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SAN GABRIEL, WASHAKIE, AND MOUNT JEFFERSON WILDERNESS AREAS

HEARINGS

BEFORE THE

SUBCOMMITTEE ON PUBLIC LANDS

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

NINETIETH CONGRESS

SECOND SESSION

ON

S. 2531

A BILL TO DESIGNATE THE SAN GABRIEL WILDERNESS, ANGELES NATIONAL FOREST, IN THE STATE OF CALIFORNIA

S. 2630

A BILL TO DESIGNATE THE STRATIFIED PRIMITIVE AREA AS A PART OF THE WASHAKIE WILDERNESS, HERETOFORE KNOWN AS THE SOUTH ABSAROKA WILDERNESS, SHOSHONE NATIONAL FOREST, IN THE STATE OF WYOMING, AND FOR OTHER PURPOSES

AND

S. 2751

A BILL TO DESIGNATE THE MOUNT JEFFERSON WILDERNESS, WILLAMETTE, DESCHUTES, AND MOUNT HOOD NATIONAL FORESTS, IN THE STATE OF OREGON

FEBRUARY 19, AND 20, 1968

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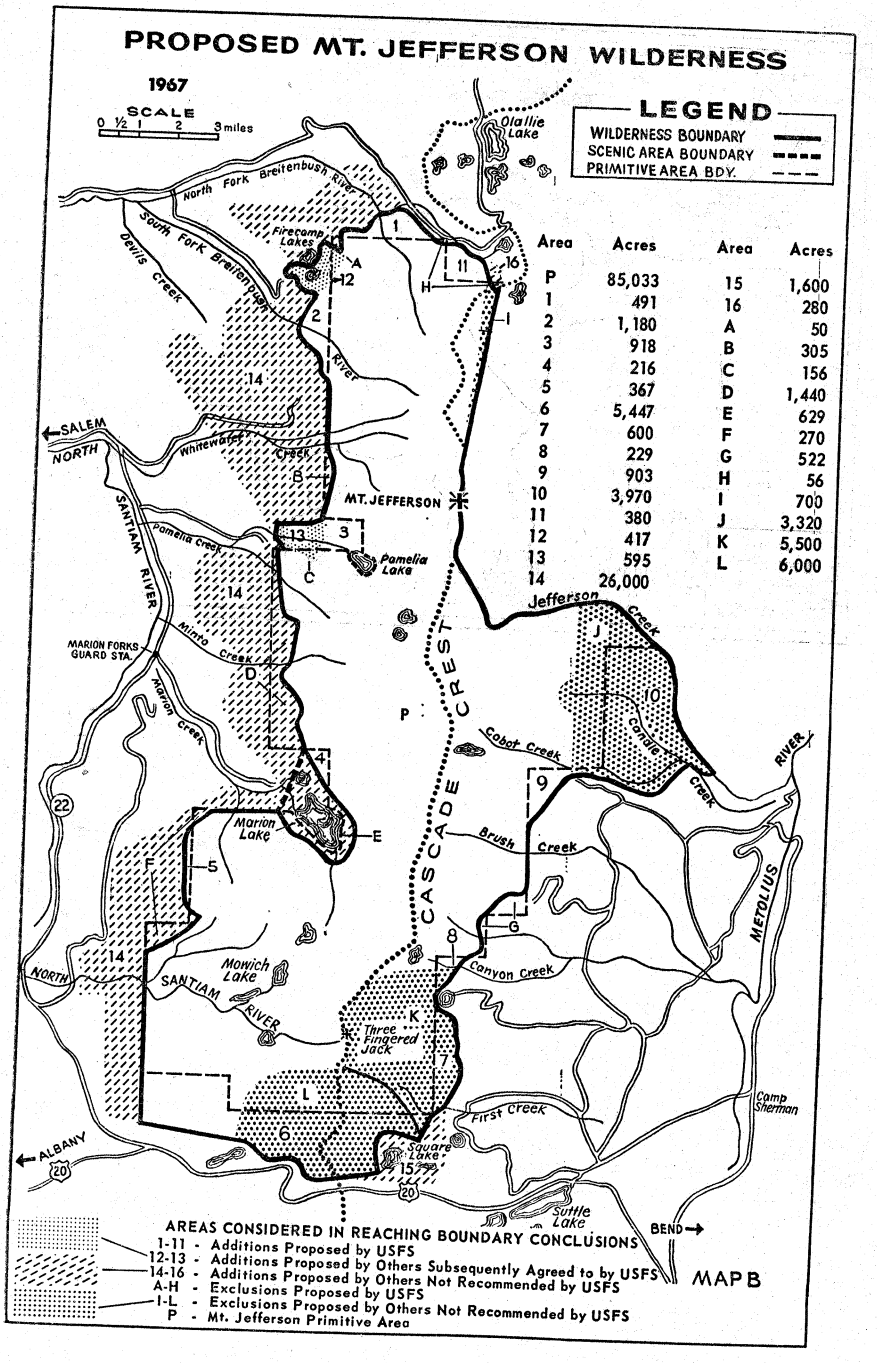
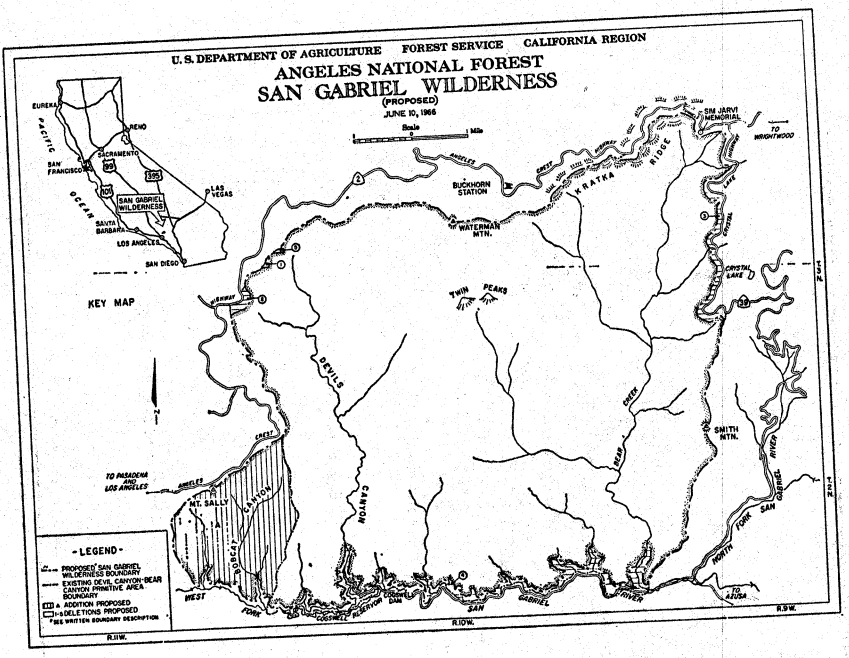

