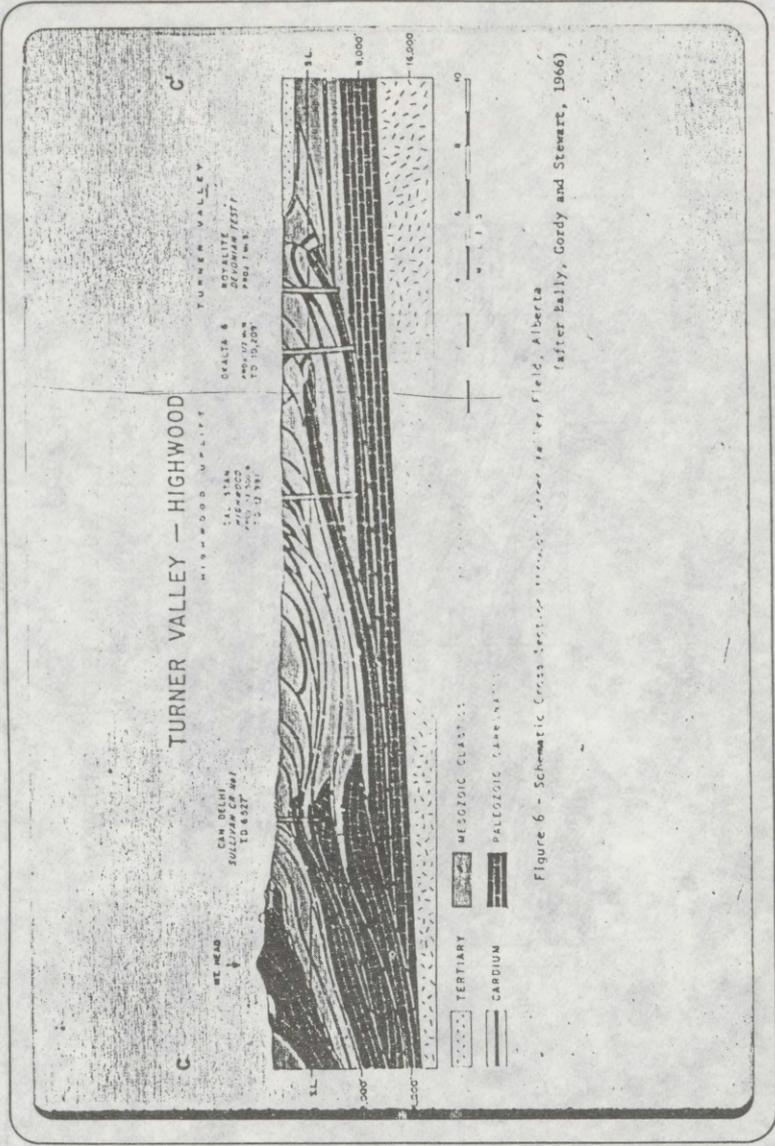
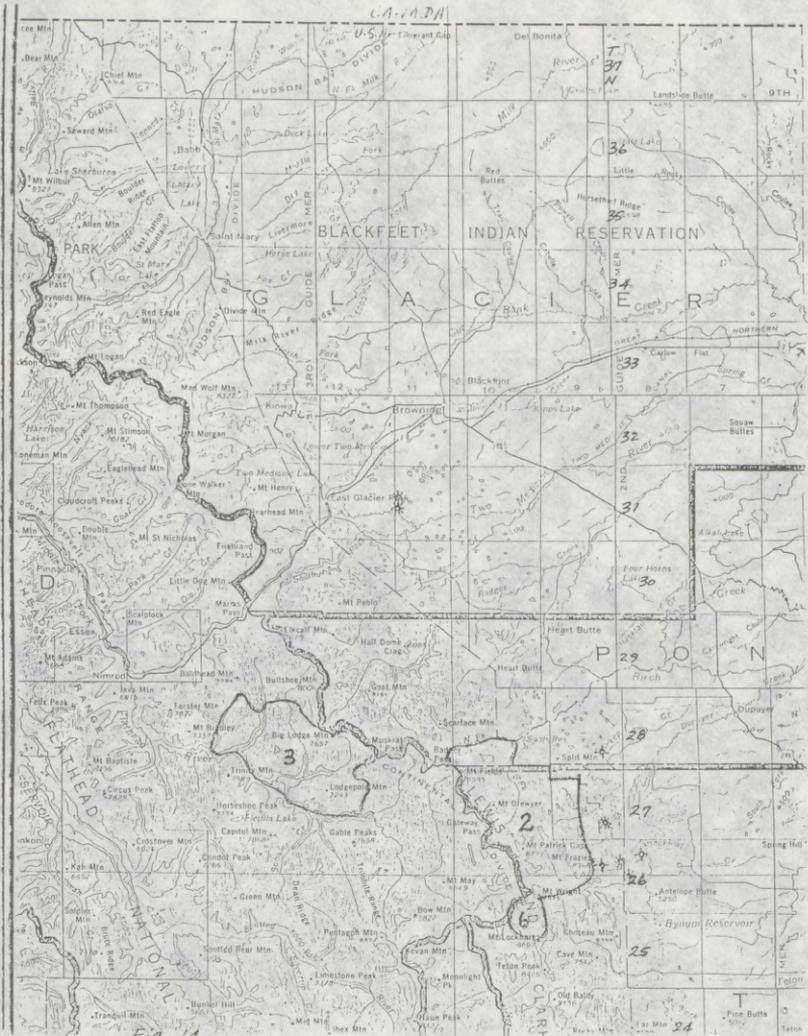


FIGURE 9 — LINE OF CROSS SECTION, BLACKLEAF CANYON AREA
(AFTER HURLEY, 1959)





Senator MELCHER. Mr. Behenna.

STATEMENT OF FRED BEHENNA, PRESIDENT, KALISPELL POLE & TIMBER CO., KALISPELL, MONT.

Mr. BEHENNA. Thank you, Mr. Chairman. I have also submitted this morning testimony from the Kalispell Chamber of Commerce of which I am vice president. It was put before the board of directors, approved, and represents 500 business people in Flathead County.

I also met on Monday with spokesmen from many of our lumber companies and can answer any questions you might have regarding them. I would like to read the statement I made regarding the Kalispell timber industry.

My name is Fred Behenna. I am testifying here in Washington today before you in my capacity as president of the Kalispell Pole and Timber Co. Our company produces 15,000 to 20,000 treated power poles each year for electric utilities, both private and rural electric cooperatives, to make a fair profit for our stockholders and we also take pride in the hundreds of thousands of dollars we save our customers in transportation costs due to our location.

We serve mainly Montana, North and South Dakota, Minnesota, Wyoming, Colorado, with our treated poles that would otherwise in all probability be shipped from the west coast at considerably higher prices due to transportation costs. We depend to a great extent on Forest Service timber for our lodgepole type logs. These type of logs are available in area 3 of this proposal. I have been to dozens of meetings concerning this study, some of which were held for public input. We in the timber industry realize compromise must be made with those who want all possible wilderness. We feel our willingness to compromise has been used against us in a manner in which area 3 has now been recommended for inclusion. This area, which is 14 percent of the study area, does have considerable timber with easy accessibility to it with at least a sustained cut of 5 million board feet per year.

This amount of timber would be 2½ times the amount needed to keep our company in full production. We employ a number of workers, plus 5 driving trucks, an average of 5 crews in the woods, for a total of 30 people in our company. It is their means of employment in an area that has an average unemployment in excess of 10 percent. Multiplied by 2½, easily accessible timber in the Great Bear proposal, 75 persons or 300 people depending on this volume of timber.

While the 5 million board feet has not been figured in the allowable cut since 1970 and may not sound significant taken separately, it becomes critical when considered in the light of a probable decrease in the allowable cut on the Flathead Forest from 150 million board feet per year where it has been during the last 3 years, to an estimated 100 to 115 under the new timber management plan. For a community which is economically dependent on the woods products industry, with 47 percent of employment and over 50 percent of personal income directly or indirectly attributable to it, these reductions and foregone resource utilization are sobering. For the local timber mills which are nearly all small business operations whose major, if not exclusive, source of supply is in national forest land, the situation becomes alarming.

One of the things that Senator Metcalf reportedly stated in the debate over the Great Bear Wilderness study bill was that the study would evaluate all resource values and recommend a management plan based on those values. Based on that assurance, the timber industry supported the study of the Great Bear area.

We are well aware that Senator Metcalf did not agree with the recommendations of the draft proposal. But that is only one part of the process that the Senator supported even more strongly than wilderness. Senator Metcalf told us on more than one occasion that the final Great Bear Wilderness area would be based on the resource capability of the land and the will of the public to utilize those resources.

Senator Metcalf often admitted to a strong bias toward wilderness. He also stated that he did not want to see wilderness preclude or destroy the timber industry in Montana. Even though he had a strong interest in wilderness, he had a stronger belief in the exchange of information that produced the final results. This hearing is the implementation of the process he strongly supported and we should not confuse Senator Metcalf's personal love for wilderness with his strong belief in the process that produces realistic wilderness proposals.

The determination of natural gas potential in the area is significant and should be explored in a manner to cause the least disturbance to the area. I understand over 50 percent of the crude refined in our State is imported from Canada. Any reduction in this dependence on the resource would be a plus for the American people in balance of payments and reliability of supply.

By the nature of the recreational activities requiring great physical effort, these remote areas—there is going to be injury and sickness requiring medical treatment and many times hospital treatment. The airstrip at this Schafer Meadows has been a lifesaver for hundreds and the airstrip should remain.

The uncertainty of timber supply to our company and other mills in our valley leave us at a great disadvantage in planning for future production. Should we replace our old equipment with new? This is only possible with reasonable expectancy of the continuing supply for wood. The demand for wood will increase and from where will the continuing supply come? Partly the current utilization of the wood will help extend the supply of forest practices such as thinning, overcrowding and infestations will help private timber will provide greater percentage to the lumberman as his public timber supply diminishes. This supply will increase and drive up the price of lumber. Since lumber is basic to a healthy family, the family that demands more wilderness will demand an investigation of why lumber prices are going higher.

Also I would like to clarify the claim by some that if not harvested, trees will continue growing. I have seen well over 1 million trees, 1 million lodgepoles come into our facility in the 21 years I have been area, which is 70 to 90 years, it starts an accelerating rate of decay; over 15 to 20 years, on an average, after maturity, it is worthless and ready to fall.

Nature clears the situation in time to fire. But in all sincerity, it is a waste of a precious resource. In summation, the innuendo that the "greedy" mills are using up our timber is false. The mills are supplying the demands of the public for wood.

Our recommendation of the Forest Service draft study and the opposition of the administration's final recommendation is respectfully submitted at this time.

Senator MELCHER. Thank you. I have a novice question first of all. At what stage when a tree is dead is it no longer good for a pole?

Mr. BEHENNA. The American Standard says it should be cut from live trees. Even though the tree might be infested. The first three seasons, summer, fall, and winter, we can still use it for a pole.

Senator MELCHER. The first year, then, and those three seasons.

Mr. BEHENNA. Yes.

Senator MELCHER. The allowable cut you say has been reduced from 150 million board feet in the Flathead Forest down to 100-105?

Mr. BEHENNA. I was told it would be from 100 to 105 million and we will have to live with that.

Senator MELCHER. I thought the 150 was the allowable cut, was the actual sale.

Mr. BEHENNA. I am not familiar with that. The answer is in this room though, the information is.

Senator MELCHER. We are all very concerned, all of us from Montana, of what is happening to the mill industry in Montana. A lot of question marks come up with the study and we are well aware next year we are going to have to reach some decisions rather quickly or there will not be much of a future for the mills. They have to know where the logs are coming from a couple of years in advance.

We will do our best, I assure you of that, to make sure the industry can survive. The mentioning of this swath, I believe it was Arnie Bolle who mentioned it. What would be the effect if that swath were in the Flathead?

Mr. BEHENNA. Probably the same thing. This is straight lodgepole. They do have to be of a special exceptional quality. We can pay the extra price to get them out.

Senator MELCHER. Would the BLM ownership of some National Forests change the competitive angle for the mills in the Flathead area?

Mr. BEHENNA. I cannot answer that. I would hope not.

Senator MELCHER. It is being asked now. I am getting a few letters on that, worried letters. What does it mean to future timber sales.

Mr. BEHENNA. We buy considerable amount of timber from Burlington Northern.

Senator MELCHER. And they put it on sale similar to——

Mr. BEHENNA. Contracts. The rest goes into the lumber mills.

Senator MELCHER. The arrangement with Burlington Northern is a contract that is put on public bidding?

Mr. BEHENNA. Yes. Can I add to my counterpart from Polson on the chamber down there, that I am on the chamber mainly to do what I can to improve the quality of life in Kalispell. Certainly there is no quality of life if there is no work for our residents.

I would also like to add in the Choteau meeting there were thousands of letters supporting withdrawal of area 3 at that meeting, submitted at that meeting.

Senator MELCHER. Thank you Mr. Behenna.

[The statement from the Kalispell Area Chamber of Commerce referred to by Mr. Behenna follows:]

STATEMENT OF RICHARD G. HADLEY, EXECUTIVE VICE PRESIDENT, KALISPELL AREA CHAMBER OF COMMERCE, KALISPELL, MONT.

The Kalispell Area Chamber of Commerce, representing 500 businesses in Flathead County, is opposed to the Administration's Great Bear Wilderness recommendation. The recommendation differs considerably from the draft proposal aired at public hearings in September 1977. That draft proposal suggested exclusions totalling 81,560 acres on the basis of resource values, particularly oil and gas and timber, and developed recreation value and boundary management difficulties.

To the surprise of many, our Chamber supported the draft Great Bear Wilderness proposal which would have designated nearly 300,000 additional acres of wilderness for our area. The key to our endorsement of the draft proposal was the exclusion of the 52,440 acre area north of the Middle Fork of the Flathead River. The exclusion as then proposed was based on natural resource and recreational values deemed to benefit the greatest number of people; sound logic in our opinion.

The most significant natural resource factor of the 52,440 acre area is oil and gas potential. The U.S. Geological Survey and Bureau of Mines both determined that the area has high natural gas potential. In Secretary Bergland's Great Bear recommendation he said, "The study area contains geologic structures and stratigraphic history similar to that in Alberta which contains major reserves of gas and minor amounts of oil."

Further, this area north of the Middle Fork also contains the most extensive area of potential regulated forest land, with a present potential annual yield of 6.8 MBF/year of which 5 MBF/year is presently accessible. Future potential yield would be considerably higher if the area was managed for timber production. According to the Forest Service draft study, the present potential yield of 5 MBF/year represents about 25 timber industry jobs and 25 to 50 related jobs.

While the 5 MBF/year has not been figured in the allowable cut since 1970 and may not sound significant taken separately, it becomes critical when considered in light of a probable decrease in the allowable cut on the Flathead Forest from 150 MBF/year where it has been during the last three years, to an estimated 100-115 under the new timber management plan. For a community which is economically dependent on the woods products industry, with 47 percent of employment and over 50 percent of personal income directly or indirectly attributable to it, these reductions and foregone resource utilization are sobering. For the local timber mills which are nearly all small business operations whose major, if not exclusive source of supply is in national forest land, the situation becomes alarming.

Finally, the Middle Fork area provides the most variety in recreational opportunities and receives the most recreational use of the entire study area. Schaffer airstrip which serves as a point of departure for river floats, big game hunters, fishermen and outfitters accounts for about 25 percent of the areas recreational use. The improvements and minimal development which makes Schaffer Meadows a unique recreational experience would not have been possible in a wilderness and should not be phased out. Snowmobile use in the Middle Fork area is also increasing.

Since it is often argued that tourism potential generated by available wilderness areas will compensate for resource development foregone, it is interesting to note that, according to Flathead Forest records, in 1977 nearly three times more people visited non-wilderness forest lands than visited wilderness areas. It is accessibility, improvements, and developed recreational facilities that make non-wilderness areas such as Glacier Park, Big Mountain Ski Area and Flathead Lake our major tourist attractions, whose economic significance is also major.

In their draft study the Forest Service itself stated that these things considered, natural gas potential, timber yield and diverse recreation use, the 52,440 acre area north of the Middle Fork can provide commodities and permit activities which would benefit a wider segment of the public by not classifying the area as wilderness. All of the arguments by persons of a preservationist persuasion cannot change that fact. We agree with that interpretation and feel that nothing has happened to change matters.

The Kalispell Area Chamber of Commerce supports designation of 299,000 acres of the Great Bear area as wilderness as proposed in the draft study. With this addition, our area would have one of the most formidable preserved areas in the entire nation totalling 2.2 million acres.

But, in light of the uncertainty of the status of another 300,000 acres on the Flathead Forest under RARE-II, it is increasingly important to be cautious in deciding that wilderness values automatically outweigh other resource values in all areas once the boundary lines are drawn. Such decisions may be politically and emotionally expedient, but they do not necessarily benefit the majority of the people over the long run.

We agree with the Great Bear Wilderness as proposed in the Forest Service's Draft Study, but oppose the Administration's final recommendation.

Senator MELCHER. Mr. Bliss?

STATEMENT OF DAVID BLISS, REPRESENTING THE MONTANA SNOWMOBILE ASSOCIATION

Mr. BLISS. I am from Montana. I am pinch hitting for Nina Smith, who is chairman of the Committee on Public Lands for the Montana Snowmobile Association. First I would like to reaffirm the resolution made by the Montana Snowmobile Association, adopted at their 1977 convention in Lincoln, Mont., October 2. This resolution is as follows:

Be it resolved that the Montana Snowmobile Association does hereby state they can live with the Forest Service conclusions reached and the current proposal made on the Great Bear Wilderness study area, which excludes certain areas from the original study area as not to be classified as wilderness; said study being directed by the Omnibus Wilderness Act of October 19, 1976 (Public Law 94-557).

Since that resolution, the areas have been changed and these areas have been included in the wilderness study. We had to change our position. I am going to go through my statement here and hit the highlights instead of reading all of the rhetoric just in there to dazzle people.

The area involved that uses this area, the user area stretches from Kalispell to the west, Sweetgrass to the north, Havre to the east, and Great Falls to the south, and then it goes west again to Ronan. I can speak from personal experience. I see people from all over these areas. The area encompasses 31,350 square miles of Montana. Also some riders come down from Canada to ride in this area. A conservative number of snowmobilers in this area would be approximately 15,000. Although after listening to our wilderness advocates, if there was 50 percent there it would jump the estimate we carry on for the general population.