PROPOSED MT. JEFFERSON WILDERNESS
1967
SCALE
0 ½ 1 2 3 miles
LEGEND
WILDERNESS BOUNDARY
SCENIC AREA BOUNDARY
PRIMITIVE AREA BDY.
Area Acres Area Acres
P 85,033 15 1,600
1 491 16 280
2 1,180 A 50
3 918 B 305
4 216 C 156
5 367 D 1,440
6 5,447 E 629
7 600 F 270
8 229 G 522
9 903 H 56
10 3,970 I 700
11 380 J 3,320
12 417 K 5,500
13 595 L 6,000
14 26,000
Olallie Lake
North Fork Breitenbush River
Firecamp Lakes
Devils Creek
South Fork Breitenbush River
SALEM
NORTH
Whitewater Creek
MT. JEFFERSON
SANTIAM RIVER
Pamelia Creek
Pamelia Lake
Jefferson Creek
MARION FORKS GUARD STA.
Minto Creek
Marion Creek
CASCADE CREST
Cabot Creek
Candle Creek
RIVER
Marion Lake
Brush Creek
METOLIUS
Mowich Lake
NORTH SANTIAM RIVER
Canyon Creek
Three Fingered Jack
Camp Sherman
First Creek
Square Lake
Suttle Lake
ALBANY
BEND
AREAS CONSIDERED IN REACHING BOUNDARY CONCLUSIONS
1-11 - Additions Proposed by USFS
12-13 - Additions Proposed by Others Subsequently Agreed to by USFS
14-16 - Additions Proposed by Others Not Recommended by USFS
A-H - Exclusions Proposed by USFS
I-L - Exclusions Proposed by Others Not Recommended by USFS
P - Mt. Jefferson Primitive Area
MAP B


U. S. DEPARTMENT OF AGRICULTURE FOREST SERVICE CALIFORNIA REGION
ANGELES NATIONAL FOREST
SAN GABRIEL WILDERNESS
(PROPOSED)
JUNE 10, 1966
Scale
Miles
KEY MAP
EUREKA
RENO
SACRAMENTO
SAN FRANCISCO
PACIFIC OCEAN
SAN GABRIEL WILDERNESS
SANTA BARBARA
LOS ANGELES
SAN DIEGO
LAS VEGAS
BUCKHORN STATION
WATERMAN MTN.
TWIN PEAKS
SAN JARVI MEMORIAL
TO WRIGHTWOOD
KRATKA RIDGE
CRYSTAL LAKE
SMITH MTN.
DEVILS CANYON
DEVILS CREEK
BEAR CREEK
MT. SALLY
BOBCAT CANYON
TO PASADENA AND LOS ANGELES
WEST FORK
SAN GABRIEL RIVER
NORTH FORK
SAN GABRIEL RIVER
TO VALYERMO
COGSWELL RESERVOIR
COGSWELL DAM
R.11W.
R.10W.
R.9W.
T.2N.
T.1N.
- LEGEND -
PROPOSED SAN GABRIEL WILDERNESS BOUNDARY
EXISTING DEVIL CANYON-BEAR CANYON PRIMITIVE AREA BOUNDARY
A ADDITION PROPOSED
D-1 D-2 DELETIONS PROPOSED
* SEE WRITTEN BOUNDARY DESCRIPTION