The usage of this area begins in December and generally ends in April. During the prime season when the weather is right and the climatic conditions are right and the snow is right, you will find 200-300 snowmobiles in a weekend in the area. Some less during the week. The reason this area gets such intense use is because of a condition we have east of the Continental Divide in Montana, of which I am sure the Senator is aware, we have a Chinook wind situation on the down-slopes of the Continental Divide. All of this results in extremely high winds and also warm winds. This dislocates the snow and melts it.

So we people who wish to participate in snowmobiling in Montana, we have to go to the Continental Divide to get adequate snow for snowmobiling. This should answer one of the questions one of the wilderness advocates asked here. We go into this area we are talking about, which is area 3, because the average snowfall there when we do start snowmobiling is between 4 and 10 feet. This will also answer one

of their objections to our using the area as to disturbing wildlife in the drainage. There is no wildlife in that drainage. We sometimes see some squirrels and a few birds, and that is all.

Another question I want to answer, we were taken to task for bar hopping, going from bar to bar. There are no bars in that area, either. I kind of question that type of testimony but I guess it is all right; I figured I should answer it. As far as accidents are concerned, I am associated with the industry. Right now it is 93 in the list of dangerous sports, which puts it way down below golfing, bicycle riding—which is quite dangerous—motorcycling and other outdoor sports. Believe it or not, golfing is considered more dangerous right now by the constant accidents, than snowmobiling.

This, I am sure, will be a surprise to people. This was announced by Yamaha Motorcycle Corp. at their last meeting.

There is another point brought up about accidents. Most of the time when a cross-country skier has an accident, they go get him with a snowmobile. In this particular area east of the Continental Divide that I have designated as a user area, there are now 23 active dealers. This is in a sport that is a "fad" and fading away.

If you would estimate between 25 and 40 machines per dealer in this area, you would come up with almost 900 new sleds per year, which is a substantial amount in that area.

As to noise, which was the question the Senator brought up, it is now regulated by stringent demands to quiet their machines down. The State of Montana has moved in and put up noise restrictions more restrictive than on automobiles. The industry is complying with these restrictions and a machine cannot be sold unless it complies with them. In fact, I would invite the Senator to come up and ride one. They are really quite pleasant to be on.

One thing we have found is we are like the proverbial dog that has been kicked. We got smart enough and we are trying to put up an alternate proposal which will make everyone happy, which is quite difficult in some cases. We realize with the wilderness designation of the middle fork of the Flathead River, these people are concerned about the status of this area, so we propose a 1-mile buffer zone along the river so that people on the river or in the vicinity will see no usage from snowmobilers or the timber or the oil industry.

We found we can cut some more areas off on the western side of area 3. Only if this becomes absolutely necessary, however. We have enclosed a map where we have redefined the area of primitive area 3, and we would appreciate your giving this consideration.

Another thing to bear in mind in considering snowmobiles, is if you see a map with trails all over it you must remember when the snow melts, the trails are no longer there. There is no evidence of anybody using the area.

In summation of my presentation, I wish to thank Senator Melcher for giving us this opportunity to present our views. I hope we will accomplish something by doing it.

[The prepared statement of Mr. Bliss follows:]

STATEMENT OF DAVID BLISS, REPRESENTING THE MONTANA SNOWMOBILE
ASSOCIATION

SECTION A

The Montana Snowmobile Association; representing approximately 60,000 active snowmobilers in Montana and is part of the national group representing 8.5 million snowmobilers; adopted a resolution at their 1977 convention in Lincoln, Montana October 2. This resolution urging passage of the Great Bear Wilderness draft proposal as originally recommended by the Forest Service. The resolution is as follows:

"Be it *Resolved*, That the Montana Snowmobile Association does hereby state they can live with the Forest Service conclusions reached and the current proposal made on the Great Bear Wilderness Study Area, which excludes certain areas from the original study area as not to be classified as wilderness; said study being directed by the Omnibus Wilderness Act of October 19, 1976" (Public Law 94-557);

With the help of the Northern Recreation Association, a group representing the snowmobilers in the immediate area, we have drawn up an alternate proposal which will protect 90 percent of our usable trails while still not encompassing the total area of Section 3 of the Forest Service Draft. We will refer again on this proposal later in this statement under Section D.

SECTION B

The area involved is used predominantly by snowmobilers residing in an area reaching from Kalispell to the West, Sweetgrass to the North, Havre to the East and Great Falls to the South, encompassing 31,350 square miles of Montana. Also some riders come down from Canada to ride in this area. A conservative number of snowmobilers in this area would be 15,000 users.

The usage of this area on an average year begins the 1st week in December and continues until the 1st week in April with snow in the area reaching 4 to 10 feet depths. The area has several parking areas, which will accommodate three hundred automobiles plus the parking area at Snow Slip and the Bear Creek Camp Grounds. There is parking at Marias Summit for an additional 50 units.

On any given day during the prime snowmobile season you will find approximately 200 to 300 snowmobilers in the area. This is to be considered an average because during some periods there will be more and on others less. This figure was arrived at by questioning several of the most active members of the Northern Recreational Association and also the businessmen of the area.

The reason the area receives such use is because it is the only area in North Central Montana suitable for snowmobiling from the Canadian border through Glacier Park. To arrive at another area of any size you have to travel to the Lincoln area approximately 175 miles south. The area 6 in the Forest Service Draft is a good area but too small to be of consequence for this number of snowmobiles. We appreciate the fact that the House of Representatives has seen fit to exempt this area 6 from the Wilderness Area but it is not sufficiently large to accommodate the demand. The reason Area 3 is the only area suitable for snowmobiling is because of an environmental phenomenon characteristic of the east slope of the continental divide called the Chinook Wind. Unless you are on the immediate slope of the divide or west of it, these winds melt the snow or blow it away. So to have adequate snow for operating machines we have to be protected by the mantle of the Continental divide.

SECTION C

Since snowmobiling has become a popular and growing sport in the area, the towns of East Glacier and Browning have had a rounding out of an otherwise seasonal business climate. In East Glacier where 8 years ago there were no motels open in the winter, there are now three. The Service Stations and eating areas are also benefiting from this usage. In Browning the War Bonnet Inn is sharing in this boom in local economics resulting in additional employment. The Bear Creek Area and Snow Slip Inn are also renting, serving food and catering to the snowmobilers. There are three snowmobile dealers in Browning, 2 in Cut Bank, 2 in Shelby, 4 in Conrad and 2 in Choteau, 3 in Chester, 4 in Kalispell and Somers, 5 in Great Falls and 4 in Havre. These dealerships are providing jobs and economic growth for the areas involved. The loss of jobs alone resulting from the loss of this use area would create a hardship in the communities involved.

SECTION D

The enclosed maps show all snowmobile trails used in the Area 3 in question. We have redefined the perimeter of the area in dark black edging giving a 1 mile buffer zone for the middle-fork of the Flathead River and reducing the total acreage by cutting off the Schaefer Meadow Trail shortening the area and reducing the width substantially by the buffer zone east of the Middle Fork.

The small figures printed by each of the many trails are usage figures received from the Northern Recreational Association reflecting the number of machines using these trails, assuming adequate snow cover and suitable weather. A thing to always bear in mind when considering snowmobiling, which is unique to the sport, is that when the snow melts the trails disappear leaving no evidence of man or machine in the areas, ridden—neither horses or men on foot can make this claim. Because of the deep snow in the area the only wildlife ever encountered are squirrels and birds, as the snow is too deep to allow survival of the other species.

In summation, I wish to thank the Senate for this opportunity to put forth our recommendations and hope that they will give just regard to our requests. The area that I represent is not exactly a garden of Eden in the Winter and we need our outdoor recreation areas.



Senator MELCHER. Thank you, Dave. Now area 6, which the House deleted, took care of some of the concerns expressed at Choteau, plus that was the area immediately concerned with Choteau. Where do you live?

Mr. BLISS. I live east of Conrad. I am a wheat farmer. I have a small recreation business in the town of Conrad.

Senator MELCHER. For your purposes, to get into this Challenge area here, you come along Highway 2 and go up Highway 2?

Mr. BLISS. Yes.

Senator MELCHER. You go down Morrison Creek to within 1 mile of the river, is that it?

Mr. BLISS. Yes. Those trails can be pursued further. We view that as effective end of usable trails in that area.

Senator MELCHER. Your general use is what months?

Mr. BLISS. December through April. Sometimes the latter part of November, in an unusually snowy year. But in a usual year the snow is sufficiently deep, and to use these trails that go up higher into the mountains.

Senator MELCHER. Under this proposal, you don't actually reach Schafer Meadows?

Mr. BLISS. We would like to. However, we chopped that off, too. We were trying to make as many concessions as we could and still retain a usable area and keep it large enough to fit the needs of the snowmobilers and the user area. I have brought a map with that area drawn on it. This is the user area. That is the snowmobiler area.

Senator MELCHER. What we are really talking about is people from the east side of the divide?

Mr. BLISS. Yes. People in the west side use it, too. It is unique. It is an experience to ride in the area, however, people of the eastern part of the divide have no other area unless we travel south to Lincoln which is 175 miles away.

Senator MELCHER. The noise level has been reduced?

Mr. BLISS. Oh, yes, Significantly.

Senator MELCHER. Do they allow snowmobiling in Gospel Hump?

Mr. WILLIAMS. No, sir.

Senator MELCHER. It was discussed but not approved?

Mr. WILLIAMS. The committee reported a bill for authorization but the conference committee deleted it.

Senator MELCHER. This is a wilderness area in Idaho acted on by the committee earlier. Now, in the Challenge area, you have been allowed to go through this?

Mr. BLISS. When this area was recommended for study, Senator Metcalf made the move to keep it open so we could keep it open while it was being studied. I would like to commend the Forest Service. They have been extremely cooperative with us. They seem to have taken care of our needs quite well in the area.

Senator MELCHER. That is nice to hear. I think that is all of the questions I have.

Mr. BEHENNA. In regard to the roads in area 3, members of the forest products industry have examined that area both on the ground and from the air. We have concluded the timber values along that preclude wilderness classification for that area known as area 3 in the draft proposal. Twenty-five Mile Creek, Granite Creek, Morrison Creek, and Lodgepole Creek have highly productive timber stands that can be easily accessed and managed for the timber values.

In fact, the hard part of the access has already been built and there are high standard roads into three of the drainages. We found spruce stands with volumes of more than 50,000 board-feet per acre, lodgepole stands with volumes of 15,000-17,000 board-feet per acre, and areas where radial growth exceeded more than one-half inch per year.

This establishes the commercial forest lands in that area are not marginal lands but productive lands capable of producing substantial volumes of timber. A major portion of the area is capable of producing more than 50 cubic feet per year with some areas producing 70 to 80 cubic feet per year. This capability for timber growth exceeds the national average and in keeping with the Wilderness Society's recommendation that the best sites be managed for timber, these drainage areas should receive priority.

Senator MELCHER. I would like to call the Forest Service back.

You ran the study?

Mr. JOY. That is true.

Senator MELCHER. Was there increased use by snowmobilers during that study or about the same?

Mr. SMITH. I think it ran about the same way. One year we had very poor snow, a year ago. It was about the same type of use. The only major activity incurred there, there was a planned trip into Schafer's Meadow where they took about 30 machines into Schafer's Meadows one weekend we know of.

Senator MELCHER. That was a planned trip? Approved by the Forest Service?

Mr. SMITH. They don't need our approval for something like that.

Senator MELCHER. Was there any environmental damage?

Mr. SMITH. I know of none. No.

Senator MELCHER. You did not observe any?

Mr. SMITH. No.

Senator MELCHER. What about the noise level? Were you there?

Mr. SMITH. I was not present during that trip, no.

Senator MELCHER. What about big game or any game? What is this talk about game?

Mr. SMITH. In Schafer Meadows, moose winter in there year long, they winter down at the bottom, the airport, in the wintertime. The elk are in there the first part of the winter. They move down the drainage as the snows progress. I would say in late January or February the elk are already out of there in a normal year.

If it is not normal, the elk will stay in the bottom of Schafer throughout the winter.

Senator MELCHER. When you say in the bottom, what do you mean? Right along the river? Close by?

Mr. SMITH. I am talking of within 1,000 feet of the river.

Senator MELCHER. Oh, very close?

Mr. SMITH. Yes, It depends on the elevation. Some of these site drainages, they move in and feed on the south slopes of the site drainages, too.

Senator MELCHER. Are the game such as elk harassed by snowmobiles?

Mr. SMITH. If it does occur, it would be an occasional type thing. I don't think that is much of a problem. There is a lot of cover the elk can go into that the snowmobiles will not go into.

Senator MELCHER. I didn't get that.

Mr. SMITH. A lot of the country the elk go into is very steep. You will not see snowmobiles in that country.

Senator MELCHER. When they talk about going down Morrison Creek and they don't get down to the river, they are not in with the game. When the snow is heavy, the elk come down; is that it?

Mr. SMITH. When the snow is heavy, they would be out of the area where the snowmobiles are going to.

Senator MELCHER. You don't have the snowmobiles functioning where the snow is not fairly heavy?

Mr. SMITH. That is true.

Senator MELCHER. You said December to April. What about April? That is getting toward spring. I suppose snow is pretty heavy in there. Is there change then?

Mr. SMITH. At that time the snow is up higher, they are in a higher part of the country, off the river.

Senator MELCHER. The game are still down there?

Mr. SMITH. The game are still down there.

Senator MELCHER. If snowmobiling were permitted in the wilderness on a limited area, we might assume it would not disturb the game in a limited area such as Morrison Creek or one of those areas staying at least 1 or 2 miles away from the river. Could we assume that?

Mr. SMITH. You would have to get down toward the river if you are going to get into Schafer. If you are going to stay back from Schafer, you would be away from the game, yes.

Senator MELCHER. I see. Believe me, I don't know whether this committee is willing to bite that bullet or not. Granted, we did it in Alaska but the committee actions so far in any snowmobiling in wilderness has been "No." Just recently we said the forest could permit it in the boundary waters. We turned over some restrictions in the boundary waters. We said the Forest Service might be able to permit it in some areas, but that is as far as this committee has ever gone in any wilderness area regarding the snowmobiling.

In recent years an exception would be boundary waters in 1964 and Alaska in regard to wilderness areas and snowmobiles.

Mr. Joy. May I comment with regard to snowmobiles. It has been the policy of the Forest Service that snowmobiles, being motorized access vehicles are prohibited by the Wilderness Act of 1964. We have assumed the position that snowmobiles are a nonconforming use to wilderness and the permission of allowing snowmobiles in any one particular wilderness could be precedent-setting and open up the door then for other interest groups such as motor trail bike users saying why can't we use the trail bikes, you are allowing snowmobilers to go in.

Pretty soon you have year-round motorized access within an area we feel the intent of the Wilderness Act was to prohibit.

Senator MELCHER. When you say what the Forest Service's views are on snowmobiles, it is no surprise to me. That is what the law says. That is why you say that.

Mr. Joy. That is correct, sir.

Senator MELCHER. And that is what I have always said. We are getting to a time now when a lot of us are going to look at this again.

This may be an occasion. We know we are setting a precedent. We are not naive in that regard. I was not there when the act was passed but I have read it several times and I have dealt with it in scores of wilderness bills in the House. I have not done much here.

But we had scores of them in the House. I know what the restrictions are. However, the point is with snowmobiles it is apparent there is not environmental damage in terms of the surface. That seems to be in most cases—all of this is regulated in any way by the Forest Service for as long as they are in a national forest and we have been pretty well satisfied, I think. At least to my knowledge, we have not had complaints coming to my office about snowmobiling being damaging to the surface.

We have heard it speculated by people who did not do much snowmobiling, and understand I have not done any—but also understand I have no prejudice—but I do understand the noise and the disturbance that it causes to other people, whether it is in forest land or wilderness. I understand the very presence of them, of a mechanized vehicle in a wilderness area is certainly a deviation from the act. The reason I am really looking at this again, to be honest with you, is with the complete abandon of any restriction in Alaska wilderness.

I wonder if we are not overcautious in American snowmobiling and some of our wilderness areas. I think they would still have to be supervised. There would have to be routes. I think they would have to be limited in case of any game harassment, et cetera.

I am not really of the opinion the noise level is extremely harmful to, say, cross-country skiers. I recognize it is an infringement on wilderness. I just have not formed an opinion on that part, whether that is an infringement that should be weighted against the value, the outdoor recreation value of snowmobiles.

Mr. Joy. We appreciate your concerns. I would like to add we certainly concur with Mr. Bliss' statement. We were pleased to hear from him that his relationship, the Montana Snowmobilers Association relationship with the Forest Service, has been favorable. We certainly attempt to work with the snowmobile industry, with the snowmobile users.

We try to establish snowmobile trails. The individual snowmobile clubs have been a great assist in helping us to lay out and mark trails, patrol trails, come to assistance in times of emergency. And snowmobiling is really recognized as a valid recreational pursuit in the national forest. We just try to identify those areas where that particular use can be accommodated in a safe manner without detriment to other forest uses.

So far, I think we have got a pretty good batting average.

Senator MELCHER. I know a lot of people think Montana, being so far north, a lot of it close to mountains, there is always a lot of snow. Of course, that is not the case. There is a fairly dry area east of the mountains and the area snow fall is not all that good.

If Mr. Bliss is representing really a whole host of people who live out in that area, if they want to get snow they have to come quite a ways. Skiing cross-country, downhill skiing, or snowmobiling, they have to travel quite a ways. I think it ought to be part of a public policy of all of us from Montana to encourage outdoor recreation in the wintertime. I think it is very good.

In fact, if our family were not exposed to more of it, we would have to go some distance for skiing. But I think people who do not have outdoor recreation in Montana, particularly from the eastern side, are really missing a lot. I would like to encourage it in every way I can.

We have a couple of other questions here. Now, Mr. Smith, when we were talking about how close you came to Highway 2, you talked really more about that east side of Glacier as being the closest point, and the map we have shows that Nimrod right at the very southwest tip of Glacier, if this map is accurate, shows a boundary coming right to Nimrod. Is that true?

Mr. SMITH. No, I think the boundary would be at least a quarter of a mile back from the highway.

Senator MELCHER. When you say that, are you also saying the railroad track?

Mr. SMITH. Yes, the highway there is right next to the railroad track.

Senator MELCHER. The highway at Nimrod crosses into Glacier, going west. Am I wrong there?

Mr. SMITH. That is correct.