AREAS CONSIDERED IN REACHING BOUNDARY CONCLUSIONS

AREA	MAP NUMBER	ACRES
A	1	1,500
B	1	1,200
C	1	1,000
D	1	1,000
E	1	1,000
F	1	1,000
G	1	1,000
H	1	1,000
I	1	1,000
J	1	1,000
K	1	1,000
L	1	1,000
M	1	1,000
N	1	1,000
O	1	1,000
P	1	1,000
Q	1	1,000
R	1	1,000
S	1	1,000
T	1	1,000
U	1	1,000
V	1	1,000
W	1	1,000
X	1	1,000
Y	1	1,000
Z	1	1,000
AA	1	1,000
BB	1	1,000
CC	1	1,000
DD	1	1,000
EE	1	1,000
FF	1	1,000
GG	1	1,000
HH	1	1,000
II	1	1,000
JJ	1	1,000
KK	1	1,000
LL	1	1,000
MM	1	1,000
NN	1	1,000
OO	1	1,000
PP	1	1,000
QQ	1	1,000
RR	1	1,000
SS	1	1,000
TT	1	1,000
UU	1	1,000
VV	1	1,000
WW	1	1,000
XX	1	1,000
YY	1	1,000
ZZ	1	1,000
AAA	1	1,000
BBB	1	1,000
CCC	1	1,000
DDD	1	1,000
EEE	1	1,000
FFF	1	1,000
GGG	1	1,000
HHH	1	1,000
III	1	1,000
JJJ	1	1,000
KKK	1	1,000
LLL	1	1,000
MMM	1	1,000
NNN	1	1,000
OOO	1	1,000
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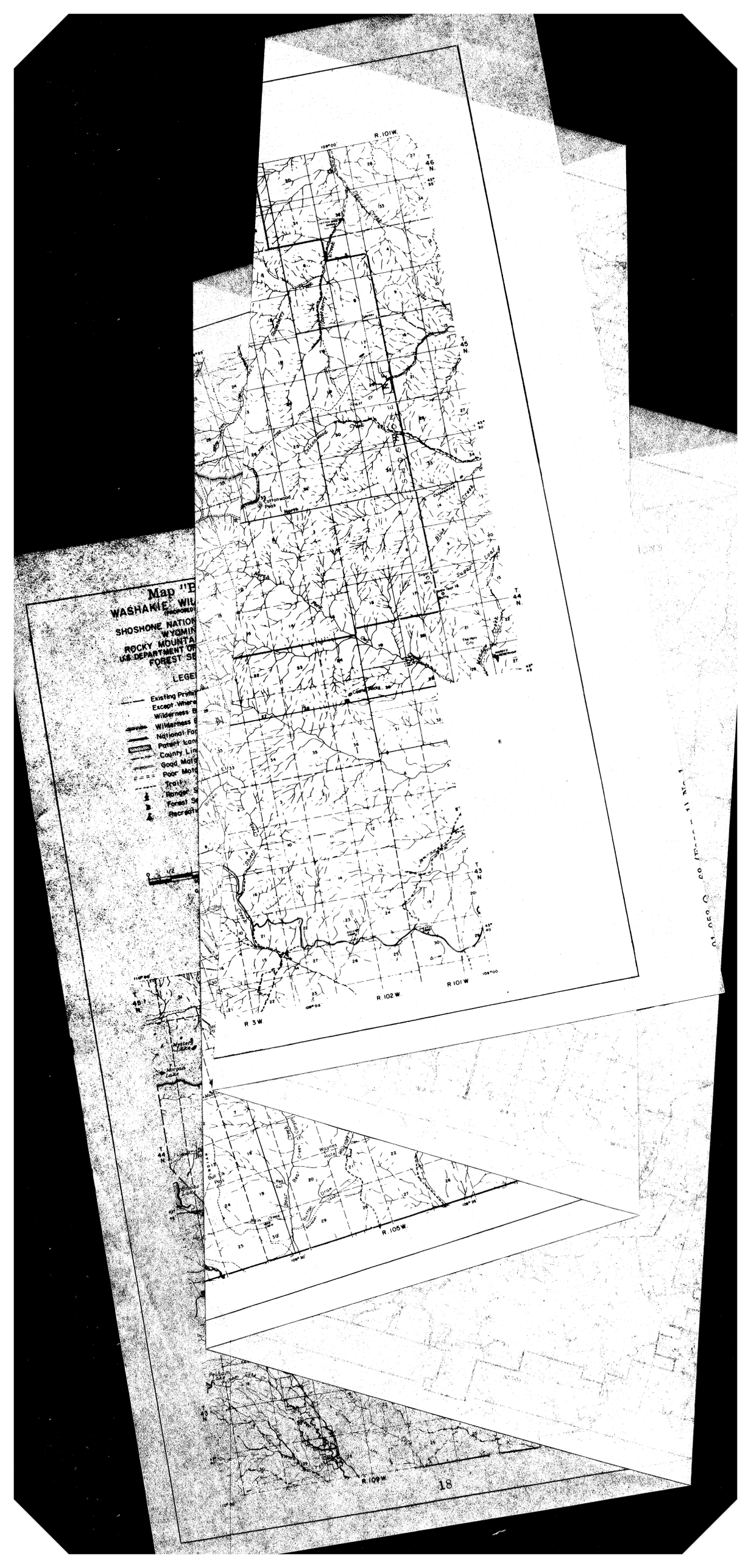
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SAN GABRIEL, WASHAKIE, AND MOUNT JEFFERSON WILDERNESS AREAS

MONDAY, FEBRUARY 19, 1968

U.S. SENATE,
PUBLIC LANDS SUBCOMMITTEE OF THE
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:15 a.m., in room 3110, New Senate Office Building, Senator Frank Church (chairman of the subcommittee) presiding.

Present: Senators Frank Church (Idaho), Lee Metcalf (Montana), Thomas H. Kuchel (California), and Clifford P. Hansen (Wyoming).

Also present: Senator Mark O. Hatfield (Oregon).

Staff members present: Jerry T. Verkler, staff director; Stewart French, chief counsel; Porter Ward, professional staff member; and E. Lewis Reid, minority counsel.

Senator CHURCH. The hearing of the subcommittee will please come to order.

This is the time duly noted and set for hearings on three bills, S. 2531, S. 2751, and S. 2630.

In 1964, Congress and the President established the National Wilderness Preservation System. Under provisions of the Wilderness Act, Public Law 88–577, suitable additions may be made to the system with the approval of Congress.

The first of these to come before the Congress since 1964 was the proposed 143,000-acre San Rafael Wilderness Area of California. A bill establishing the San Rafael was passed last year by the Senate, but is still pending final House action.

The bills we consider today would add three new areas to the Wilderness System. S. 2531 proposed establishment of 36,137 acres to be called the San Gabriel Wilderness in California. S. 2751 would create the Mount Jefferson Wilderness of 96,462 acres in Oregon. The third bill, S. 2630, would combine the existing South Absaroka Wilderness with the Stratified Primitive Area and some adjacent lands to establish the Washakie Wilderness of 679,520 acres.

Now I think at this point, if the committee has no objections, we will include the text of these three bills, and also the message from the President requesting them, in the record.

(The documents referred to follow:)

[S. 2531, 90th Cong., first sess.]

A BILL To designate the San Gabriel Wilderness, Angeles National Forest, in the State of California

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in accordance with subsection 3(b) of the Wilderness Act of September 3, 1964 (78 Stat. 891), the area classified as the

Devil Canyon-Bear Canyon Primitive Area, with the proposed additions thereto and deletions therefrom, as generally depicted on a map entitled "San Gabriel Wilderness—Proposed", dated March 17, 1967, which is on file and available for public inspection in the office of the Chief, Forest Service, Department of Agriculture, is hereby designated as the San Gabriel Wilderness within and as a part of the Angeles National Forest, comprising an area of approximately thirty-six thousand acres.

SEC. 2. As soon as practicable after this Act takes effect, the Secretary of Agriculture shall file a map and a legal description of the San Gabriel Wilderness with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives and such description shall have the same force and effect as if included in this Act: *Provided, however,* That correction of clerical and typographical errors in such legal description and map may be made.

SEC. 3. The San Gabriel Wilderness shall be administered by the Secretary of Agriculture in accordance with the provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act.

SEC. 4. The previous classification of the Devil Canyon-Bear Canyon Primitive Area is hereby abolished.

[S. 2630, 90th Cong., first sess.]

A BILL To designate the Stratified Primitive Area as a part of the Washakie Wilderness, heretofore known as the South Absaroka Wilderness, Shoshone National Forest, in the State of Wyoming, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in accordance with subsection 3(b) of the Wilderness Act of September 3, 1964 (78 Stat. 891), the area classified as the Stratified Primitive Area, with the proposed additions thereto and deletions therefrom, comprising an area of approximately one hundred and ninety-six thousand acres as generally depicted on a map entitled "Washakie Wilderness—Proposed," dated June 15, 1967, which is on file and available for public inspection in the office of the Chief, Forest Service, Department of Agriculture, is hereby designated for addition to and as a part of the area heretofore known as the South Absaroka Wilderness, which is hereby renamed as the Washakie Wilderness.

SEC. 2. As soon as practicable after this Act takes effect, the Secretary of Agriculture shall file a map and a legal description of the Washakie Wilderness with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such description shall have the same force and effect as if included in this Act: *Provided, however,* That correction of clerical and typographical errors in such legal description and map may be made.

SEC. 3. The Stratified Primitive Area addition to the Washakie Wilderness shall be administered as a part of the Washakie Wilderness by the Secretary of Agriculture in accordance with the provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act.

SEC. 4. The previous classification of the Stratified Primitive Area is hereby abolished.

[S. 2751, 90th Cong., first sess.]

A BILL To designate the Mount Jefferson Wilderness, Willamette, Deschutes, and Mount Hood National Forests, in the State of Oregon

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in accordance with subsection 3(b) of the Wilderness Act of September 3, 1964 (78 Stat. 891), the area classified as the Mount Jefferson Primitive Area, with the proposed additions thereto and deletions therefrom, as generally depicted on a map entitled "Mt. Jefferson Wilderness—Proposed," dated August 1967, which is on file and available for public inspection in the Office of the Chief, Forest Service, Department of Agriculture, is hereby designated as the Mount Jefferson Wilderness within and as a part of Willamette, Deschutes, and Mount Hood National Forests, comprising an area of approximately ninety-seven thousand acres.

SEC. 2. As soon as practicable after this Act takes effect, the Secretary of Agriculture shall file a map and a legal description of the Mount Jefferson Wilderness with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such description shall have the same force and effect as if included in this Act: *Provided, however,* That correction of clerical and typographical errors in such legal description and map may be made.

SEC. 3. The Mount Jefferson Wilderness shall be administered by the Secretary of Agriculture in accordance with the provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act.

SEC. 4. The previous classification of the Mount Jefferson Primitive Area is hereby abolished.

THE WHITE HOUSE,
Washington, D.C., October 6, 1967.

Hon. HUBERT H. HUMPHREY,
President of the Senate,
Washington, D.C.

DEAR MR. PRESIDENT: Just 60 miles from the Los Angeles metropolitan area lies a wilderness of rocky cliffs and deep canyons inhabited only by rare California condors, deer, and other wildlife.

Just last February I asked the Congress to declare this area—the San Rafael Wilderness—a part of the National Wilderness Preservation System, both for the enjoyment of our own and future generations and as a symbol of man's respect for nature's work.

The Wilderness Act of 1964 gives us the authority to preserve this region and others like it. When I signed that Act in September 1964 I noted that it was a major conservation measure which would preserve millions of "acres of this vast continent in their original and unchanging beauty and wonder."

I now propose that three additional areas—in California, Oregon, and Wyoming—also be proclaimed wilderness areas. This action will not cost the American taxpayer a penny. But it will enrich the lives of every citizen.

The Federal Government already has jurisdiction over these lands. They have been the subjects of open hearings and intensive studies and have been recommended by the Secretary of Agriculture for inclusion in the wilderness system.

These three areas are admirably suited to become additions to that system.

The proposed San Gabriel Wildnerness in California is a part of the Angeles National Forest and comprises some 36,000 acres of primitive mountain terrain some 35 miles northeast of the City of Los Angeles. It is uninhabited and provides much needed opportunities for hiking, fishing, hunting, camping, and other public use.