Senator MELCHER. So you are actually in Glacier then?

Mr. SMITH. The highway is, yes.

Senator MELCHER. But the highway at Nimrod should not be as close as it is on the map. When we pass one of these bills all we have got to go on is a map down here in the Forest Service identified by number and if we don't have it right a problem results and we have to have another act of Congress.

This map is a little bit different than the one I have. What is the map you are going to use if it becomes a law?

Mr. JOY. This is a work map, Senator, where we have established the boundary. It is very similar to a map the House subcommittee has. It shows the boundary.

Senator MELCHER. Here is Nimrod. That shows well away.

Mr. JOY. This would be the boundary.

Senator MELCHER. How far is that? What is the scale here?

Mr. SMITH. This scale is 1 inch to 1 mile, so that is about half a mile.

Senator MELCHER. This is further away than the map I have up there and this one looks further away from it, where this one is. Where is the railroad track there?

Mr. SMITH. It runs right here.

Senator MELCHER. That line is the railroad track. So what you have attempted to do is, as I think Don Marble said, this is not linear feet going up a slope, it is one-quarter of a mile horizontal distance.

Mr. SMITH. Yes.

Senator MELCHER. These are the lakes you were referring to?

Mr. SMITH. Yes.

Senator MELCHER. These are section lines. That is 1 mile, what you are saying, from this point, about half a mile to get into Tranquil Basin.

Mr. SMITH. Yes.

Mr. JOY. We would be glad to leave this map for the committee to work with.

Mr. SMITH. I have two copies. You may have my copy, Senator.

Senator MELCHER. We would appreciate having that. I think they are more accurate than anything we have got in front of us right now. Now, who can tell me about the work being done on land exchange for the Burlington Northern?

First of all, in the Jack Creek area. As of the spring of 1977, there have been about half a dozen swaps right up adjacent to the Spanish Peaks primitive area. Have there been any more swaps since then?

Mr. WILLIAMS. No, there have not.

Senator MELCHER. What is the status of the swaps with the Burlington Northern? Mr. Bolle mentioned 177,000 acres. What are the facts? Occasionally you see some news item that alludes to this.

Mr. WILLIAMS. About 175,000 acres of private land would be involved. For the total swap what we are dealing with is a request from Burlington Northern to swap their intermingled lands in the Gallatin and Beaverhead Forests and acquire in lieu of those lands, areas in the Flathead and the Lolo Forests where they have checkerboard ownership. They would pick up the Forest Service checkerboard there. The Forest Service would acquire the Burlington Northern land in the Gallatin and in the Beaverhead.

Senator MELCHER. Is the proposal always checkerboard, or what is it?

Mr. WILLIAMS. To my knowledge, it is dealing with checkerboard at this time.

Senator MELCHER. How much has this cost the Forest Service so far?

Mr. WILLIAMS. It has been a rather minimal cost at this point. We have essentially held off taking any action on it for several years, until about a year ago at the renewed request of Burlington Northern we agreed to initiate an environmental statement to simply assess the question of whether or not it was in the public interest to proceed with the land exchange.

There has been a study leader appointed. There will be a salary for him and a small amount of work on the part of other people to complete an environmental statement.

Senator MELCHER. Do you have anything assigned to it?

Mr. WILLIAMS. I do not. This person is working from the regional office, addressing the issue. Our people are detailed to it 2 or 3 days at a time to acquire data for it.

Senator MELCHER. So it is at a stage of drafting an environmental statement?

Mr. WILLIAMS. That is right. It is assessing the question of whether we should proceed.

Senator MELCHER. Environmental assessment?

Mr. WILLIAMS. It is an EIS which will assess or evaluate the question of whether or not we should proceed with the land exchange. It is being prepared as an environmental statement which will be filed under the environmental statement rules with EPA.

Senator MELCHER. That will take an EIS, won't it?

Mr. WILLIAMS. Yes. It is an EIS. I am sorry if I confused you on that. It is an EIS that is being prepared. We referred to it as an assessment but it will be presented in an environmental statement which is filed under the NEPA process.

Senator MELCHER. I am not aware the Forest Service has engaged in such big swaps before.

Mr. WILLIAMS. There have been some large ones. We will be looking at several alternatives, one of which will be to do nothing, the other of which will be to consummate the entire swap. In between, there is a whole host of ways it could be approached in smaller pieces. It very likely would be very appealing to many people, if we were to break it up into many small pieces before we actually start appraising land values and talking about swap of acre for acre.

Senator MELCHER. As a matter of fact—well, to repeat, I am not aware of any big swaps. I know something of the law that permits the Forest Service to do this, but I am not familiar with any huge swap of this nature.

Mr. WILLIAMS. This is why I am trying to make the point the environmental statement is to address the question of whether or not a swap or a series of swaps is in the public interest. It is not a statement that is addressing a total land exchange. It is simply addressing a question of should we proceed from here and go into the expensive part of the job which is the appraisal of land parcels and the negotiation that gets involved at that point, which then becomes a big job and a relatively expensive job.

Senator MELCHER. I am not trying to put you on the spot. It is not your responsibility. But it would be my understanding an environmental impact statement which does not necessarily include all of that appraisal but in fact an environmental impact statement of that nature would cost several million dollars.

Mr. WILLIAMS. Our estimates are considerably below that. I do not have them at hand but I know it has been calculated and we could supply a study plan to you which outlines the time frame as well as estimates of the cost.

Senator MELCHER. Not only that, I think we will do what Chairman Hale used to do with the House Interior Committee, the cap on what you can spend. It doesn't make any difference. It doesn't make any difference—we know what the EIS's have been costing which are charged to an applicant. We have one situation, one is the Forest Service. There is no charge to the Burlington Northern for the EIS work, is there?

Mr. WILLIAMS. No direct charge. They are providing data regarding their lands but we are not collecting funds from them to defray our costs.

Senator MELCHER. I have to remind you in all of the procedures I am aware of for an application for a permit or lease, the applicant pays the expense involved. Talk about one man here, or two men there. It doesn't disturb anybody here, I think, from the cost standpoint, but we are well aware an environmental impact statement for something of this nature would ordinarily cost somebody who is being billed several million dollars.

We have to assume that is about what it will cost anyway, unless our policy has been to overcharge.

Mr. JOY. Mr. Chairman, maybe we can reiterate what we are looking at at the present time is the feasibility of such an exchange. That feasibility realized could have considerable social, economic and environmental impacts if an exchange should be carried out. So the environmental statement that will be forthcoming will assess various alternatives as Bob has pointed out and try to determine, with public involvement, if such an exchange is appropriate or not.

If it is determined that we should go forth with an exchange, that is when the real nitty-gritty detail work gets done. That involves land appraisals, selections offered, selected lands, and other complexities.

Senator MELCHER. The NEPA Act requires an economic study. It requires an alternative also based on an economic study. You cannot get a successful environmental impact statement without taking that into detail. You may not have to assess every section of land involved in the section to arrive at the economic impact but you have got to get pretty close to it.

I see it as being quite costly. I may be prejudiced, I try not to be. I try to look at it objectively. But while I firmly believe in locking up the land between the Forest Service and the Burlington Northern that is checkerboard or any other as far as that is concerned, because I think it leads to better management, but I am very hesitant to think of an exchange of this size from one forest area to another forest area and the impact it might have.

I am beginning to get letters of concern from some timber people who say we don't know whether we will be able to bid on Burlington Northern or not. I was pleased to hear the testimony we heard earlier from Fred that it was working with his company quite well. That is reassuring.

But these are things that will have to be considered. Now, how much of this land we are looking at in the Gallatin or the Burlington Northern and on your forest, Mr. Williams, Beaverhead, is infested with bark beetle?

Mr. WILLIAMS. I do not have the total figure. In the Jack Creek area, we have about 14,000 acres that are infested. That includes both national forest and private lands. A very rough estimate would probably be 5,000 or 6,000 acres of private land are infested at this time. A much larger area of infestation extends over the Gallatin.

Senator MELCHER. Can that be answered right now? How much in the Gallatin?

Mr. JOY. Let's see if we have the answer here. This is the information telephoned to us by the Gallatin National Forest, including Spanish Peaks, for 1977 a total of 224,000 acres were infested. Infestation involved about 5.7 million trees, estimated. In the Beaverhead Forest, a total of 29,000 acres were infested in 1978. This area includes Jack Creek with an infestation of about 14,720 acres involved. And, because the Jack Creek drainage is pretty well checkerboarded, it would be pretty much 50-50.

Senator MELCHER. How much land has Burlington Northern got in Gallatin National Forest?

Mr. JOY. I don't think we have that here but it could be furnished.

Senator MELCHER. Well, this 177,000 acres, how much land does Burlington Northern have in the Beaverhead?

Mr. WILLIAMS. It is in the neighborhood of about 30,000 acres. The only figures I have with me today are those of Jack Creek which are 13,000 acres.

Senator MELCHER. But it is in the neighborhood of 30,000?

Mr. WILLIAMS. Yes; there are two separate sections. Indian Creek and Jack Creek.

Senator MELCHER. Has Indian Creek got beetle infestation?

Mr. WILLIAMS. Yes; it has.

Senator MELCHER. We have 224,000 acres of the Gallatin, which is what percentage of the Gallatin's total?

Mr. JOY. I don't have that.

Mr. WILLIAMS. Between 10 and 15 percent. Probably about 15 percent. I think the forest is nearly 2 million acres, the Gallatin.

Senator MELCHER. Apparently if this 177,000-acre figure for Burlington Northern is correct, it is about 147,000 acres of it would come out of the Gallatin. Does that seem logical?

Mr. JOY. That is about right. If we subtract the Beaverhead portion which Bob has estimated of 30,000.

Senator MELCHER. So the north part of the area from the Beaverhead, that is checkerboard, Burlington Northern; perhaps most of the land of Burlington Northern and the Beaverhead is beetle infested, and you don't know how much of the Gallatin would be in this Burlington Northern swap that would be beetle infested. These are some of the things that have caused me apprehension about the whole proposal.

We are talking about a process that would probably take about 4 or 5 years to arrive at an answer. I suppose in the interim we are supposed to wait and see what happens to the beetle. We are not getting anything done on it, are we?

Mr. WILLIAMS. There are some sales being offered at the present time on the Gallatin Forest. The Burlington Northern is moving into some of their land offering sales. They have contacted us regarding road access into Jack Creek to access their lands in that area.

Senator MELCHER. How far up Jack Creek would they go?

Mr. WILLIAMS. The map they supplied was a rough one but they indicated a complete system which would tie Big Sky to the bottom, would be a network on both sides of the drainage.

Senator MELCHER. What will you do with that application?

Mr. WILLIAMS. We have a cost share agreement with them. They asked if we wanted to participate in cost share. Because of the RARE II status we were unable to do that. Essentially the ball is back in their court. We will assume they will ask to build it themselves. They will have to supply us with a plan for the road and we will proceed to evaluate that plan and probably eventually issue the permit to provide them access to their private lands.

Senator MELCHER. You have to under the law, don't you?

Mr. WILLIAMS. That is our opinion.

Senator MELCHER. Would you do that before RARE II action has been completed?

Mr. WILLIAMS. If they supply a request for it, we will go ahead and deal with it in advance of RARE II. It is doubtful that will be done in that timeframe. By the time they get the surveying done, it will probably be winter or possibly even next year.

Senator MELCHER. How far does the road come up Jack Creek, all of the way?

Mr. WILLIAMS. The existing road? No, it only goes in from the bottom a couple of miles.

Senator MELCHER. Does it go up over the Diamond Ranch?

Mr. WILLIAMS. Yes, it does. There is a national Forest campground at the bottom of Jack Creek.

Senator MELCHER. Is there a road up to the Hammond Creek guard station?

Mr. WILLIAMS. A very low standard road that goes from the campground to the guard station, a road that is not maintained.

Senator MELCHER. From the Diamond Ranch going up Jack Creek. Where is the national forest campground?

Mr. WILLIAMS. The campground would be located probably about 1½ miles into this area. That is the end of the maintained road, and then it swings back to the guard station.

Senator MELCHER. There are some inholdings in the Jack Creek area other than Burlington Northern or not?

Mr. WILLIAMS. In the lower reaches. I am not sure of the number of owners. A couple of ranchers have land there.

Senator MELCHER. We have a map a couple of years old. We are confused on what some numbers mean here, but they are not the lower reaches of Jack Creek.

Mr. Joy, has the position on Spanish Peaks Wilderness recommendation of the administration changed?

Mr. JOY. It has not changed since it was submitted to the Congress in 1968.

Senator MELCHER. It is still the same.

Mr. JOY. Yes, sir.

Senator MELCHER. Then the only rethinking on that as far as the Forest Service has been concerned is the discussion I have had with the Forest Service a year ago about additions that have been traded out.

Mr. JOY. We have acquired some lands both inside the existing primitive area there and some lands that are just on the outside, on the north slopes of Jack Creek. With the RARE II program underway, it is quite feasible upon completion of RARE II there would be recommendations for additional lands for wilderness purposes.

Senator MELCHER. Adjacent to it?

Mr. JOY. Yes.

Senator MELCHER. Where would that be?

Mr. JOY. There are wilderness lands that have been inventoried on the north, the northwest, swinging on down the west side of the Spanish Peaks through Jack Creek, and, of course, that ties in with the Hilgard study area.

Senator MELCHER. How do you tie into the Hilgard area? There is a highway in between, isn't there?

Mr. JOY. No, sir.

Senator MELCHER. Where does 191 end up?

Mr. JOY. The 191 goes in the upper Gallatin Canyon.

Senator MELCHER. I am looking in the wrong direction. You are looking in the west?

Mr. JOY. On the northwest and the northern side of the Spanish Peaks.

Senator MELCHER. The north we have discussed before. There is some forest land there. The last time I talked about this the recommendation seemed to be "no." You are looking at it again?

Mr. JOY. No, sir. We have not reexamined the Spanish Peaks proposal. Upon completion of RARE II, it is quite possible with the RARE II recommendations, we may have a different proposal for the Spanish Peaks.

Senator MELCHER. That is true. But RARE II is going to have lots of recommendations.

Mr. JOY. That is correct.

Senator MELCHER. Recommendations that are available here, it seems to me, are principally Jack Creek, whatever was determined on Jack Creek.

If you go west there, that area between the western part here and the 8 or 9 miles it is to the lake would be involved.

Mr. WILLIAMS. The RARE II inventory includes all of that country. The Beaverhead Forest has a final land management plan in that area, that addressed wilderness. It was for nonwilderness management for a combination of timber, recreation, and so forth in the Jack Creek range.

Senator MELCHER. How about if you went directly west toward Ennis Lake?

Mr. WILLIAMS. Also for nonwilderness management, essentially leave it as it is with grazing activity.

Senator MELCHER. Now going the other way, you have the highway. Now Big Sky, where would that be on my map here?

Mr. JOY. About where map B is labeled on yours, in this area here.

Senator MELCHER. If that land management plan at Beaverhead were accepted, we are still kind of down to the point where we are looking at Spanish Peaks, modified I suspect. The Forest Service position is they would just as soon see Spanish Peaks modified. At least that is what you told me privately. There wasn't any formal change in the recommendation.

Mr. JOY. At the present time the administration's recommendation is with the 63,300 acres that has been before Congress.

Senator MELCHER. My concern is to reach a resolution some time between Spanish Peaks and Jack Creek, my personal preference would be to go with Spanish Peaks as modified and that additional land taken in and then address Jack Creek as a separate issue. But I don't know, that is just my personal view.

I get into, however, a different thing with Jack Creek. I have mentioned this beetle situation. I have a feeling if we allow the beetle to go on and spread without any attempt to correct it, or following a very lousy procedure, I am always discouraged when I talk to Forest Service people about controlling it. They are always pessimistic. Is there any reason to think we can check this at some point, at least in some areas?

Mr. WILLIAMS. We are evaluating it on the Beaverhead at the present time. The tentative conclusion is we don't check it by attacking it where it is, but we check it by moving out where we predict it will go next and start managing those stands and create younger stands of trees. That is the only effective treatment we have been able to find.

Senator MELCHER. Does the Gallatin look at it the same way?

Mr. WILLIAMS. They do. I do know the Gallatin has done some small high intensity treatment around recreation areas and summer homes that actually involve spraying and felling some highly accessible trees. A very expensive operation. And you only do it where there are high recreation values.

Senator MELCHER. The process of forming a belt, how far around it would you go?

Mr. WILLIAMS. My understanding from the entymologists, the concept of forming a belt is not effective. The beetles are always there in endemic proportions, even though you create the belt, that would not stop them from developing when the trees become older in the next block of trees beyond it. We see they tend to move from area to area. That is sort of a spilling over of the population. But it is helping build the population that already exists.

The best advice I can get from entymologists, who seem to understand this, the belt or barrier concept is not effective.

Senator MELCHER. Then how would you do it? What would be your plan at Beaverhead?

Mr. WILLIAMS. The plan is, No. 1, to identify the areas we want to manage for timber. Then we select those areas that are most highly susceptible to beetle development, say the next 5 to 10 years, which we are in the process of doing now. We think we can pretty well chart how it is going to go on Beaverhead, then program our timber sales program into those most susceptible areas and begin to convert them to younger stands of trees so we can harvest the old ones while they are usable and establish the young stands.

In highly sensitive areas such as campgrounds, we are thinking now in terms of removing the older trees, maybe 10 or 15 years before they become susceptible to the beetle. This is thinking quite a ways down the road. We are simply investigating at this time.

Senator MELCHER. Are these all lodgepoles we are talking about?

Mr. WILLIAMS. Yes.

Senator MELCHER. We are not talking about ponderosa?

Mr. WILLIAMS. No, sir.

Senator MELCHER. In other words, you view it right now as selective savings?

Mr. WILLIAMS. That is correct.

Senator MELCHER. With a priority on those sales that might become of an age that is susceptible to the beetle?

Mr. WILLIAMS. That is right.

Senator MELCHER. In this campground area, you can thin it. I am confused and I guess a little bit disappointed, too. Apparently thinning is not really all that good to halt it.

Mr. WILLIAMS. There are several disadvantage to thinning. Probably in most of our stands, if you thin it for whatever reasons, harvest or insects, you end up with a stand of old trees. They are simply smaller. They are not necessarily younger. They are not thrifty trees. Often they are heavily infested with mistletoe. This is the reason clearcutting, even though we may not want to speak of it sometimes, is the only practical, across-the-board method to handle lodgepole pine in the Beaverhead Forest and several of the other east side forests.