The Mt. Jefferson Wilderness would comprise 96,000 acres now included within the Willamette, Deschutes, and Mt. Hood National Forests, some 60 miles from Salem, Oregon. This wilderness contains the second tallest peak in Oregon, nearly 150 lakes, 160 miles of trails, and good fishing and hunting.

The proposed Washakie Wilderness, Shoshone National Forest, Wyoming, includes nearly 680,000 acres. This area provides excellent hunting, a rugged region for hiking, and an opportunity to discover petrified remains of ancient forests.

I urge the Congress to preserve these priceless national assets by approving their inclusion in the wilderness system.

Sincerely,

LYNDON B. JOHNSON.

Senator CHURCH. I would like to call on the distinguished Senator from California, whose bill is first on the agenda this morning, for such remarks as he would care to make. Mr. Kuchel.

STATEMENT OF HON. THOMAS H. KUCHEL, A U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator KUCHEL. Thank you, Mr. Chairman. I am honored to appear today before your Subcommittee on Public Lands, to testify in behalf of S. 2531, which I introduced, to designate the San Gabriel Wilderness, Angeles National Forest, in my State of California.

It would establish a superb wilderness of some 36,137 acres. The proposed San Gabriel Wilderness Area is located in the San Gabriel Mountains in eastern Los Angeles County, Calif., about 5 miles northeast of Metropolitan Los Angeles.

This fine wilderness example lies within 50 miles of approximately 6 million people. As you know, Mr. Chairman, I have long advocated the creation of recreational areas in close proximity to areas of population concentration. The southern California area presents a prime opportunity and need in this regard. People are more likely to use recreation facilities when they are within easy driving distance from their homes and offices.

While it is essential that we preserve our superb natural areas that are remotely located, it is also essential that we retain these superlative examples of untrammeled nature existing close to metropolitan areas. As our population grows, nationally, and certainly in California, the demands on our recreational facilities will increase.

Therefore, as I have often said, we must set aside the needed areas now, not only to satisfy the present demand, but to deal with our responsibilities for providing for the future's requirements.

It is encouraging that my San Gabriel Wilderness proposal has the support of all concerned Federal and State administrative and resources agencies, as well as receiving the enthusiastic support of responsible national and local conservation groups.

I am happy to add that the total proposed wilderness area is within the Angeles National Forest, and therefore no private land will be acquired by virtue of this designation.

I have no doubt that this committee will see the merit and wisdom of this proposal, recommended as it is by the administration, and supported as I say by public and private people interested in sound conservation.

I ask consent that some comments I made in the Senate last fall when I introduced the bill be incorporated at this point, Mr. Chairman, in the record.

Senator CHURCH. Without objection, the comments will be incorporated.

(The document referred to follows:)

[From the Congressional Record, Washington, Oct. 12, 1967]

SAN GABRIEL WILDERNESS AREA

Mr. KUCHEL. Mr. President, on February 8 of this year, I had the pleasure of introducing a bill, S. 889, which would establish the San Rafael Wilderness Area in the Los Padres National Forest in California. The San Rafael bill is the historic first proposed addition to the Wilderness Preservation System established by the 1964 Wilderness Act. S. 889 passed the Senate on May 2, 1967, and is currently pending in the House, where I understand passage is imminent.

I now introduce for appropriate reference a bill to establish the San Gabriel Wilderness Area in the Angeles National Forest of California. The proposed San Gabriel Wilderness is located in the San Gabriel mountain range in eastern Los Angeles County, approximately 35 miles northeast of the city of Los Angeles. This fine wilderness example lies within 50 miles of approximately 6 million people.

The proposed San Gabriel Wilderness comprises some 36,137 acres, including 34,807 acres currently designated as the Devil Canyon-Bear Canyon Primitive Area. The additional 2,490 acres proposed to be added to the primitive area acreage is contiguous to the primitive area and is also totally within the Angeles National Forest. Thus, no private land nor other public land would have to be acquired in order to establish the San Gabriel Wilderness Area.

Underlying all of the proposed San Gabriel Wilderness is a granitic formation which has been cut to form deep, steep-walled canyons. Elevations range from 2,150 feet on the banks of the west fork of the San Gabriel River to 8,000 feet on Waterman Mountain; a greater portion of the area lies above 5,000 feet. This mountainous area has temperatures ranging from an approximate low of 20 degrees to a high of 100 degrees. Precipitation averages 32 inches a year and primarily occurs between November and March. During this period snow occurs at elevations above 4,000 feet but does not last long because the periods of freezing weather are short. As in the proposed San Rafael Wilderness Area, the proposed San Gabriel Wilderness is most attractive for use in winter and spring, owing to the very hot and dry summer and fall. During the summer and fall the danger of fire is great, the vegetation being explosively flammable, the temperature high, and the humidity low.

The San Gabriel Wilderness is covered primarily with dense chaparral, with some low-grade, noncommercial timber covering approximately one-quarter of the area. While the area abounds in small wildlife, the higher elevations and peaks are part of the natural range of the big horn sheep. Some black bear and innumerable deer reside in the area. Both Devil Canyon and Bear Canyon, located within the proposed wilderness, furnish good fishing for native rainbow trout.

Since fire is a constant threat during the summer and fall months, certain fire control measures are necessary. While closure of the area during critical months is often required, the threat of lightning fires dictates that firefighting forces must be provided good access over trails from the well-maintained peripheral roads and by helicopters which will land on small, hand-constructed clearings within the area. In addition, aerial fire detection activities will be increased and some fireproofing will be done in spots where visitors tend to rest, eat, or camp.

It is encouraging that the proposal which I introduce today has the support of all relevant Federal and State administrative and resources agencies. My proposal is also enthusiastically supported by a very great number of fine national and local conservation groups, including: The Wilderness Society, the Sierra Club, the Southern California Chapter of Nature Conservancy, the California State Division of the Isaac Walton League of America, the Southern Council of Conservation Clubs, many area chapters of the Audubon Society, the Southern California Section of the Society of American Foresters, many local counsels of the Boy Scouts of America, the Desomount Club, the National Parks Association, the California Council of Landscape Architects, as well as many other fine conservation, garden, and riding clubs.

Mr. President, I am honored to propose this fine addition to our ever-growing wilderness preservation system. As I said when I introduced S. 889:

"The preservation of significant areas of land in our country in their natural state is mandatory. These areas provide present and future generations examples of the workings of nature unimpeded by human invasion. The areas are just as they would be if man had never come upon the earth. As the availability of such areas is reduced by the advance of man, the value of retaining them is amplified."

I today echo my belief in those words, and encourage my colleagues to join me in urging the rapid consideration and passage of this most worthy measure.

I ask that the bill be appropritely referred.

The Acting President pro tempore. The bill will be received and appropriately referred.

The bill (S. 2531) to designate the San Gabriel Wilderness, Angeles National Forest, in the State of California, introduced by Mr. Kuchel, was received, read twice by its title, and referred to the Committee on Interior and Insular Affairs.

Senator CHURCH. I want to thank you, Senator Kuchel, for your remarks. I wonder if there is any other member of the committee who would like to be heard at this time on this bill or any one of the bills on the agenda?

We would be happy to accommodate Members, if any are present.

Senator Hansen, do you have any comment you would like to make?

Senator HANSEN. I don't have any comment, thank you, Mr. Chairman, with reference to the bill that the Senator has discussed. I would like to say that I have introduced the Washakie Wilderness bill. This proposal recommends that 189,024 acres of the Stratified Primitive Area in the Shoshone National Forest, State of Wyoming, and 7,366 contiguous acres designated as wilderness by act of Congress and be added to the national wilderness preservation system.

This proposal further recommends that primitive area status be lifted from 14,906 acres now included in the Stratified Primitive Area. This proposal further recommends that the existing South Absaroka Wilderness, 483,130 acres, which is immediately adjacent to the Stratified Primitive Area, be combined with the 196,390 acres included in this report.

The total added acreage therefore, would be 211,296 acres. It might be mentioned parenthetically that by including these acreages, all of which are in the Shoshone National Forest, we will have some 53 percent of the Shoshone Forest included in wilderness.

I am here today and I will continue to be present at these hearings, so long as they may be in session, to hear from all of those witnesses who are back here.

I know a number of people from Wyoming and other interested individuals as well are present. It is my purpose to listen closely to what is said, and then to try to make up my mind and my judgment independently of anyone else, so as to represent, as best I can, first, the people of the State of Wyoming, and then secondly, the broad national interest.

I will be submitting for inclusion in the record a number of pieces of correspondence, some resolutions and some statements of position, and I ask unanimous consent at this time, Mr. Chairman, that such material as I will submit be included in the record.

Senator CHURCH. Certainly.

Senator HANSEN. I have no further statement. Thank you, Mr. Chairman.

Senator CHURCH. Thank you, Senator Hansen.

Our first witness is Edward P. Cliff, the Chief of the Forest Service.

Mr. Cliff, it is always nice to see you.

STATEMENT OF EDWARD P. CLIFF, CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. CLIFF. Thank you, Mr. Chairman, members of the committee.

Senator CHURCH. If there is anyone, Ed, you would like to have sit with you, feel free to call them.

Mr. CLIFF. Thank you. I have some fellows backing me up here, but I will try to manage by myself.

Senator CHURCH. All right, I am sure you will do well.

Mr. CLIFF. I am pleased to speak for the Department of Agriculture in support of S. 2751, S. 2531, and S. 2630. These bills would designate the Mount Jefferson Wilderness, Willamette, Deschutes, and Mount Hood National Forests in Oregon; the San Gabriel Wilderness, Angeles National Forest in California, and the Washakie Wilderness, Shoshone National Forest in Wyoming, as units of the National Wilderness Preservation System.

We in the Department of Agriculture have been working hard to implement the provisions of the Wilderness Act. We believe we have made good progress. Regulations and policy guidelines for the administration and use of these areas have been published; field review has been completed and public hearings held on 12 of the 34 National Primitive Areas which must be reviewed by 1974 to determine their suitability or nonsuitability for inclusion in the Wilderness System.

The proposals before you today are three of these on which our review has been completed. As required by the Wilderness Act Secretary Freeman reviewed these three proposals and forwarded his recommendations to the President. President Johnson submitted them to you. His recommendations are embodied in S. 2751, S. 2531, and S. 2630.

Our progress thus far would not have been possible without the fine cooperation and assistance in the review process by the Geological Survey and Bureau of Mines in the Department of Interior. We are grateful for this. Strong public interest expressed at the field hearings and the large amount of citizen testimony also assisted us in developing our final recommendations.

Before discussing the three Wilderness Proposals before you today, I would like to describe to you some of the principles we consider in determining suitability or nonsuitability of an area of land for wilderness.

The first step is to test primitive area and contiguous lands against the criteria for wilderness set forth in subsection 2(c) of the Wilderness Act. We recognize that these criteria are subjective, but when taken together they do provide a good basis for testing the qualifications of an area for wilderness.

The land must pass that test. Our recommendations have to be based on conditions as they exist now, and not on conditions that might exist 50 or 100 years from now.

In developing some of the proposals you have before you today, we could not include certain areas because they do not meet the criteria presented in the Wilderness Act.