This is the best silviculture means for handling those stands. Each is handled carefully by a silviculturist and in 85 to 90 percent of the cases, clearcutting in small groups or moderate-sized groups is the approach. Very seldom can we use thinning or seed tree cutting or one of the other methods.

Senator MELCHER. That is what happened to lodgepoles. Thinning is the only way. It does not necessarily apply to lodgepole all over. That is a pretty big forest?

Mr. WILLIAMS. Yes, it is. About 70 percent of our timber which, in turn, covers about 50 percent of the forest.

Senator MELCHER. How big are these proposed sales?

Mr. WILLIAMS. Most of our sales run from about 3 million feet to about 5 or 6 million feet.

Senator MELCHER. What does that mean in acres?

Mr. WILLIAMS. In acres, probably in the neighborhood of 1,000 acres. They vary considerably depending on the particular location. We try to build the sale to fit the drainage in the area it is in.

Senator MELCHER. What happens to lodgepole when they are hit? Anything harmful?

Mr. WILLIAMS. The first thing that happens is severe damage in the logging process itself. The way the lodgepole grows, it is difficult to get the small trees out without damaging the residual stand. The main thing that happens is nothing. They simply sit there and don't grow. Twenty-five or thirty years later you come back—

Senator MELCHER. I mean in an area where they are not mature.

Mr. WILLIAMS. If you had a stand that was not mature and was not infested with mistletoe, it would increase, it would grow. We are thinning stands now that are 30 years old, as a result of fires, and some 20-year-old stands the result of previous clearcuts.

We are getting beautiful response from thinning. They respond very well as long as you are dealing with a healthy stand young enough to do it.

Senator MELCHER. By respond, you mean they grow to be bigger trees?

Mr. WILLIAMS. Yes. The annual rings on the trees are four or five times larger than before they were thinned.

Senator MELCHER. How much money do you have available in the Beaverhead for thinning?

Mr. WILLIAMS. I have no committed amount for year to year. We propose projects each year. Maybe one year we will get a \$100,000 project. Maybe the next year, \$30,000 to \$40,000. It depends on how it stacks up with the other projects.

Senator MELCHER. How about reforestation?

Mr. WILLIAMS. It works the same way.

Senator MELCHER. How much of the Beaverhead ought to be reforested?

Mr. WILLIAMS. I am sorry, I cannot give you a figure.

Senator MELCHER. Quite a bit?

Mr. WILLIAMS. I am hesitating. There are several things that enter into it. We have got about 500,000 acres we intend to manage for timber under our land management plan. We are looking at 50,000 acres or less of that which needs some kind of treatment. But some of it consists of extremely poor timber that is essentially mature, that is not of commercial quality. It actually needs to be removed and some kind of technique to reforest it, probably using direct seeding rather than planting of seedlings.

Senator MELCHER. I am really in a quandary. On your response on lodgepole, we are well intentioned here in drafting laws. Sometimes what we think we are doing is not the way it finally comes out. The restrictions on clearcutting were pretty closely examined and adopted, and Forest Service regulations have probably tightened up some by putting Church guidelines into law and expressing a limitation on acreage for clearcut.

Now apparently the interpretation of the Forest Service is lodgepole, the way to handle it is to clearcut.

Mr. WILLIAMS. I do not view that as a Forest Service interpretation. I view it as we are following very specifically the statement—I cannot quote in verbatim—that says clearcutting should be avoided except where it was the only way of handling it. There is something of that nature. Each stand is carefully reviewed by a silviculturist. If he can find other ways of handling it, clearcutting is the last option we choose.

About 30 percent of our forest is Douglas-fir and essentially no clearcutting is done on Douglas-fir.

Senator MELCHER. I understand that. But you have got a lot of lodgepole and where there is lodgepole there is hardly anything else.

Mr. WILLIAMS. That is correct.

Senator MELCHER. And the infested area is lodgepole. Unless we have a forest fire, something that takes it out, I guess we have to take it out some time or not have a forest there. That is about all that happens, isn't it, in the heavily infested areas the trees all die.

Mr. WILLIAMS. The trees don't all die. There is usually a stand left, but it is a very, very thin stand. The big bulk of the forest, the western portion which is not infested with bugs now, was hit very hard in the 1930's. It reduced on an average of perhaps 12,000 board feet per acre stand down to stands that are now 3,000 or 4,000 board feet per acre.

But it took essentially all of the large merchantable trees at that time.

Senator MELCHER. If you had more money in Beaverhead and the Gallatin, had more money available for control of the beetle, would you have the personnel to do it or would it be impossible to do it, with the personnel ceiling?

Mr. WILLIAMS. From my perspective, the personnel ceilings have not been a problem, but I would have to say that is because there has been enough adjustment regionally and nationally to provide me with the people I need. I presume if there were more money coming, there would be a ceiling there.

Senator MELCHER. But the ceiling is not cramping you right now?

Mr. WILLIAMS. It is not right now, that is correct. Although we are limited on money.

Senator MELCHER. Yes, I know. But part of the reason also is you have completed the Beaverhead study, is that right?

Mr. WILLIAMS. That has not really affected the personnel situation?

Senator MELCHER. Don't you have to use your personnel doing that?

Mr. WILLIAMS. We did. We have been able to shift them to other activities. Our personnel and our money are balanced. When we are doing a land use plan much of the money is going into land use planning and not other activities. Now we are able to shift that money.

Senator MELCHER. That was my point. When your land use plan is completed, personnel working on that can be doing other things, is that correct?

Mr. WILLIAMS. That is correct.

Senator MELCHER. You are not bumping against the ceiling, if you had more money you could do more on beetle control?

Mr. WILLIAMS. That and everything else we need to do.

Senator MELCHER. Is the same true of Gallatin?

Mr. WILLIAMS. I am sure it is.

Senator MELCHER. Thank you all very much. I am sure we will be asking a question or two before we are done.

I have a number of statements I want to put in the record. Without objection, I submit them for the appendix to the record.

I will be around a little bit after this, but the hearing is concluded.

Mr. MARBLE. Could I have a minute for final comments from the proponents of Great Bear? On behalf of the proponents we want to thank you for hearing our testimony. We are happy to hear you are going to move the Great Bear proposal. I would like to point out since we are here on our own time and expenses, we are not paid lobbyists, we are not going to be able to stay any longer and to work with you and your staff on the Great Bear proposal.

After observing the rush conditions here and all that, we therefore request the Senate, with your help, pass the House-approved version as it exists. The House-approved bill, we think, represents a fair compromise of all of the interests that are involved. We are not totally happy with it but it represents a fair compromise. So we would like to see it approved by the Senate.

Senator MELCHER. Thank you very much.

The hearing is adjourned.

[Whereupon, at 1:53 p.m., the hearing was adjourned.]

APPENDIX

ADDITIONAL STATEMENTS AND COMMUNICATIONS SUBMITTED FOR THE RECORD

STATEMENT OF LARRY B. BLASING, DIRECTOR, FORESTRY PROGRAMS, INLAND FOREST RESOURCE COUNCIL, MISSOULA, MONT.

My name is Larry B. Blasing. I am Director of Forestry Programs for the Inland Forest Resource Council in Missoula, Montana. The Inland Forest Resource Council is an association of forest products companies that operate mills and plants in Montana and northern Idaho. Member companies harvest timber on private, state and federal lands and process it into lumber, plywood, particle board, pulp and paper, packaging and other wood products. These companies employ approximately 15,000 people and the combined annual payroll exceeds \$200 million.

The Council's primary goal is a sustained timber supply from the public and private commercial forest lands.

Our Council represents 24 member companies with more than 60 manufacturing plants. Not only are we representing those companies, but we are also representing their interest in their employees, the communities that depend on their operations for their social and economic vitality and their interest in the consuming public that purchases the products they manufacture.

Our Council has been involved in the Great Bear controversy since its inception. We supported the bill which mandated Wilderness Study for the Great Bear. We then actively participated in the planning process which was to determine the suitability or non-suitability for Wilderness and then formulate a recommendation. When the draft recommendation was published, we then supported that proposal. We supported that proposal as a compromise. The draft proposal was unquestionably inadequate for resource development, but was one that offered to expedite some relief for our industry's timber supply problems. Had the draft proposal not made the development concessions that it did, we would have opposed Wilderness classification for the Great Bear Area. It is these same reservations that cause us to oppose S. 3429 as it is now written.

The final Great Bear proposal offers nothing to the American public except acres of Wilderness. It does not take into account the needs and opportunities for energy, wood products, minerals, wildlife, or developed or motorized recreation. While Wilderness classification of the Great Bear is sought by only a few vocal people, the other resource values are important to virtually all of the consuming public of America. All through the deliberations of the Great Bear Study, Senator Metcalf repeatedly assured us that this was to be a study exercise which would recommend deserving areas for Wilderness, and other areas with significant resource values for non-Wilderness. We fully expect the agencies and the Congress to honor that commitment. At this point in the process, we feel that the commitment is not being honored.

Our industry still supports the Draft Proposal for a Great Bear Wilderness as our compromise position. We have made substantial concessions to reach this compromise and we feel that it is only appropriate that the industries and the consuming public who wish to utilize the resources of the Great Bear do not become the "fall-guys." Ultimately, it is the consumers that are the sacrificial lambs when undeserving areas are classified as Wilderness by Congress.

The timber industry still supports the Draft Wilderness Proposal for the Great Bear; however, we want to make it clear that support for the Draft Proposal does not mean support for the Final Proposal. Without amendment, S. 3429 is unacceptable.

Today's advertising people are great for coming up with "buzz words." The Great Bear proposal is no exception. Great Bear is just a sexy name for a massive extension to the Bob Marshall Wilderness Area. There is no difference in that you are dealing with the same terrain, the same drainages and the same vegetative and wildlife communities. It just sounds sexier to ask for classification of the Great Bear, than it does to ask for an addition of 360,000 to the 1,189,000 acres of the Bob Marshall-Scapegoat Wilderness Area. In reality, this is merely a proposed addition to the Bob Marshall.

There is no established need for Wilderness in the Great Bear. With the 1,189,000 acres classified Wilderness in the southern boundary, and the 1,013,000-acre Glacier National Park with its 927,000-acre Wilderness proposal on the north boundary, there is no conceivable need for more Wilderness in the area.

As a corollary, we have a nation that is facing energy shortages, an established national need for housing and other wood products, local industries that are starving for timber and an overwhelming demand for developed and motorized recreation. Need for Wilderness is not a factor because no need for classification exists in the Great Bear.

I have been told that the Secretary of Agriculture has indicated that there is overwhelming support for the Great Bear proposal. This is curious in view of the summary of public comment that was compiled from the public meetings that were held in Kalispell, Missoula and Great Falls, Montana. This summary shows that while there was public support for a Great Bear Wilderness, there was also strong support for boundary modifications. Without boundary modifications, many people would have opposed any Great Bear proposal. An examination of the comments in this document will show that opinion was split in Kalispell, pro-wilderness in Missoula because of the influence of the University of Montana Wilderness Institute, and anti-Wilderness in Great Falls. There was no overwhelming public support for the proposal that is being advanced today.

IFRC staff and members of the forest products industry have examined the area, both on the ground and from the air. We have concluded that the timber values alone should preclude Wilderness classification for that area known as Area No. 3 of the Draft Proposal. Twenty-five Mile Creek, Granite Creek, Morrison Creek and Lodgepole Creek have highly productive timber stands that can be easily accessed and managed for the timber values. In fact, the hard part of the access has already been built and there are high standard roads into three of the drainages.

We found spruce stands with volumes of more than 50,000 board feet per acre; lodgepole stands with volumes of 15-17,000 board feet per acre; and areas where radial growth exceeded one-half inch per year. This establishes that the commercial forest lands in the area are not marginal lands, but are highly productive lands, capable of producing substantial volumes of timber. A major portion of the area is capable of producing more than 50 cubic feet per year, with some areas producing 70-80 cubic feet per year. This capability for timber growth exceeds the national average, and in keeping with the Wilderness Society's recommendation that the best sites be managed for timber, these drainages of the Great Bear should receive high priority.

The Forest Service proposal states that 5 million board feet of allowable cut are accessible in Area #3. This volume will sustain a small sawmill operation and will produce about one-fourth of the volume needed for an average Montana sawmill. This becomes very critical to those industries in the Kalispell area that are dependent on federal timber sales for their survival. Timber sales programs have been reduced in recent years and raw material supplies are in critically short supply. The chain is unbroken in that communities are in turn dependent on the basic industries for their economic vitality. Five million feet of allowable cut will produce 105 permanent jobs. It also provides a substantial contribution to state and county revenues.

The five million board feet of allowable cut in Area #3 becomes very important in view of recent discussions with Flathead National Forest officials. They feel that the annual allowable cut on the Flathead National Forest will drop from 146.3 million board feet per year to approximately 105 million board feet per year.

Such a cut will unquestionably cause critical raw material shortage for the timber industry in the Kalispell area. The timber sale program on the Flathead National Forest has been averaging about 120 million board feet per year in recent years down from a high of 233 million board feet in 1970. The stage is

set for disastrous impact on the timber industry in the Kalispell area. Some mills will not survive with these kinds of cutbacks. This makes the timber in Area #3 extremely important to the survival of all of the timber industry in the Flathead Area.

We have heard of citizen proposals for decreasing taxes all across the country. Bond issues are failing regularly because taxpayers do not want to support any more projects. Proposition 13's are being considered all across the country. It is absurd to consider a proposal that would take monies away from both state and county governments without additional burden to the taxpayer when government financing is in such a state of uncertainty.

As you are undoubtedly aware, the RARE II process has just finished its public involvement phase. RARE II is a study that is to resolve the Wilderness-development controversy surrounding National Forest lands. The Great Bear decision must be considered an integral part of that study in that the same issues are being decided. Land allocation in the Great Bear must consider all resource needs in light of the needs of the American people as directed in the Resource Planning Act. The best areas should be considered for Wilderness while the other resource values should also be considered in national perspective.

It is through this perspective that the regional and national needs for wood fiber, energy resources, and recreation supersede any Wilderness consideration for at least some of the Great Bear proposal. The Great Bear has substantial timber resources, the best probability for discovery of oil and natural gas in the United States and a proven playground for motorized recreation that must be a part of any recognized national resource goal.

Numerous studies have determined that the national need for timber cannot be met unless we begin now to manage our commercial forest land base. Preservationists have questioned whether or not a tradeoff could be made between intensive forest management on the good sites, and the restriction of harvest on low-site lands. The most recent Forest Service study has shown that this approach is simply not possible. This study, called the Roadless Area-Intensive Management and Tradeoffs on Western National Forests (RATS), shows without question that all of our commercial forest lands need to be managed in order to be able to produce the amount of timber established in the Resource Planning Act goals.

The RATS study examined seven National Forests to determine whether or not the development costs in roadless areas could be reprogrammed into intensive management on roaded lands and still produce the same amount of timber. The study clearly states that such a tradeoff is not possible.

Some study findings state:

1. "The harvest that could be programmed in the first decade with all the roadless area in the land base could not be achieved on any study forest with half or all of the roadless area withdrawn through reallocation of cost savings to more intensive timber management."

2. "Potential yield was reduced on all forests when half or all of the roadless area was withdrawn."

3. "Reductions in potential yield on the study forests were very nearly proportional to reductions in regulated commercial forest land acres."

The study findings clearly show that a reduction in available commercial forest lands correspondingly reduce the availability of timber regardless of intensive management investment levels.

Another study takes this finding and advances it one step further. The study entitled "RARE II: The Economic Effects of U.S. Softwood Supply Restrictions," by Data Resources, Inc., finds that a reduction in softwood timber supply of one billion or more board feet causes a substantial increase in lumber prices and lumber imports. It causes a corresponding decrease in employment and forest industry manufacturing capacity.

The results of these studies show conclusively that the commercial forest land base is critical to timber supply and consumer interest. Great Bear can make a substantial contribution to the timber supply in the Kalispell area.

The Draft Proposal also received support from the oil and gas industry, and those people supporting motorized and developed recreation. Members of the Montana Fish and Game Department have told me that they also support the Draft Proposal for the Great Bear. With this strong and broad base of support, it would seem that the only people in favor of the Final Wilderness Proposal are a few Wilderness advocates.

We do not believe that the Secretary of Agriculture considered anything other than Wilderness values in his final decision. This is not in accordance with the intent of the law, and we urge Congress to adopt reasonable amendments to the bill to give consideration to our local, state and national resource needs.

Thank you for allowing us to testify. I will be happy to answer any questions.

STATEMENT OF DR. DOUGLAS DUNNET, SENIOR GEOLOGIST, ROCKY MOUNTAIN DISTRICT, ANACONDA, COLO.

I would appreciate your including this letter and the attached information as a statement for the record in conjunction with the October 5 subcommittee hearing on the Great Bear Wilderness and Bob Marshall Wilderness Addition in Montana (S. 3429). I regret that neither I nor my staff can be there to testify in person, but as you know, with only a few weeks of good weather remaining to work in the field, this is a critical time of the year for the geology department.

The Anaconda Company does not hold mineral interest in this area, but has undertaken several mineral studies within and adjacent to the proposed Wilderness areas over the past 40 years.

We wish to record the facts that the western margin of the Great Bear Wilderness and the Arrasta-Stonewall addition to the Scapegoat Wilderness contain important resources of copper and silver. These resources are, at current metal prices, marginal to subeconomic, but include significant tonnages of these metals as part of the U.S. mineral inventory.

These metal resources occur within the sedimentary rocks of the Empire Formation of the Belt Basin. The nature of the deposits is similar to the deposits of the Copperbelt of Africa and, as such, can be reasonably expected to improve in grade and size eastwards beneath the Wilderness areas, and towards the edge of the Belt Basin.

The U.S. Geological Survey has reported these deposits (open file 77-95) but did not stress the probability of improvements of metal content within the Wilderness.

In recent submissions to the RARE II process, we have classified metal resource potential in three categories:

- (a) High Potential
- (b) Moderate Potential
- (c) Low potential or no data available

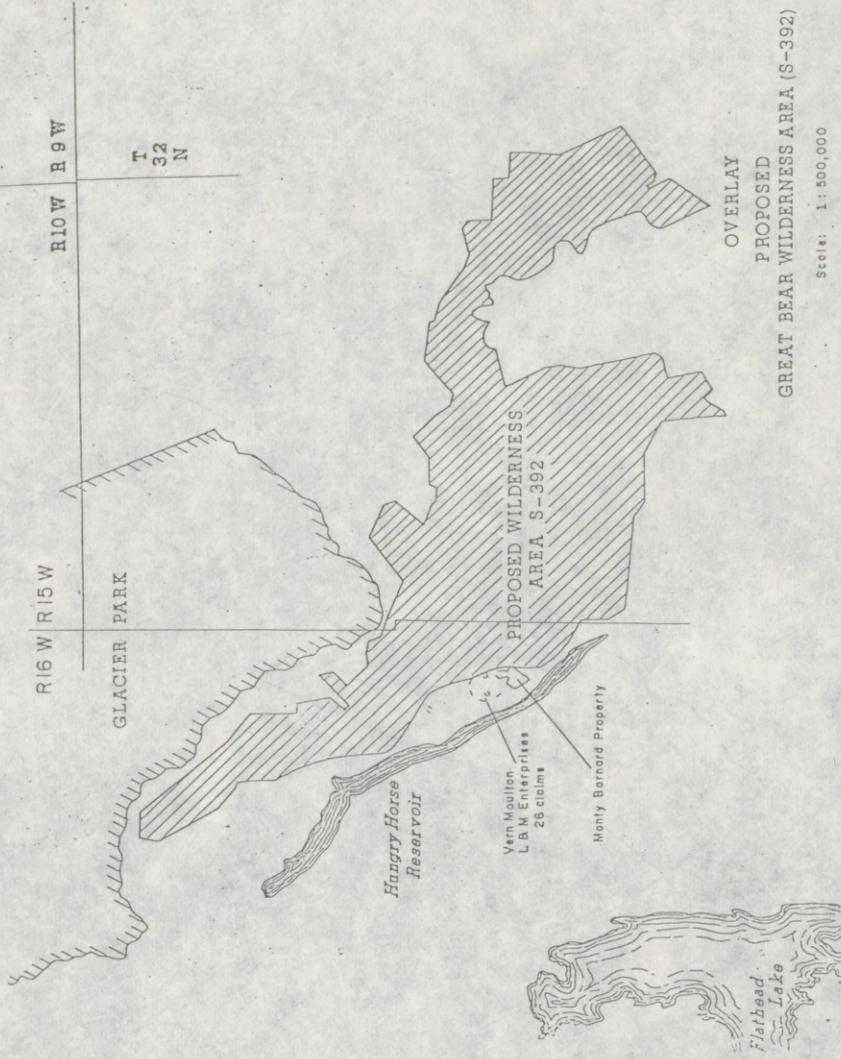
In this framework, our recommendations would place the Great Bear in the Moderate category and not of as critical importance as areas such as Stillwater, Montana and Salmon-Cobalt, Idaho.

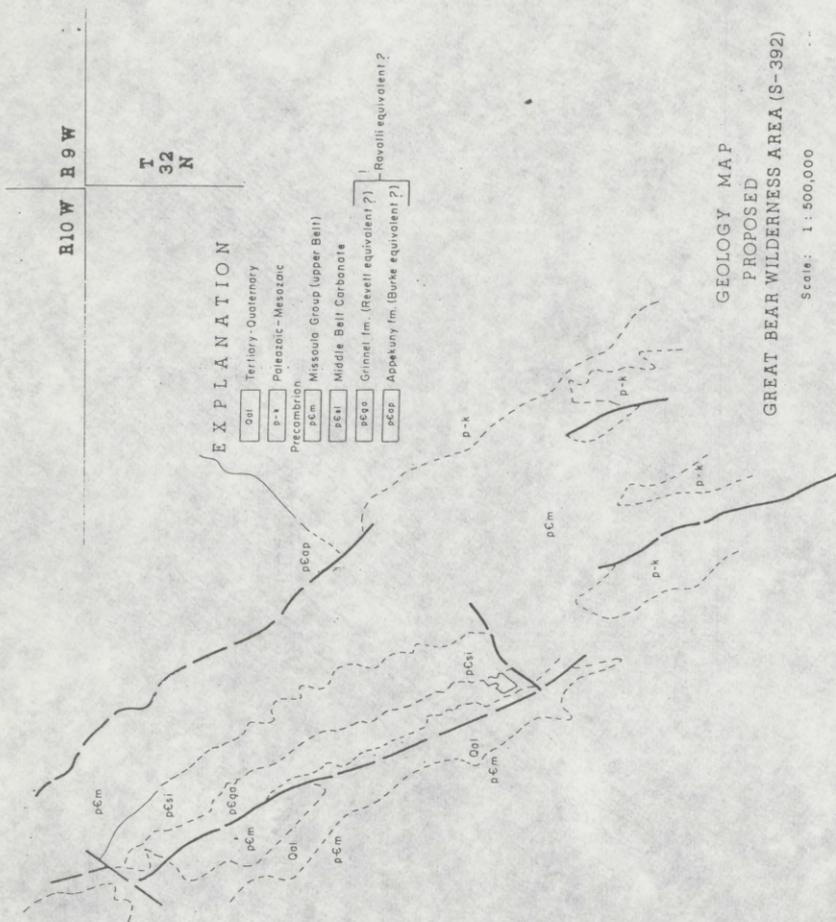
We must stress, however, that this is one of the few regions in the Western U.S.A. where potentially large tonnages of strata-bound copper/silver can exist subsurface. In that the total U.S.A. mineral inventory is a finite resource, we consider every caution should be taken to evaluate this type of deposit prior to commitment to Wilderness status. The probability of the resource existing in economic grades is only moderate. If it does exist, however, its value to the U.S.A. is very large and at current metal prices well in excess of \$10 billion.

As you can see on the attached map, there are several already existing claims along the proposed western border of the Great Bear Wilderness. While these are not Anaconda claims, the company does plan to do some studies in this area next year to re-evaluate the copper/silver potential of this type in western Montana.

The House Interior and Insular Affairs Committee took these plans and the existing claims into account, and the committee deleted "approximately 3,000 acres from the Administration's wilderness proposal in the vicinity of Mt. Baptiste to allow for the exploration and possible future development of potential copper and silver deposits." The Anaconda Company appreciates the House deleting this acreage to permit the planned evaluation and possible development, and we urge the Senate subcommittee to concur in the House decision and adopt the House boundary modification in this area.

Thank you very much for your consideration of our position on this legislation. Enclosures.





STATEMENT OF DAVE FOREMAN, WILDERNESS AFFAIRS COORDINATOR,
THE WILDERNESS SOCIETY

I am Dave Foreman, Wilderness Affairs Coordinator for The Wilderness Society, a national conservation group dedicated to the preservation of the last remnants of the great American wilderness. I am very pleased to present our testimony today in support of a Great Bear Wilderness of 290,000 acres and a 60,000-acre addition to the Bob Marshall Wilderness of Montana. This is a particularly important issue for The Wilderness Society, since for 25 years we have been involved in trying to gain protection for this nationally significant area. There are several reasons why formal wilderness designation should be made for these 350,000 acres:

1. First of all, the area is unquestionably of the highest wilderness quality. The Forest Service has found it highly suitable for wilderness designation. It is an area of national significance and will be one of the finest units in the National Wilderness Preservation System.

2. Not only is the Great Bear important in and of itself, but it comprises a key link between the wilderness of Glacier National Park and the Bob Marshall/Scapegoat wilderness complex—a region of wilderness equaled only in a couple of other areas in the Lower 48 states.

3. Wilderness designation for this area is necessary to protect its outstanding wildlife—grizzly, wolf, elk.

4. Wilderness will complement the Middle Fork of the Flathead Wild River which flows through the area and which contains an outstanding fishery.

5. There has been an amazing degree of strong public support for wilderness designation of the area. The Montana State Democratic Platform has endorsed it, Montana Congressmen Baucus and Marlenee supported it in the House, Senator Paul Hatfield supports it, the Carter Administration is in strong support, and many Montanans from all walks of life are in enthusiastic support.

6. There are few resource conflicts with wilderness designation for the area. Wilderness is the highest and best use for it.

7. Montana's late Senator Lee Metcalf had passage of a Great Bear Wilderness as one of his highest legislative priorities. The Senate should pass this legislation now as a memorial to one of its greatest members of recent times.

We are concerned with arguments to delete 52,000 acres of "Area 3" north of the Middle Fork of the Flathead. We do not believe that gas potential there is sufficient cause for deletion of this area nor is the timber resource significant enough to even consider deletion. Timber in the area is marginal, largely in stringers, and would probably be uneconomic to harvest. Moreover, road access would probably have to be constructed up the Middle Fork of the Flathead Wild River, which would certainly destroy its wild river values. We are unalterably opposed to any deletions from the House passed acreage. We consider the House passed bill to have been a compromise and it is the least we can support. We urge the Senate to accept the House passed compromise acreage on the Great Bear and additions to the Bob Marshall.

We are also concerned with possible attempts to tie an inadequate Spanish Peaks Wilderness to the Great Bear. They are separate issues and Spanish Peaks should not be considered at this time. Contiguous wild lands to the Spanish Peaks Primitive Area in the Madison Range are involved in RARE II and S. 393. These studies should continue. No formal Congressional hearings have been held on this area in the field or in the House. Any action at this time on Spanish Peaks is unwise and premature, although we are in strong support of a large wilderness area in the Madison Range, including the Spanish Peaks, at a future time.

In summary, The Wilderness Society is strongly in support of a 60,000-acre addition to the Bob Marshall Wilderness and the designation of a 290,000-acre Great Bear Wilderness in Montana. This area will be one of the finest units of the National Wilderness Preservation System and an undying tribute to Senator Lee Metcalf.

Thank you for this opportunity to testify.

STATEMENT OF MARIAN HUFFMAN, CHOTEAU, MONT.

The concept of wilderness is misunderstood by those who think of it as a lock-in situation. The public may hike, backpack, ride horseback and hunt and fish, while enjoying the impressive scenery. If grazing has been established, it may continue.

The Forest Service has determined that in the Great Bear, the wilderness values exceed the value of the speculative oil and gas potential.

This is the vital element involved—oil and gas development.

In non-wilderness areas, permission may be granted by Forest Service personnel. Seismograph exploration has been continuous in this area for over a year in the North and South Fork areas of the Teton River. Permission has recently been granted for exploration in the Bear Mountain area.

In designated wilderness such permission will involve decisions by the Interior and Agriculture Departments. This is important to the oil companies—and to us.

50 per cent of the Great Bear is now overlain with gas and oil lease applications.

In a recent Tribune article, a geologist promoted oil and gas development over wilderness values because of the priority of national need. Let's discuss this priority of national need. America has been squandering the world's fuel for generations. We have 5½ per cent of the world's population. And we consume 63 per cent of the natural gas and 44 per cent of the world's coal! And the United States exports 60 million tons of coal a year!

Right now there is an accumulation of Alaskan oil on our West coast that is being considered for export to a foreign country!

The answer is conservation—not exploitation of our fragile wilderness areas.

Only 1 per cent of America is wilderness. ⅔ of Montana's forest land is already developed. How much can we afford to lose?

The catch phrase, "multiple use and a viable economy" is a smoke screen popular with opponents of wilderness. There is no compatibility in oil development and wilderness values—including wild life preservation. "A viable economy" is achieved as well by Montana's fast-growing tourist industry.

Production costs for obtaining natural gas or oil from wilderness areas would be astronomical, and so would your cost be, in using the product.

The reason that ⅓ of our forest lands remain undeveloped is because it is not economically feasible to develop them.

We need not apologize for not giving in to the oil companies whose efforts have been successful in preventing an energy policy, and also the establishment of alternative energy sources.

America desperately needs a comprehensive energy program that will make its citizens better stewards of their God-given resources and restore our prestige among other nations.

The reason that the energy bill languishes is due to pressure upon congressmen and others by 16,000 lobbyists for the oil and gas companies.

Then there is this question? Why can't a country that could develop nuclear energy; and put a man on the moon; and with a Department of Energy with a budget of \$2 million and a staff of 20,000 people—why can't this country develop another source of energy?

Answer: the same lobbyists plus still another unbelievable highly unpatriotic policy of the oil companies achieving control of 35 per cent to 40 per cent of America's entire copper production. And with the potential acquisition of Kennecott Copper Corporation it will rise to 65 per cent! This is the exact amount of copper that America needs for its solar heating production planned for next year.

Why copper?

Because copper is the major component of collectors used in solar heating and cooling systems!

This is America?

If this isn't revolting to you, then you shouldn't complain if your school children say "I pledge allegiance to Exxon"—or sing "God Bless Amoco."

No wonder that President Carter, at a news conference last year denounced the tactics of the oil and gas companies as the biggest "rip-off" in American history.

We need protection!

It frightens me to hear people say, "But there's nothing we can do!"

But there is something we can do. We are a democracy—not a Communist country. We have four active members in Congress to represent us, and they will, if they know that you feel very strongly about the preservation of wilderness, and especially at this crucial time, the Great Bear. I say crucial because it must be passed this session, or we can forget it—forever. The reason is that the RARE II study, which concerns the entire United States, will be before Congress soon. That study is highly slanted against wilderness and toward industry. (I'm sure you know why.)

It can be done if all of the members of our congressional delegation will work together as a team and show their colleagues that Montana can break the oil barrier.

So let them know how you feel. Go home today and write a letter. Make enough copies for each of them and one for Governor Judge, if you like. Tell your friends who aren't here today to do the same.

Don't think that it won't make a difference. Last winter our Regional Forester made a decision that he said was influenced by all of the letters he received. This attitude deserves our respect.

You may also include important reasons of your own:

1. The grizzly habitat preservation.
2. The spectacular scenic values.
3. Recreation opportunities (use of motorized vehicles has not been allowed because of the nature of the trails and frequent pedestrian and horseback use.) This would be controversial and threaten the bill.
4. Preservation of the habitat of a wonderful variety of wild creatures.

Remind the congressmen that they are not only representing their present constituency, but they are leaving one of the finest heritages that can be left to our children. Thank you!

STATEMENT OF JOHN A. McCOMB, WASHINGTON REPRESENTATIVE OF THE SIERRA CLUB

Mr. Chairman and Members of the Committee: I am John A. McComb. As one of the Washington Representatives of the Sierra Club I have primary responsibility for all wilderness legislation. The Sierra Club has a long history of active support for the protection of the nation's wilderness beginning with our founding in 1892 by John Muir. Currently we have 180,000 members organized in chapters covering all fifty states. The Sierra Club nationally, our Northern Rockies Chapter which covers the State of Montana, and I all enthusiastically endorse the designation of the Great Bear Wilderness and related additions to the Bob Marshall Wilderness in Montana.

The Department of Agriculture recommends the designation of a 293,571 acre Great Bear Wilderness plus the addition of 66,000 acres to the existing Bob Marshall Wilderness. The addition of these two areas to the National Wilderness Preservation System would result in a single unit of wilderness of over 1½ million acres, the largest contiguous Congressionally designated wilderness in the nation.

During consideration in the House some 9,000 acres were dropped from the Administration recommended boundaries. Although we can reluctantly accept the compromises which passed the House on Tuesday, any further deletions from the proposed wilderness are unacceptable.

Designation of the Great Bear Wilderness will greatly enhance the habitat protection for the "great bear," the grizzly bear from which it derives its name. The area also encompasses some of the finest scenery and opportunities for primitive recreation in the nation. It would complement the Wild River status of the Flathead river whose Middle Fork rises in its midst. We believe it is one of the most important possible additions to the Wilderness System.

Although it is late in the session we urge that this Committee do everything in your power to expedite the consideration of this proposal so that it may become law this year. It would be a fitting and timely memorial to the work of the late Senator Lee Metcalf, a long-time member of this Committee and an equally ardent supporter of the expansion of the National Wilderness Preservation System in his State of Montana.

Thank you.

THE IMPACT OF PROPOSED FEDERAL LAND USE PLANS ON THE MEMBERS OF THE BLACKFEET RESERVATION

NEPA

Establishing programs for the development of energy resources on federal properties affects not only those people that use these federal lands but also those people who own and use the adjacent properties. Consideration of a project's affect on people and their cultural traditions is required under several federal laws. Probably the single, most important piece of federal legislation is the National Environmental Policy Act of 1969, which requires that administrative agencies prepare environmental impact statements for major actions that will

significantly affect the human environment.¹ By law, the impact statements have been mandated to be multidisciplinary and to scientifically evaluate the agency's proposed action. NEPA emphasizes that the agency, in keeping with national policy, should preserve important historical, cultural, and national aspects of our heritage, maintaining where possible an environment which supports diversity, culturally pleasing surroundings and a variety of individual choice.¹ Following the passage of NEPA, several court decisions more clearly defined the implementation of the preceding section. First it was held in several cases that under NEPA social, economic, and other impacts upon the quality of life must also be considered.² Second, that the lead agency is obligated to assure that adverse socio-economic impacts of energy developments are properly mitigated.²

NEPA AND OTHER FEDERAL PROGRAMS WHICH APPLY TO THE BLACKFEET

Therefore, under NEPA, any impact statement prepared by a federal agency has areas that could reasonably affect the members of the Blackfeet Reservation must assess the potential cultural impacts. This includes the impact assessment of programs for the federal lands adjacent to the reservation as well as areas within federal lands and parks where the Blackfeet have been granted special access. Access to public lands for timber, game, etc. has been granted to the Blackfeet under Article I, Section 9 of the Treaty of September 26, 1895 and has been reaffirmed in the Lewis and Clark Forest Reserve Proclamation of 1897.

Because the Blackfeet represent a distinct native American culture with long term traditional roots, they are also directly affected by two other federal programs: the National Heritage Program and a multi-faceted program for the location and protection of cultural resources.

NATIONAL HERITAGE PROGRAM

The National Heritage Program was created in response to the "... recognition and awareness of who we are, the meaning of where we live, work and play, the special meaning of our natural and historic landmarks, together with a renewed reverence for the quality of our national environment comprise a consciousness very real in America today."³ This program is intended to consolidate the federal government's planning functions for heritage conservation and recreation.⁴ However, this program will also be applied to three new criteria: neighborhood, cultural landscapes, and networks of related sites.⁴ Certainly, the Blackfeet, past and present, represent a distinct, cultural landscape in this country. The traditional social and cultural patterns, language, etc. that remain among the present tribal members are the results of tens of thousands of years of adaption to the changing natural environment of this area. Maintaining long term cultural and environmental relationships are particularly important to retaining elements of the lifestyle that is distinctly Blackfeet and reaffirming a cultural tradition that will continue to integrate its tribal members. By helping the Blackfeet and others retain and re-established their culture, the cultural diversity of this nation will be preserved.