One measure of suitability for wilderness is a weighing of other public values. For example, if these areas are not included in the Wilderness System, we would be able to construct water systems, sanitation facilities, and other similar structures which are prohibited in wildernesses.

This would permit us to accommodate a far greater number of campers, hikers, horseback riders, and other back-country users, and better provide for their health and safety.

Wilderness designation has an impact on other citizens needs too. The social and economic welfare of many Americans and the stability of many communities depends upon the carefully planned management and utilization of national forest resources.

Timber must be grown and harvested. Watersheds must sometimes be modified to improve and stabilize water yield. This may mean conversion of vegetative types or erection of snow fences.

Sometimes it is necessary to reseed or modify national forest ranges for the benefit of permitted domestic livestock. We need to carry out programs to better fish and wildlife habitat. This could involve trout stream improvement, vegetative type conversion, and wildlife watering installations. And throughout the national forests millions of hours of healthful outdoor recreation and enjoyment can and must be provided for by the development of winter sports areas, campgrounds, picnic areas, and other special recreation facilities.

These are all practices or installations which, while needed and appropriate in many places, do not conform with the criteria established for the designation and management of wilderness. We cannot

have them and wilderness too in the same area. We believe the value of the wilderness resources in the three proposals before you is greater than the possible benefits from other important resource use and activities which will be forgone.

Another consideration is the factor of need. Approximately 9 million acres or about 5 percent of all national forest lands are already in the National Wilderness Preservation System. Another 5½ million acres or about 3 percent of national forest lands are in primitive areas that are being studied for possible inclusion in the system. In addition there are a number of other areas with wilderness characteristics that we will also study. The Department of the Interior is also studying areas for possible inclusion in the Wilderness System. Taking all of this existing and potential wilderness into account, we strive to arrive at proposals which result in a reasonable balance between the need for wilderness and the need for nonwilderness recreation and other resource uses and activities.

Once the basic wilderness unit is selected the placement of boundaries becomes very important. Our 44 years of experience in the administration of wilderness has taught us that a properly placed boundary helps assure that the quality of the wilderness resource within the unit will remain high. National forest visitors appreciate having the boundaries on prominent topographic features which they can easily recognize. This prevents accidental disturbances of the wilderness atmosphere. We have also found boundaries are best placed on features such as ridges or rims which, in themselves, act to shield the wilderness resource inside from the effect of nonwilderness activities outside. These concepts have been followed to the extent possible in developing the three wilderness proposals before you.

THE PROPOSED MOUNT JEFFERSON WILDERNESS

The proposed Mount Jefferson Wilderness is part of the Willamette, Deschutes, and Mount Hood National Forests. It is located within the Cascade Range in part of Jefferson, Lynn, and Marion Counties in the State of Oregon. The area lies approximately 60 airline miles southeast of the city of Salem and extends along about 25 miles along the Cascades in a generally north-south direction. This proposed wilderness takes its name from its most prominent peak, 10,427-foot-high Mount Jefferson. Three Fingered Jack is another prominent volcanic peak in the south end of the area.

The proposed Mount Jefferson Wilderness will be an outstanding sample of Oregon's timber heritage. The area is 87 percent forested and about 70 percent of the forested area supports virgin timber of gold to excellent commercial quality.

The area proposed for wilderness has an estimated commercial timber volume of 1.35 billion board feet. However, most of this volume has never been included in the calculations of allowable harvest for the three national forests involved because it has been included in the Mount Jefferson Primitive Area since the early 1930's.

The proposal will have only a very minor effect on the timber available to support nearby dependent communities and industries. You will find more detailed information on timber and other resources and on our plans for administering the proposed wilderness in the report of Secretary Freeman.

I would like to discuss the reasons we have chosen the particular boundaries of our proposal. Each area that I will describe is shown on the map on page 14 of the Secretary's report, and will be pointed out on the large display map before you.

Our initial proposal for the Mount Jefferson Wilderness contained 95,450 acres. It was announced to the public in August of 1963, and a public hearing was held in June of 1964.

However, because classification action was not completed before the Wilderness Act was enacted, a new hearing was held on the proposal in October of 1966. Sentiment was overwhelmingly in favor of reclassifying the Mount Jefferson Primitive Area to wilderness. The boundary of the primitive area is indicated on the display map by an orange line.

Following the hearing we concluded that our proposal should be enlarged by 1,012 acres to include areas designated 12 and 13 shown in dark green on the map.

Area 12 includes the very scenic upper portion of Firecamp Lakes Basin. The boundary we recommend in this area will allow the development of much needed horse packing stations and campgrounds outside the wilderness.

These facilities will provide a jumpoff point for the use of the wilderness. We will be able to construct the sanitation and other improvements which are badly needed for public health and safety and to protect the site and other values found in this small but very scenic basin.

Area 13, encompassing 595 acres, was added to include an additional mile of trail into Pamelia Lake which passes through majestic old growth Douglas-fir. A portion of this trail is shown in the photograph on page 17 of the Secretary's report.

In our original proposal we recommended 11 separate areas not presently in the primitive area for addition to the wilderness.

They are shown on the map, with black vertical lines, as areas 1–11. Our reasons for suggesting these inclusions are:

Area 1 (491 acres) North Fork Breitenbush River, includes a series of waterfalls and several small lakes with high wilderness value.

Area 2 (819 acres) South Fork Brietenbush River. This area was added to maintain the wilderness character of the upper reaches of the river. Trails follow both the north and south ridges to Jefferson Park.

Area 3 (479 acres) Pamelia Lake. This addition includes Pamelia Lake and about 1 mile of Pamelia Creek. It provides a wilderness entry to the alpine areas through a dense stand of mature Douglas-fir timber. Area 13, which I discussed earlier, is an extension of this addition.