FEDERAL LAWS APPLYING TO HISTORIC AND PREHISTORIC ARCHAEOLOGY

The second federal program is really a series of laws that have a combined effect of locating and preserving the cultural resources that are the remains of past historic and prehistoric activities, Congress has implicitly recognized such a need: the National Historic Preservation Act of 1966 states that the historic and cultural heritage of this country should be preserved in order to "give a sense of orientation" to this nation's people.⁵ Better understanding of the structure and function of cultural resources is important in at least two ways. First, it provides the long-range perspective needed to assess man's impact on the environment and the impact of the environment on man. This understanding of biological interaction will enhance man's ability to project his future influence on nature.⁵ Second, better understanding of our cultural heritage promotes a better understanding of our sociological selves.⁵ This latter is particularly important to maintaining the

¹ NEPA.

² Watson, Keith S., "Measuring and Mitigating Socioeconomic Environmental Impacts of Constructing Energy Projects: An Emerging Regulatory Issue," *Natural Resources Lawyer*, Vol. X, No. 2, pp. 393-403, 1977.

³ Friesema, Paul and Paul J. Culhane, "Social Impacts, Politics, and the Environmental Impact Statement Process," *Natural Resources Journal*, Vol. 16, pp. 339-356, April, 1976.

⁴ The National Heritage Program (Draft), Department of the Interior, 1978.

⁵ Johnson, Robert L. and Victoria Palacios, "An Overview of Archaeology and the Law. Seventy Years of Unexploited Protection for Prehistoric Resources," in *Notre Dame Lawyer*, Vol. 51, No. 706, pp. 706-721, April 1976.

cultural traditions of the Blackfeet. This is because the present people are tied by their traditions, religion, and kinship to sites used in the ethnographic past. The information presented identifies and locates some (but not necessarily all) known areas of cultural importance including burial areas, shrines, seasonal settlements, etc., on the present reservation and in the federal lands which were part of the original Blackfeet territory.

Moreover, the locations and purposes of other sites, now lost to the memories of living Blackfeet, are also likely to be numerous in the federal lands. In fact, the potential exists that the remains of complete subsistence-settlement systems of historic and prehistoric peoples may be preserved in undisturbed portions of these federal lands. Preserved sites of this type could provide important scientific data as well as contribute to maintaining Blackfeet culture.

Sites discussed in the above section and any artifacts associated with these sites are protected under federal law (see Appendix A). Protection is granted to historic and prehistoric sites and artifacts as well as to cultural resources that are produced in the ethnographic present. In a recent court case it was held that respect for culture and heritage of native Americans requires protection of their sacred places, past and present, against commercial plundering.⁶

SUMMARY AND CONCLUSIONS

Impact statements prepared on the federal lands adjacent to the Blackfeet Reservation must, by law, include consideration of potential social, economic, and political impacts to tribal members as well as to their cultural resources. Changes in the land use of these federal properties can strongly affect the Blackfeet who have gained access to use natural resources located on these properties. These parks contain cultural resources that are important to maintaining the social and religious traditions that give meaning to Blackfeet culture (see Figure 1 and Table 1). Moreover, cultural resources located in these parks may have scientific importance. These resources are like an endangered species, even more endangered, for no matter how hard we work to protect them, they cannot reproduce or increase.

APPENDIX A

SYNOPSIS OF FEDERAL LAWS AND POLICY STATEMENTS CONCERNING CULTURAL RESOURCES

The Antiquity Act of 1906 (Public Law 59-209, 34 STAT. 225; 16 U.S.C. 431-433).—This act sets forth the basic principle that the federal government, acting for all the people, should work toward the protection, preservation, and public availability of the nation's historic and prehistoric cultural resources. With accompanying guidelines, the act provides for federal control of all cultural resources on federally owned or controlled land and establishes a permit system for investigating them. The Act makes it a Federal offense to appropriate, excavate, injure or destroy any historic ruin or monument located on lands owned or controlled by the United States without permission from the Secretary of the Department having jurisdiction thereof. Further guidance on this matter is contained in ER 405-1-875, 7 May 1973.

The Historic Sites Act of 1935 (Public Law 74-292, 49 STAT. 666; 16 U.S.C. 461-467).—This act declares it to be national policy to preserve for the public historic (including prehistoric) sites, buildings, and objects of national significance. The National Park Service is directed to "make necessary investigations and researches in the United States relating to particular sites . . . or objects to obtain true and accurate historical and archeological facts and information concerning the same."

The Reservoir Salvage Act of 1960 (Public Law 86-523, 74 STAT. 220; 16 U.S.C. 469-469c).—This act requires that before any agency of the United States shall undertake the construction of a dam or issue a license for construction of a dam (greater than 5000 acre feet or 40 surface acres of capacity, it shall provide written notice to the Secretary of the Interior. (The provisions of the act apply regardless of the size of the reservoir if the constructing agency finds

⁶ United States v. Diaz, 499 F. 2d 113 (9th Cir. 1974).

or is presented with evidence that cultural resources are affected.) The Act permits the expenditure of up to one percent (1%) of the amount authorized to be appropriated for an individual Civil Works projects for survey, recovery, analysis and reporting of important scientific, historical, and archeological data which are being or may be irreparably lost or destroyed as a result of Civil Works undertakings on Federally owned lands or on non-Federal lands provided by local interests for certain types of projects.

Before undertaking construction, written notice must be provided the Secretary of the Interior setting forth the site of the proposed project including the area to be flooded or otherwise changed.

If advised by the Secretary of the Interior or other appropriate authority that Federal construction activity may result in the loss of important cultural data, or when the agency finds that such losses may occur, notice will be provided the Secretary of the Interior. The agency may undertake directly, or by contract with qualified investigators or by transfer of funds to the Secretary of the Interior, the recovery protection and preservation, analysis and publication of reports of such data, including surveys or other investigations as in the determination of the agency are needed. The amount expended for such activities may not exceed one percent of the amount authorized to be appropriated for the project, and all expenditures made for such activities are to be treated as non-reimbursable project costs.

The Secretary of the Interior must report annually to Congress on Federal expenditures and accomplishments under this authority.

The Historic Preservation Act of 1966 (Public Law 89-665, 80 STAT. 915; 16 U.S.C. 470).—This act sets forth the basic concern of the nation for the preservation of its heritage. It provides for an expanded National Register of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, and culture and makes provision for matching funds to help acquire and/or preserve them. It provides also for matching funds to conduct statewide surveys for locating sites to be placed on the National Register.

Under this law, if a site is on the National Register, this fact must be taken into consideration when any project utilizing federal funds or under federal permit might adversely affect it. However, the location of sites on the National Register is published and thereby becomes common knowledge. Therefore many states do not nominate sites unless they are otherwise protected from casual destruction by the public. Furthermore, the sheer number of archeological sites and the fact that no survey can locate all significant sites (e.g., because of thick ground cover, or because sites are buried) means that in no case can the National Register be viewed as the sole source for information about the presence of potentially significant sites to be taken into consideration before or during land alteration or for the purpose of an adequate environmental impact statement.

Section 106 of this act requires that the President's Advisory Council on Historic Preservation be afforded an opportunity to comment on any undertaking which adversely affects properties listed on the National Register.

Executive Order 11593 (more below) applies the same consultation and protection provisions to properties which the Secretary of the Interior determines are eligible for inclusion in the Register. Implementing procedures for consultation with and securing the advice of ACHP are contained in 36 CFR 800, 25 January 1974.

Agencies are directed to exercise caution to ensure that Federally owned cultural properties on lands under their jurisdiction are not inadvertently sold, demolished or substantially altered until the Secretary of the Interior has the opportunity to review the eligibility of the property for the National Register and if an eligible property is to be sold, demolished or altered, the ACHP has an opportunity to comment and steps are taken to make records of the property for deposit in the Library of Congress.

The National Environmental Policy Act of 1969 (Public Law 91-190, 31 STAT. 852; 42 U.S.C. 4321-4347).—This act declares that it is the policy of the federal government to use all practical means, consistent with other essential considerations of national policy, to—among other things—improve and coordinate federal plans, functions, programs, and resources to the end that the nation may preserve important historic, cultural, and natural aspects of our heritage. It directs that, to the fullest extent possible, the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the act and that all agencies shall utilize a systematic interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decision making which may

have an impact on man's environment. It further requires that on all federally sponsored or licensed projects which significantly affect the environment, the responsible official submit an environmental impact statement which assesses the impact of the proposed action and any unavoidable adverse environmental effects (which consistently has been interpreted to include those on archeological and historical resources), and sets forth the alternatives to the project, the long and short term results, and any irreversible and irretrievable commitment of resources.

The act charges the Government to administer its policies, regulations, and laws to the fullest extent possible in accordance with these policies. Agencies are directed to develop methods and procedures for "giving unquantified environmental amenities and values appropriate consideration in the decisionmaking process along with economic and technical considerations."

The act also established the Council on Environmental Quality in the Executive Branch to advise and assist the President in carrying out the provisions of the act and in reviewing environmental impact statements.

Department of Housing and Urban Development Legislations.—Under certain conditions HUD is authorized to make grants for surveys for archeological sites and structures of historical and architectural value, and to fund (on a matching basis) technical assistance and studies, and to fund the acquisition, removal, or preservations of significant structures (40 U.S.C. 461, 42 U.S.C. 1460, 42 U.S.C. 1500, 42 U.S.C. 3303).

Department of Transportation Legislation.—The Department's basic legislation charges it with responsibility for making a special effort to preserve historic sites (49 U.S.C. 1651). Construction shall not adversely affect any such site with national, state, or local significance unless there is no feasible and prudent alternative and all possible efforts have been made to minimize the adverse effects (23 U.S.C. 138). Matching funds for archeological research carried out by or under contract with a state highway department on a highway right-of-way, will be provided for by the Department on the same basis as other construction costs.

Executive Order 11593.—In this Executive Order it is decreed that "The Federal Government shall provide leadership in preserving, restoring and maintaining the historic and cultural environment of the Nation. Agencies . . . shall (1) administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations, (2) initiate measures necessary to direct their policies, plans and programs in such a way that federally owned sites, structures, and objects of historical, architectural or archeological significance are preserved, restored and maintained for the inspiration and benefit of the people, and (3) in consultation with the Advisory Council on Historic Preservation (16 U.S.C. 470i) institute procedures to assure that Federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures and objects of historical, architectural or archeological significance."

The Executive Order further spells out that federal agencies are to inventory archeological and historical resources under their control or affected by their programs, are to exercise due caution with respect to those resources, give them appropriate and adequate consideration during planning, and do whatever is possible with regard to protecting and, when necessary, recovering those resources.

The Secretary of the Interior is to provide technical and advisory assistance to other agencies in their accomplishment of these goals and is to review agency procedures.

Archeological and Historic Preservation Act of 1974 (Public Law 93-291, 88 STAT. 174).—This act amends the Reservoir Salvage Act of 1960 (PL 86-523; 74 STAT 220) so as to expand its application for preserving scientific, prehistoric, historic, and archeological data to include all Federal or federally assisted or licensed construction projects rather than being limited to Federal dam and reservoir sites. The act places coordinating responsibility in the Secretary of the Interior so that a relatively uniform Federal program should be assured. It also provides authorization to all Federal agencies whereby they can seek future appropriations, obligate available monies or reprogram existing appropriations for the recovery, protection and preservation of significant scientific, prehistoric, historic, or archeological data. Finally, the act permits agencies to either undertake the requisite recovery, protection, and preservation themselves in coordination with the Secretary of the Interior or, alternatively, to transfer a maximum of 1 percent of the total amount authorized to be appropriated for each project (not applicable to projects of less than \$50,000) to the Secretary of the Interior for this purpose.

STATE LAWS AND REGULATIONS

Most (but not all) states have legislation affecting cultural resources. In general, these laws regulate disturbance of cultural resources on state land, and in some instances and to different degrees, on private land. The increasing corpus of state environmental legislation also usually pertains to cultural resources, have been established.

These laws vary considerably from state to state and local inquiry is necessary.

NATIONAL WILDLIFE FEDERATION,
Washington, D.C., October 4, 1978.

HON. JAMES ABOUREZK,
Chairman, Subcommittee on Parks and Recreation,
Dirksen Office Building,
Washington, D.C.

DEAR CHAIRMAN ABOUREZK: The National Wildlife Federation joins with our Montana affiliate, the Montana Wildlife Federation, and Donald Aldrich, NWF's Regional Director, in supporting the designation of the Great Bear Wilderness, Montana, and the enlargement of the Bob Marshall Wilderness, Montana. It is our understanding that the House passed its version of this proposal, H.R. 13972 as amended, on October 3. The Federation supports the provisions of this legislation as a minimum and urges Senatorial support for this fitting memorial to the late Senator Lee Metcalf.

In our judgement, the Great Bear Wilderness encompasses an area of the highest wilderness quality, and serves as a valuable habitat for numerous wildlife species, including grizzly bear, wolf and elk. This designation will not only complement the management of the Middle Fork of the Flathead River, a component of the National Wild and Scenic Rivers System, but also will provide a key link in the protection of the valuable natural area comprised by the Bob Marshall Wilderness Area, and Glacier National Park.

The Federation strongly opposes any acreage reduction in this wilderness proposal. Of specific interest and concern to us is the 52,000 acres of area #3 in the Great Bear Wilderness. The Federation views this area as being essential in retaining the integrity of the entire proposal.

We request that these comments be made part of the permanent record for S. 3429.

Sincerely,

THOMAS L. KIMBALL,
Executive Vice President.

CHESTER, MONT., August 23, 1978.

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: I have received word that the Administration's proposal for a 360,000 acre Great Bear Wilderness with no mention of a power corridor has been sent to Congress. As a Farmer-Rancher who is involved in intensive agriculture, I am becoming more concerned with preserving some of our natural beautiful areas as they are. The small amount of resources which can be taken out is but a drop in the bucket compared to what we are consuming. Once roads are put into these areas it becomes open game for almost anyone who carelessly despoils the area.

I look upon these wilderness areas as indicators of the condition of our country similar to those plants which serve as indicators of the condition of a grazing range. I would hope the country can begin to discipline itself as to the use of resources so that we never have to resort to development of these areas. As to range, I would hope the country can begin to discipline itself as to the use of eral hundred years as this generation does not have the right to place future generations in the risky position of having to develop a technological breakthrough in order to survive.

I highly recommend passage of this proposal as it stands for the above reasons and that it may be a living tribute to the late Senator Lee Metcalf. The area also speaks for itself as I have hiked into several parts of it and it is very impressive. From a practical view this area provides much needed clean water for downstream irrigators and municipal and farm water supplies. Keeping roads out of it insures that the streams remain relatively free of erosion sediment.

From those of us who are interested in keeping America great and beautiful we would appreciate quick passage of this bill this year. Incidentally I would like this letter to be included in the official hearing record for the Great Bear. Thank you.

Sincerely

ARLO SKARI

P. S.—Thanks for the support you are giving the Farmer-Rancher.

MISSOULA, MONT., *October 26, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SIR: The Great Bear Wilderness or not? I have just spent the last few days wandering through this area and am very concerned as to what will happen to this beautiful sacred land. Wild it is, and the mountain goats roam free. Please actively support passage of the Forest Service 360,000 acre Great Bear Wilderness (H.R. 13972, S. 3429) this year! There is enough time this year to enact the Great Bear if each member of the Montana delegation will work together to make it happen! Boy, there are many reasons in favor of this! This area is the vital link of Glacier Park & Bob Marshal Wilderness. As such, it is important habitat for the threatened grizzly bear! Also, the Great Bear drains the Middle Fork of the Flathead, a "wild" river. "A river can only be as wild as the country it drains." Also, there are high wilderness values that may exceed oil & gas potential values (determined by the Forest Service). The timber in the stream bottoms can only be reached by costly roads that will exceed the timber value!

Also, there is no need for a transmission corridor up Dirty Face Creek as originally suggested by Bonneville Power Administration. If need arises in the future the President can create such a corridor [Wilderness Act Sec. 4d(4)]. Sen. Melcher, the F.S. boundary need not be redrawn as it would allow a future corridor along highway 2.

So, please work for this important issue! There is time if you will work to make it happen! Please make this letter a part of the official hearing record.

Thank you.

Sincerely,

JULIA BECKER.

HAMILTON, MONT., *August 30, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: This letter is written to reaffirm my continued support for a 360,000 acre Great Bear Wilderness.

My reasons have been previously stated, but briefly, they center around the tremendous wilderness quality which the Great Bear really has. I've been into the heart of the area and certainly consider it to be a candidate without flaw or question. The borders have been worked over several times, they are well positioned and can be defended. Inholdings are no problem, mining is no problem, so most of the big questions usually asked are no longer unanswered.

A most serious point for consideration of this area for wilderness classification can be made from the soils point. Never, except in some areas which have suffered the violent hands of placer miners, have I seen devastation like the floods of 1964 and 1974 wreaked on parts of that area. Not another handful of soil should be disturbed by man; nature does a pretty thorough job herself when she lets down rain on spring snows.

Wilderness classification would be the best "life insurance" policy that could be taken out on this great wild area.

Secretary Bergland on behalf of the President, has recommended the 360,000 acres to Congress. I hope that you will give it your unqualified support. Public record certainly has spoken strongly for its classification in past hearings and letters.

Sincerely,

DORIS MILNER.

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

HELENA, MONT., August 30, 1978.

DEAR SENATOR MELCHER: This letter concerns the Great Bear Wilderness Bill (H.R. 13972) introduced by request from Rep. Udall, and Senators Jackson and Hanson (S. 3429). Please make my comments a part of the public record.

The Great Bear Wilderness must be recognized for what it is: a prime wilderness environment. It provides the vital link of habitat for the grizzly between Glacier Park and the Bob Marshall. It drains the Middle Fork of the Flathead a "Wild" River of the Wild & Scenic Rivers System. Wilderness classification is more than justified here, for a river can only be as wild as the country it drains. Furthermore, there are no significant resource conflicts in the area, and even the development-biased Forest Service agrees that the wilderness values in the region exceed the value of the speculative oil & gas potential. The timber there is too marginal and too costly to profitably extract.

There is no need for the Dirty Face Creek transmission corridor. I would like to stress that the Forest Service Boundary need not be redrawn as it would allow a future corridor along Highway 2. If the need for such an energy corridor becomes evident in the future, the Wilderness Act (Sec. 4-d[4]) provides the President with the authority to create one.

If you intend to reply to this request for your supportive action for the Great Bear with the argument that not enough time remains to act on it this year, then don't bother to reply. If each of you in the Montana delegation combines his energy and time to follow through with this bill there is enough time.

Finally, it would be an outstanding tribute to the pioneering efforts of Senator Lee Metcalf to insure, without further deletions, the enactment of the Great Bear Wilderness. This is one area in Montana that deserves immediate, complete protection from exploitation and degradation. Let Montana be as rich in wilderness as it is in timber, coal, and cold. Work together in unison with your colleagues to enact the Great Bear Wilderness immediately, and the people of Montana will thank you for generations to come.

Most sincerely,

BENJAMIN S. KAGHAN.

EASTERN MONTANA COLLEGE,
Billings, Mont., August 31, 1978.

Senator JOHN MELCHER,
Senator PAUL HATFIELD,
Representative MAX BAUCUS,
Representative RON MARLENEE,
Washington, D.C.

GENTLEMEN OF THE MONTANA CONGRESSIONAL DELEGATION: May I strongly urge you all to act in unison for the prompt enactment of the Great Bear Wilderness as recommended by the Administration at 360,000 acres as a fitting tribute to Senator Lee Metcalf who was trying to do this before his death.

This area is vital link of wild country between Glacier and Bob Marshall wilderness area and would provide the needed, protected habitat which the Grizzly bear needs so desperately. Most experts indicate that their population is well under 1,000 for the continental United States and they will become extinct in ten years unless wild habitat is available. And the Great Bear will be the determining factor in this for the bear. Our country will become much poorer in cultural and biological resources if this magnificent bear is lost forever because the Great Bear Wilderness was not established.

The Forest Service has indicated that wilderness values far exceed the gas and oil potential. Certainly, we can place intangible and quality values above marginal potential in this case. Further, it has been proved through a national study (sponsored by the timber industries) that two out of three Americans favor wilderness protection over economic development. We do not rip up museums (and particularly a living museum like the Great Bear) for a service station on a short sighted basis.

If an energy corridor is needed, the boundary lines need not be withdrawn as it would allow a future corridor along Highway 2. I might note that this was the exact point made by Senator Melcher at the public hearing that he conducted on Senator Jackson's bill on the BPA at Eastern Montana College. Senator Melcher indicated that the energy corridor could run along Highway 2 and that there was no conflict with the Great Bear Wilderness.

Gentlemen, please try to enact the above this year before it gets all tangled up with Rare II proposals. May I request that you transmit this letter to the House and Senate Interior Committees.

Sincerely,

DANIEL H. HENNING, PH. D.,
*Professor, Political Science and Environment,
 Distinguished Scholar Professor, 1978.*

KALISPELL, MONT., *September 1, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
 Washington, D.C.*

DEAR SENATOR MELCHER: With your sincere support there is still time to enact the Great Bear bill. The submarginal timber resource of the area can only be harvested by subsidized taxpayers dollars. This great link between Glacier Park and the Bob Marshall, including the majestic Wild Middle Fork of the Flatland, will produce a long term economic benefit to the State of Montana that far exceeds any other use. Please make this letter part of the official record.

LOUIS PHILLIPS.

NRMC, BREMERTON,
Bremerton, Wash., September 3, 1978.

HON. JOHN MELCHER,
*U.S. Senate,
 Washington, D.C.*

DEAR SENATOR MELCHER: I am presently a medical doctor serving with the Navy, and plan to buy land in Gallatin County, and move my family there when I retire from the service. I chose Montana because of its unique natural and social environments: its fish and wildlife, its clean air and wide-open spaces. My family and I love to fish, and strongly support the need for wilderness protection, as well as wild and scenic rivers, to enhance important wildlife habitat and natural heritage in Montana. This, of course, must be in balance with other resource needs.

I am writing this letter to ask you, along with Montana's other Congressional delegates, to actively sponsor and support the passage of the Forest Service 360,000 acre Great Bear Wilderness (H.R. 13972 and S. 3429) this year! This area is long overdue for wilderness protection and habitat protection for the Dolly Varden, grizzly bear, and timber wolf. Wilderness values in this area far exceed any commodity interests.

I sincerely hope that the Montana delegation can work as a team so that there will be prompt enactment of the Great Bear Wilderness, without further deletions, this year! Please include this letter in the official hearing record. Thank you.

Sincerely yours,

GREGORY D. GESSAY, M.D.

ITHACA, N.Y., *September 8, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
 Washington, D.C.*

DEAR SENATOR: As a Montanan by birth and upbringing, though now a resident of New York state, I still follow what happens to the land that is Montana. At this time the Senate has before it a bill which would grant 360,000 acres of land for the Great Bear Wilderness (S. 3429). There are no significant resource conflicts in the Great Bear; the Administration proposal is a good one and without further deletions, the passage of this bill will enrich the lives of us all. I urge you to actively support this legislation in any and every way that you can.

(Also please forward this request to the Senate Interior Committee for inclusion in the official hearing record.)

Thank you for your attention.

Sincerely,

KATHY HAMMERSTROM.

WEST GLACIER, MONT., *September 9, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: I am writing to you regarding three important issues at this time. The first issue that greatly concerns me is the Alaska National Interest Lands. The vast changes in the Senate Energy and Natural Resources Committee markup of this legislation is totally unacceptable. I do NOT support your multiple use views in regards to the designation of certain areas in Alaska. Fragile ecosystems in the alpine north must be protected in their totality and not dismembered and separated among several land management agencies with differing philosophies. I again urge your support of protecting complete ecosystems and of strong wilderness designations in the southeast panhandle of Alaska.

Speak out and stand up for that part of your constituency that are concerned about land use and the establishment of these magnificent federal lands in the North. Wilderness protection speaks more to life than mineral development, economic gains and wholesale land abuse. This can be a landmark decision by the Senate with sound land use legislation. I again urge your support for designation of these lands into national parks, wildlife refuges, and wilderness areas. I will be closely watching your vote on this issue.

The second issue of importance is the designation of the Great Bear Wilderness Area. The Carter Administration proposal for 360,000 acres is a well planned and complete plan for this area. I urge your cosponsorship of this bill (S. 3429) as soon as possible. Time is short but it can happen if you and the rest of the Montana congressional delegation will work towards this goal.

I support S. 3429 without further deletions for these reasons—

1. Great Bear is a vital link between Glacier Park and the Bob Marshall Wilderness Area. It will provide important protected habitat for the endangered grizzly bear and the North American timber wolf as well as important recreational lands for northwestern Montana.

2. The Middle Fork of the Flathead River—"a wild" river in our Wild and Scenic River System—drains the Great Bear. Designation of the wilderness area would greatly complement this wild river.

3. There are no significant resource conflicts. Any timber of marketable value can only be reached by costly and expensive roads that would exceed the timber market value. The Forest Service has determined that wilderness value exceed the speculative values of gas and oil potential.

The Forest Service Boundary does not need to be changed or redrawn for a transmission corridor. Any demonstrated need in the future can be designated by the authority of the President or a future corridor could be along U.S. Highway 2. Support Great Bear designation now without further deletions or delays!

Thirdly, I would like to support your opposition to the new B.P.A. bill, S. 3418. The administrative changes for B.P.A. in this legislation can easily compromise and condemn Montana into an energy provider/source with little input as to policy. Eastern Montana is not represented at all in the proceedings. The bill also would preempt Montana Major Facility Siting Act—a complete snub to state government. Please work diligently to kill this piece of disruptive legislation.

Thank you for your time.

Sincerely yours,

CHARLES LENNOX.

COLUMBUS FALLS, MONT., *September 10, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: My wife, Alice, and I am writing to urge your full, and immediate support of the Great Bear Wilderness Bill, S. 3429.

The area as defined in S. 3429 has been fully studied by the U.S. Forest Service and represents the best professional judgment of the Agency and the informed support of many citizens. All issues such as timber and mineral resources, water quality, land forms, wildlife, etc. have been considered in making this final determination.

Many years of effort on the part of dedicated professionals, citizens, and not least the late Sen. Lee Metcalf, call for prompt action on this bill. There seems no defensible reason for delay.

Sincerely,

W. A. (LEX) BLOOD.
ALICE F. BLOOD.

BILLINGS, MONT., *September 10, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: I am writing to request your active support of S. 3429, which would designate 360,000 acres in Montana as the Great Bear Wilderness. If you work towards a concerted effort with other members in the Montana Congressional delegation, there will be enough time to pass S. 3429 this year.

It is important that no further deletions be made. There is no need to redraw the boundary to allow for a transmission corridor because of Sec. 4-d(4) of the Wilderness Act. The Forest Service recommendation is good as it stands.

I appreciate your consideration of the urgency of passage of S. 3429 this year, and request that you transmit this letter to the Senate Interior Committee for inclusion in the official hearing record.

Sincerely,

PATRICIA DECKER.

FISHTAIL, MONT., *September 11, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SIR: I have recently returned from a trip to the area of the Great Bear Wilderness. I fully back the boundary as drawn up by the Forest Service.

I can not see any important resource conflict in the area and feel that the Wilderness value exceeds any possible plan to prospect for oil or gas—which would be a doubtful undertaking at best.

Please make this letter a part of the official hearing record.

Yours truly,

GEORGE M. ROSSETTER.

HELENA, MONT., *September 13, 1978.*

Senator JOHN MELCHER,
Senator PAUL HATFIELD,
Representative MAX BAUCUS,
Representative RON MARLENEE,
Washington, D.C.

GENTLEMEN: I request your active support for passage of the Forest Service 360,000 acre Great Bear Wilderness (H.R. 13972, S. 3429) this year. I believe there is adequate time for these bills to pass the Congress and be signed by the President this year if we have the active support and work of each member of the Montana delegation.

I am asking that this letter be made a part of the official hearing record at the September 17 field hearing in Choteau, Montana.

The Great Bear is needed to protect the habitat of the threatened grizzly bear. It is a vital area which is needed because of its strategic location between Glacier Park and the Bob Marshall Wilderness.

In my opinion, the proposal of the Administration is a sound and workable proposal. It is professionally done and follows the Wilderness Act. It is my understanding that conservationists will accept the Forest Service recommendation even though 26,000 acres have been deleted from the original boundary, and that seems to me to be evidence of good faith on the part of the conservationists.

The Middle Fork of the Flathead is a "wild" river in our Nation's Wild and Scenic Rivers System. The Great Bear Wilderness designation would supplement and compliment the wild river classification.

The wilderness values in the area exceed the value of any resources in the Great Bear. The timber and stream bottoms cannot be economically harvested

in light of the expense involved in reaching such timber. Oil and gas potential is speculative in the extreme.

It is my belief that at the present time there is no need for a transmission corridor up Dirty Face Creek as the Bonneville Power Administration originally indicated. In any event, the Wilderness Act gives the President authority to create such a corridor in the future if it is needed. Furthermore, the Forest Service boundary would not have to be redrawn as it would allow future corridor along Highway 2.

I was a personal friend of the late Montana Senator Lee Metcalf who was deeply interested in wilderness protection for the Great Bear. It would be a fitting tribute to him if wilderness status were to be given to this area.

Again, I enlist your active support to help in this worthy cause.

Sincerely yours,

HENRY LOBLE.

BUTTE MONT., *September 14, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

DEAR SENATOR MELCHER: You may recall that on previous occasions I have written you in regard to conservation matters and that invariably our viewpoints are not entirely compatible. However, I look upon you as a conscientious representative of all your constituents who tries to make the best possible decision. I applaud you for your efforts in connection with the Missouri Breaks and Bear-tooth Wilderness bills.

I do not believe that you are steadfastly opposed to all conservation or wilderness proposals, and I would like to solicit your support for the Great Bear Wilderness bill (S. 3429 introduced by Senator Jackson and Hansen, but which sorely needs the active support of both yourself and Senator Hatfield. Most of us who support this most worthy bill feel that the support of the entire Montana Congressional delegation is required if the bill is to be enacted into law before the end of this year.

I feel that there are actually no good reasons why this bill should not be made into law without delay, and I am sure that you are cognizant of the many excellent reasons why it should be—grizzly bear protection, preservation of the wild Middle Fork of the Flathead, no significant resource conflicts, and the proposal is based on a sound professional study and a correct interpretation of the Wilderness Act.

It is my belief that Montanans are concerned with the preservation of wildlife, including the grizzly bear. They are concerned with free-flowing rivers and open game ranges; virgin wilderness forests and crystal-clear lakes; clean air and palatable drinking water. In my opinion, people live in Montana because they like the way it is, and they want to keep it that way!

The people of Western Montana are environmentally-minded. It could be politically-expedient for you to support the Great Bear Wilderness bill. Will you please make this letter a part of the official hearing record? Thank you.

GEORGE F. GRANT.

HAMILTON, MONT., *September 15, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

DEAR SENATOR MELCHER: Please help pass S. 3429 this year. The Great Bear Wilderness, by linking the Bob Marshall Wilderness and Glacier Park, would insure the survival of Montana's great natural wildlife species, grizzly bear, elk, and mountain timber wolf, and at the same time preserve our unique way of life and heritage. All this would be done with little economic cost to our state. By far, in the long run, the populated towns surrounding this great area will receive more economic benefit by giving it Wilderness status, than by the short run benefits of subsidized logging in the low grade timber stands within this area.

I live in the Bitter Root Valley next to the Bitter Root Selway Wilderness. Our population increases is one of the greatest in the state, and they are still coming, many of them because of the Bitter Root Selway Wilderness. If wilderness has hurt our economic growth in the Bitter Root, let's have some more of it.

The Great Bears time is now. What a fitting memorial to the late Senator Metcalf if his colleagues would make the Great Bear Wilderness a reality this year.

Please have this letter made a part of the official hearing record.

Yours truly,

THOMAS A. FORD.

MISSOULA, MONT., *September 15, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

HOWDY HON. JOHN MELCHER: I am writing in regard for the Great Bear, a particularly unique area for many reasons, some for me very personal. In the winter of 1976, I had occasion to live on west side of the Great Bear considered area and admired the whole area very much. I spent a great deal of time talking to old people who live in the area who had traveled a lot into the Great Bear area and their stories of the wildlife and scenery made me want to have time to explore this region.

At the same time tho in the summer of 1976, I attended a Gathering of the Rainbow Family Tribe in Jones creek, up the West Fork of the Teton River. Though this particular area may only just be in the Great Bear and Jones Creek being somewhat of an ecological disaster area, still the area around Jones creek going west into the Mtns. was full of life. Our prayers were that all such land be protected from exploitation, that there be time for exploration and journeying into this great forest. The Great Bear would give the grizzly an opportunity to survive, to roam and be free; that there is someplace left on Earth for them to live. In many ways I suppose there are those who say, "why there has got to be many exploitable commodities up there in them deep hills," but you know even if they went in, got them out, they would not have a hundredth of the wealth that that land will bring come the future when the world is crowded and there are few places left to go where people can be alone, where people can be sure that there is such a place that animal life, free, wild, animal life is alive and well. We lose such areas, we lose that vital relationship to the land, to the whole concept of free life, of freedom.

I am not so sure that because America was such a wild land that it wasn't the real inspiration for those who came across the Great Water to this land to be free, to want to live unfettered. If these lands are lost, and if they are exploited they will be lost, will we in turn not lose that inspiration to live the free life, to live as free as the Great Bear.

For folks who are wondering where the money will come from if we don't open these lands, they should consider the lessons we see in California and Oregon, where every area that has been opened is crowded, where there are some areas, even Wilderness areas, where you must have a reservation in order to visit. When the day comes when the advancing hordes of humanity make their way to Montana, as they are doing each year on the increase, at that time our wild places will be like money in the bank. Solid, financial, job oriented people better look at our most valuable resource, our wild places. Ten years is a drop in the bucket, but in just ten years many areas opened in Oregon for such exploitation are now overcrowded, cause when the resources have been drained, the land lays open for others to come in and use that land, in vehicles etc. . . . This land should not be so opened. My family came into the Augusta area in the 1860's, they saw the Great Bear then, before it was surrounded by people, before it became the island that it is now and will be from now on, I envied them for years, but now I know that right thinking people will see to it that the Great Bear will be saved. Thank you.

BARRY E. ADAMS,
*Research Assistant,
RARE II and Great Bear.*

MISSOULA, MONT., *September 16, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

DEAR SENATOR MELCHER: Enclosed is a copy of our letter to Robert Torheim Regional Director of the Forest Service, expressing our support for "Alternative W" as presented by the Montana Coalition for Wilderness. We are sending you this letter so you will be advised of our feelings on this matter.

We are also writing to urge you to sponsor H.R. 13972, S 3429 The Great Bear Wilderness Bill. If Montana's delegation would actively support passage of this bill The Great Bear could be put under wilderness protection this year.

I'm sure you already realize the importance of the Great Bear in that it is one of the last areas of Grizzly habitat, that the area drains the "wild" middle fork of the Flathead, and that it is a vital link of wilderness between Glacier and the Bob Marshall.

Also since there are no major resource conflicts, since there is no need for a transmission line corridor up Dirty Face Creek, or any need for any boundaries to be redrawn; and because the Forest Service, industry, and conservationists are in agreement over the proposal we feel now is the time to get this bill passed and enacted into law. There IS time left this year if you will help.

Sincerely,

MARY NYMAN.
MEL NYMAN.

GREAT FALLS, MONT., September 17, 1978.

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: I am writing this letter to address the philosophy of wilderness designation generally, and at this time specifically, the Great Bear Wilderness.

I am concerned about the Great Bear designation because I am a land owner along the Rocky Mountain Front, I am intimately familiar with portions of the Great Bear and because I will be affected by the economic, social and esthetic impacts of any decision for the area.

I think pros and cons of wilderness designation will be adequately addressed from the simplistic viewpoints of "it is beautiful and its wilderness value justifies it, etc." which I agree with, to the threats of "we must develop the mineral resources or there will be rampant unemployment and abysmal depression" which is nothing less than cruel, below the belt, unacceptable economic blackmail.

I believe that examination of the rather elementary complexities of economic evolution and realities is justified and at the risk of apparent digression would like to elaborate.

The primary factors of economic philosophy and practice in the past were the political, social and religious climates. The power and relative influence of a nation pivoted on these factors because if they could be controlled and manipulated there were always natural resources to be acquired that were expendable commodities to satisfy the other factors in the economic machine and consequently establish international status. However, in recent years the tremendously accelerated change in technology, values and demographic factors with the resulting consumption of resources, has changed the significance of the primary factors of economics.

Today religion (unfortunately or fortunately) has been suppressed, with the possible exception of a Far East nation, and the significance of resources has been elevated to the extent that political and social factors, and religion, may have to be considered expendable to sustain resource independence and survive as an international economic entity in a long term sense.

In view of the foregoing, the past and current philosophy of industry to develop and consume at an ever increasing rate as a survival or competitive technique is totally fallacious and unacceptable in today's set of circumstances. The idea of creating X number of "cash flow" loops and "spend it today and to hell with tomorrow" at the expense of resources is passé, whether industry and politics have awakened to that fact or not.

Industry often alludes to "what is good for the industry is good for the nation" but this is no longer a truism particularly in this age of multinational conglomerates.

The people or industries that have the means, use natural resources or financial trust funds to guarantee personal or corporate economic security for the future but frequently oppose a future trust of natural resources for the nation because that natural resource trust would not contribute to their personal or corporate trust fund now or as profitably.

A trust fund of wilderness with whatever natural resources they include is the best guarantee for future economic survival of our nation. Those resources

will be of ever greater value in the future or everything industry has been saying about decreasing availability and increasing cost of development is not the truth.

If we have to develop all available resources now, with nothing left for future generations, it is too late, we are resource bankrupt.

I can say with conviction that the value of true wilderness with the habitat to support endangered, indigenous species and the need of the people for wilderness justifies its designation.

But even more important, careful analysis of resources, economics and the future well being of this country, justifies its designation even more.

I Strongly Support and Wish To Have This Letter Entered In The Record Supporting The Great Bear Wilderness Bills H.R. 13972 and S. 3429.

Sincerely,

CAL RYDER.

IZAAK WALTON INN,
Essex, Mont., August 17, 1978.

Senator MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SIR: I wish that my letter to you supporting the Great Bear Wilderness be included in the official hearing record for the Great Bear. My husband and I feel the passage of bill is essential for the future of our children and grandchildren for their enjoyment of untouched area—you should hear tourists complaints because they do not see animals in Glacier National Park. Please support the passage of the Great Bear.

Thank you.

MILDRED GOODRICH.

BILLINGS, MONT., September 18, 1978.

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MELCHER: I am urging you along with the other members of our Montana Congressional Delegation to work together to support the 360,000 acre Great Bear Wilderness legislation. It appears to me that there is enough time to pass this legislation this fall if you will work for its passage.

It is very appropriate to have this area reserved as wilderness in respect for and as a tribute to the late Senator Metcalf who was vitally interested in this cause as well as the Absaroka-Beartooth. But even for more important reasons: that this land, without significant resource conflicts, it is imminently qualified for wilderness. With the Middle Fork of the Flathead River now a wild river, what a compliment to it to have the adjoining land set aside for wilderness. In the same vein but in a much magnified sense, this area immediately relates to the wilderness of Glacier Park and the adjoining land to the south, the Bob Marshalls. Here is a chance to create a magnificent grizzly habitat. With the Presidents authority to create a future utility corridor as needed as well as the F.S. boundary allowing for a future corridor along Highway 2, there is no need to change the boundary. The speculation of gas resources under Area #3 does not warrant this deletion considering the magnificent quality of the area and the fact that angle drilling from outside the boundary could reach the wells.

Your support of the Absaroka-Beartooth was much appreciated and I hope you will make this important effort and help move this legislation toward passage without deletions and without delay.

I would request that this letter be made a part of the hearing record.

Thank you for this opportunity to communicate with you on a most important subject.

Sincerely,

JAMES H. LEBAR.

MISSOULA, MONT., September 18, 1978.

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SIR: I strongly urge you to support passage of the Great Bear Wilderness Bill (H.R. 13972, S. 3429). Given its location between Glacier Park and Bob

Marshall and its proven low timber, oil and gas potential, it appears to be a logical wilderness area. I backpack, fish, ski, and hike in wilderness areas on my yearly vacation and on weekends.

It is imperative that this bill not get buried this session since RARE II will hold center stage next session. Coordination among the members of the Montana delegation can make passage of the Great Bear Wilderness Bill a reality this session.

Please include this letter in the official hearing record. Thank you for your efforts.

Sincerely,

ANNE TERESE BIER.

MONTANA DEMOCRATIC CENTRAL COMMITTEE.

SENATOR MELCHER: The Montana Democratic Party wants to go on record in support of the Great Bear Wilderness proposal. We would like to have the following resolution from the 1978 Montana Democratic Party Platform entered in the hearing record on this bill on October 5:

Whereas, Lee Metcalf fought for many causes in the United States Senate, including protection and preservation of our natural resources. In his final session of Congress, which was so tragically abbreviated, Lee's major goal was the creation of the Great Bear Wilderness: and

Whereas, this area is a logical link between the Bob Marshall Wilderness and Glacier National Park and will provide necessary protection for critical game habitat and the wild Middle Fork of the Flathead River; and

Therefore, be it *resolved*, that we urge support of legislation enacting the Great Bear Wilderness by our congressional delegation during this session of Congress as a fitting legacy to Lee Metcalf.

SALLY JORDAN, *Chairman*.

MISSOULA, MONT., *September 27, 1978.*

Senator JOHN MELCHER,
Senate Office Building,
Washington, D.C.

DEAR SIR: Having just hiked through the heart of the eastern part of the Great Bear proposed wilderness, I strongly urge you to put make mum effort into passage of the Forest Service 360,000 acre Great Bear Wilderness (H.R. 13972, S. 3429). Going through this spectacular country with its wild peaks, rugged high tundra and picturesque creek bottoms, I recognize the high quality of its wilderness attributes. From my experience doing Stage One for the Forest Service, I see that there is only very little marginal timber resource along some of the creek bottoms (i.e. Birch Creek). Also the Forest Service has determined that the wilderness quality exceeds the speculative oil and gas potential. Therefore, I urge immediate passage *this year* so we may have protection now for this valuable buffer to the Bob Marshall. True to its name, I saw bear sign in the Great Bear, a vital habitat for the threatened grizzly.

I must reiterate two more points. There is no need for a transmission corridor up Dirty Face Creek. If needed later, the Wilderness Act (Sec. 4-d(4)) gives the President authority to create such a corridor in the future. Second, the Middle Fork of the Flathead, a "wild" river in the National Wild and Scenic Rivers System, needs protected wilderness around to fully preserve it wild quality.

As a sign of good faith, conservationists have accepted the Forest Service recommendation even though 26,000 acres have been deleted from the original boundary. Furthermore, the proposal is a sound one based on a professional study and correct interpretation of the Wilderness Act. Act *now*, if for no other reason than as a grand gesture to the late Sen. Lee Metcalf, a great supporter of this fine area for wilderness preservation. I close with an original poem and ask that this letter be entered into the hearing record.

Symphony

Reeds by Crickets in the grasses
 Winds in the trees
 Percussion by water over rocks in Birch Creek
 Conducted by the Autumn Sun
 To the Silent bravos of the clouds.

Sincerely,

JOEL R. KEANAN.

 GREAT FALLS, MONT., *September 28, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
 Washington, D.C.*

DEAR SENATOR MELCHER: This letter concerns the Great Bear Wilderness and I'd like it to be considered part of the official record. I make my living in the construction industry and realize the importance of timber, gas, and oil production for the national and local economy. I feel, however, that there is a greater need for wilderness lands. I think that the value of wilderness land has only begun to be realized and wilderness recreation will become more & more necessary to man in the future.

The Forest Service proposed Great Bear Wilderness is an important and necessary link between the Bob Marshall and Glacier Park. It is prime habitat not only for the grizzly but also sheep & goats. The area has already been cut down by 26,000 acres and we are not really happy with this, but that is acceptable if we can get H.R. 13972, S. 3429 passed this year with no further changes.

The Middle Fork of the Flathead has been included as a wild river in the Wild and Scenic Rivers System and certainly should be. However, if it becomes muddied and polluted from logging and other resource development in its headwaters area then this wild river designation is meaningless. Please help to get H.R. 17972, S. 3429 passed this year with all parts including area 3 included.

As was indicated by expert professional testimony at the September 17 hearing, there is little resource value present on any of the Great Bear land. At best the timber is only slightly valuable in area 3 and even that would cost the taxpayers more than it's worth since the cost of building roads is not considered in the logging company cost estimates. Oil and gas exploration for the most part indicates, at best, marginal deposits. In any case the Wilderness Act allows exploration and resource recovery if the need should arise in the future. All things considered it seems obvious that the wilderness values far exceed any economic value.

The need for a transmission line between the Bob Marshall and Glacier was questioned by expert testimony at the September 17 hearing. Should the transmission line be needed, it certainly need not go up Dirty Face Creek. The line will have little or no aesthetic affect if the corridor follows highway 2. It is important to note that the Forest Service boundary does not need to be redrawn in order to allow a corridor along highway 2. In any event the Wilderness Act gives the President the power to create a corridor if it ever should become necessary.

I think that the enormous assets of a piece of wild land between and connecting the Bob Marshall and Glacier Park speak for themselves. But if wilderness doesn't mean as much to you as it does to me, then think of what this land meant to the late Senator Metcalf. Please, Senator Melcher, do all you can to aid the passage of H.R. 13972, S. 3429 with no further adjustments in boundaries, with all areas included, and with no further delay. This wilderness is important to me, important to wildlife, important to Montana, and probably most important to thousands of Americans who will probably never visit the area but derive satisfaction just knowing that in Montana there are wild lands that hold the last remnants of what all of America once was. Please help all you can to get the Great Bear Wilderness passed this year.

Sincerely,

DAVID R. BROWN.

P.S.—Senator Melcher, the fate of the Great Bear is in your hands. Please do all you can to get the Great Bear Wilderness passed this year with no further deletions or boundary adjustments.

Thanks.

DIXON, MONT., *September 29, 1978.*

DEAR SENATOR MELCHER: I am writing to you to request that you actively support passage of the Forest Service 360,000 acre Great Bear Wilderness (H.R. 13972, S. 3429) this year. There is adequate time to enact the Great Bear this year if each member of the Montana delegation will work together as a team in support of the Great Bear.

The Great Bear is a vital link between Glacier National Park and the Bob Marshall Wilderness. It would provide an essential corridor for the "gene pools" of several endangered and threatened species, such as the grizzly bear and wolf. It is the last remaining large expanse of unprotected habitat for the grizzly bear. The Administration's proposal is based on a sound professional study and a correct interpretation of the Wilderness Act. I am willing to accept the Forest Service's recommendation even though 26,000 acres have been deleted. There is no significant economic loss in the Great Bear as the remote and marginal timber in the stream bottoms can only be reached by costly roads that would exceed the value of the timber. The Forest Service has also determined that the wilderness values in the area exceed the value of the speculative oil and gas potential.

There is no need for a transmission corridor up Dirty Face Creek as originally suggested by Bonneville Power Administration. The Wilderness Act (Sec. 4-d(4)) gives the President authority to create such a corridor in the future if the need arises in the public interest. I'd like to emphasize that the Forest Service boundary would not need to be redrawn as it would allow a future corridor along Highway 2.

Prompt enactment of the Great Bear Wilderness, without further deletions, would be a fitting tribute to the late Montana Senator Lee Metcalf who had long championed wilderness protection for this area.

I'd like to request that this letter be made part of the official hearing record. Thank you for your time and consideration.

Sincerely,

STACY ROCKWELL.

WEST GLACIER, MONT., *October 3, 1978.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

For inclusion in the Senate hearing record on the Great Bear Wilderness proposal.

I am a Registered Nurse who has lived and worked in Montana for the past 12 years. Five of those years were spent living adjacent to the Great Bear Wilderness Area—between the proposed wilderness area and Glacier Park. During the past 7 years I have spent many days hiking, horseback riding, and skiing in the area. It is a great place to relax, to renew one's spirit, and get away from people and the constant demands of my profession. I fully support the Administration's proposal for a 360,000 acre wilderness and would accept the house proposal of about 350,000 acres.

While living in the area I was well aware of the fact the animals knew no political boundaries and would readily cross from one area into the other. I know of a grizzly sow with 2 cubs, and 2 black bears who sought refuge from the overcrowded park by going into the area of the Great Bear Wilderness. I heard reports of wolves crossing, but unfortunately never saw any myself. It was common to see elk, deer, and moose crossing. And Frank Singer, in his report of the study of the Walton Goat Lick in Glacier Park near Highway 2 reports goats coming out of Sheep Creek in the Great Bear Wilderness and crossing the Middlefork of the Flathead River to satisfy their needs at the natural lick in the park.

Any deletions of land areas along Highway 2 or the northern portion of the proposed wilderness (Area #3) would make it increasingly difficult for these animals to range back and forth. This is their natural pattern and should be preserved if the animals are to be preserved.

Leaving out the section north of the Middlefork would affect the animals ranging as well as affecting the elk winter range on the Middlefork and the watershed. This land is too fragile for roads and logging and other intensive use. After the heavy rains of August, Morrison and Twentyfive Mile Creeks were carrying a heavy silt load into the otherwise clear Middlefork. Both of these drainages have logging activities and roads.

Leaving this area out for oil and gas leasing would be a short sighted approach. The future of our country does not depend on the possible existence of oil and gas under the Great Bear Wilderness. If a national emergency in the future necessitates the use of any oil or gas that may be there, then it will be available for use. Perhaps then there will be better methods of extracting it, methods that will not destroy the natural landscape and sacrifice this wilderness. Wilderness designation would not "lock up" this resource, it would only ensure there is something left for the future.

I have seen many young people traveling the country seeking wilderness to be challenged in. There are few constructive ways for these young people to be challenged and use up their excess energy and get their "kicks" in this country today. They need to have these opportunities without adversely affecting other people and being on their own in the wilderness is far better than taking drugs, joining street gangs, stealing cars, etc. to get their "kicks".

There is no need to set aside the area on Logan Creek and Dirtyface Creek for a power corridor. If it becomes necessary in the future to have a power corridor through there, it can be done by presidential order. Highway 2 runs north of the area and there is no reason the power corridor cannot follow that route. It was interesting that at the public workshop on the wilderness proposal held by the forest service in Kalispell, the one factor almost everyone was in agreement on was that the power corridor should not go through the wilderness.

There are abundant areas on the Flathead and Lewis and Clark National Forests for mechanized recreational uses—areas such as the South and North Forks of the Flathead River which have hundreds of miles of old logging roads and trails which are suitable. Also the existing roads on the Middlefork such as Skyland, Essex, Dickey, Pinnacle, and Paola Creek Roads will remain open for these uses. The area north of Birch Creek and east of the Continental Divide on the Lewis and Clark Forest is heavily roaded and contains many trails and open meadows suitable for snowmobile use. No need to deny this wilderness resource to the whole country for a few people. Besides, if the country as a whole is so hard up for oil and gas that they have to take what little may lie under this area and sacrifice the area, then surely people should not be wasting it on motorbikes and snowmobiles when it may be needed to keep our industries and defenses going.

There are those who argue that wilderness is for the healthy, the young, and the rich. Well, I'm certainly not rich, and I can cite many examples of 70 year old people enjoying a wilderness experience. I know a 74 year old man from back east who made yearly trips into the area of the Great Bear, traveling 23 miles on horseback in one day. And a look at the Sat. Sept. 16, 1978 issue of the Missoulian will show you an article about a physician with severe coronary artery disease who makes a yearly trip into the Bob Marshall Wilderness Area for fly fishing. I know a 65 year old man at Essex who has severe arthritis and has had surgery to replace one hip. He walks with 2 canes yet delights in taking people into the area of the Great Bear to introduce them to a wilderness experience.

Last summer I led a series of 12 hikes into the proposed Great Bear Wilderness Area to familiarize people with the area so they could form their own opinions about it. These hikes were from one half day to three days in length. A total of 132 people participated in the hikes and they ranged in age from 1½ years to 68 years!

Having worked for a cardiologist for 2 years I can say that after office testing to be sure it is safe, cardiac patients are put on an exercise schedule of walking at a brisk pace of 3 to 4 miles per hour. Getting out on their own two feet in the wilderness may be the healthiest thing many people will ever do. It is merely a matter of what one wants to do with his time and money, not a matter of age, physical ability, or wealth.

I urge you to actively support the Administration's Great Bear Wilderness Proposal or the House's proposal and get it passed during this session of Congress. There have been numerous public workshops and public hearings on this proposal. It is a proposal that Senator Metcalf pursued for many years and it is past due.

Sincerely,

ELAINE SEDLACK.

UNIVERSITY OF MONTANA, *Missoula, Mont.*

Senator JOHN MELCHER,
*Senate Office Building,
Washington, D.C.*

SENATOR MELCHER. I am writing to support the Great Bear Wilderness proposal. I write atop a ridge overlooking the North Fork of Birch Creek, one of the

wildest, most beautiful places I have ever seen. I am emotional about this place because whichever way I look, I am awed.

This proposal needs your support if it is to pass legislation this year. It links Glacier Park and the Bob Marshall, although it is just as rugged and wild. The Great Bear drains the middle fork of the Flathead river, a wild river which can remain wild only if the country around it is wild. There are no resources in this area—only marginal timber in the creek bottoms.

There is no need for a transmission corridor up Dirty Face Creek as suggested by Bonneville Power. The forest service boundary need not be redrawn as it would allow a future corridor along Highway 2.

Please enter this letter in the Congressional Record, and notify me of the results.

Thank you for your time and consideration.

Yours Truly,

DAVID A. BLAIR, Jr.

MISSOULA, MONT., *September 28, 1978.*

Senator JOHN MELCHER,
Washington, D.C.

DEAR SENATOR MELCHER: I would ask that you actively support passage of the Forest Service's proposed 360,000 acre wilderness, to be called the Great Bear Wilderness (H.R. 13972, S. 3429), this year. There is adequate time to enact the Great Bear this year if each member of the Montana delegation will work together as a team in support of the Great Bear.

The Great Bear is an important hunk of wild land between Glacier National Park and the Bob Marshall Wilderness and, as such, is the last remaining large expanse of unprotected habitat for the threatened grizzly bear, and Northern Rocky Mountain wolf.

There is no need for a Power Corridor up Dirty Face Creek as suggested by B.P.A.

The Wilderness Act (Sec. 4d(4)) gives the President authority to create such a corridor in the future if needed. Besides, the corridor could be run along Highway 2.

Thank you.

SHARON NACE.