Area 4 (216 acres) northeast of Lake Ann, and Area 5 (367 acres) Pine Ridge, were proposed to place the boundary on recognizable features.

Area 6 (5,447 acres) Santiam Pass. This major addition extends the boundary to identifiable features approximately one-half mile from the Santiam Highway. The alpine timber types and open meadows make this an ideal area for wilderness use.

Area 7 (600 acres) Little Lake, was proposed for addition to place the boundary on recognizable topographic features.

Area 8 (229 acres) Canyon Creek, includes wilderness values in the glacial cirque at the head of Canyon Creek.

Area 9 (903 acres) Cabot Lake Trail. This addition will protect wilderness values in the Cabot Lake-Carl Lake Basin and provide a wilderness atmosphere along a primary access trail.

Area 10 (3,970 acres) Candle Creek. This addition includes the Jefferson Creek and Cabot Creek lava flows. These extensive lava flows surrounding an island of Douglas-fir, ponderosa pine, and white fir trees contribute exceptional wilderness and scientific values to the area.

Area 11 (380 acres) Pyramid Butte. This area was added to include Pyramid Butte and more of the Oregon Skyline Trail, both having significant wilderness values.

Areas A through H were recommended for exclusion from the primitive area for the following reasons:

Area A (106 acres) Northwest Corner; Area B (305 acres) Woodpecker Ridge; and Area C (156 acres) Grizzly Ridge were all suggested for exclusion to place the boundary on recognizable topographic features.

Area D (1,440 acres), Minto Creek. This major exclusion includes parts of Lizard and Bingham Ridges. The highest public value for the area will be realized if it is developed for resources other than wilderness.

Area E (629 acres), Marion Lake. This area is primarily valuable for recreation and is included in the Marion Lake Scenic Area as shown on the map. This new 1,596-acre scenic area includes Marion Lake, Marion Falls, and Lake Ann.

Area F (270 acres), Turpentine Peak, was excluded to place the boundary on recognizable topographic features.

Area G (522 acres), Minto Burn. This excludes an old burn with limited wilderness values and places the boundary on topographic features.

Area H (56 acres), Skyline Road. These two small changes will exclude the existing Skyline Road and will place the boundary on recognizable topographic features.

Our proposal for the Mount Jefferson Wilderness represents a net increase of 12 percent in the area dedicated to wilderness purposes.

The brown shading on the display map shows those areas which some groups and individuals who testified at the hearing recommended for exclusion from the administration's proposal.

Areas 10 and J were recommended for exclusion because they contain a substantial volume of commercial forest land which could be managed for timber production. We concluded that the unique wilderness values present here outweighed the timber values.

Areas 6, 7, K, and L were recommended for exclusion because some groups felt these areas should eventually be developed for winter sports. We have carefully studied the winter sports potential here. The areas rate only marginal or submarginal in meeting the characteristics necessary for successful commercial ski development. Winter sports needs for the foreseeable future can be accommodated by the expansion of existing winter sports areas outside of the proposed wilderness and by the development of potential sites elsewhere in the Oregon Cascades.

Area I (700 acres) was recommended for exclusion by the Confederated Tribes of the Warm Springs Reservation. The area is a

part of 61,360 acres of national forest lands in the "McQuinn Strip." It is a long narrow sliver parallel to the Cascades Crest.

Under the Act of July 3, 1948, all national forests receipts which are derived from the McQuinn Strip are paid to the Warm Springs Tribe. The tribe is concerned that the inclusion of this portion of the strip in the wilderness will diminish the benefits they would derive from it.

Area I has been managed as a part of Mount Jefferson Primitive Area for nearly 30 years. It contains practically no commercial timber. The potential receipts from the McQuinn Strip would not be affected by inclusion of area I in the wilderness. We concluded, therefore, that it should not be recommended for exclusion.

The areas shown in blue on our maps were recommended by a number of groups and individuals at the hearings as expansions of the administration's proposal.

Area 14 encompasses some 26,000 acres along the west side of our proposal. We did not include area 14 in our recommendation for several reasons.

Timber has been harvested in three different parts of the area, and high standard access roads have been constructed. This work is located in the South Fork of the Breitenbush River, in Whitewater Creek, and on the slopes into Marion Creek. These areas clearly do not qualify as wilderness under the criteria set forth in the Wilderness Act.

Marion Lake, within area 14, has significant recreation and scenic importance. It is presently heavily used and additional facilities such as water systems, sanitation measures, tables, and fire grills are needed to assure the health and safety of users and protect the resources.

Senator CHURCH. Ed, what is the access now to Marion Lake?

Mr. Cliff. The road goes to within a short distance from the lake, as shown on the map. The road terminates before it gets to the area, and the access is by trail. It is a high class trail, about three or four feet wide, and everybody has to hike in to the lake.

Senator CHURCH. What distance is it from the end of the road to the lake itself?

Mr. CLIFF. It is about a mile.

Mr. WORF. It is a little more than a mile. About 2 miles.

Mr. CLIFF. About 2 miles. I stand corrected.

Senator CHURCH. About 2 miles. Do you have figures that would indicate the visitor days at the lake?

Mr. CLIFF. Yes sir. In 1967, based on trail counts, Marion Lake received 10,000 visitor-days use. It is very heavily used. We predict that that use will triple by the year 2000. It will double by the year 1976, and that is the reason why we feel that it should not be included in the wilderness.

It is not an untrammeled area. It is being heavily trammeled, and we need to get in there and provide sanitation facilities, and water and fire grills, and other recreational improvements, to accomodate the use that is already being made there, and to protect the resources of the area.

In recognition of its value, we have set it aside as a scenic area. There will be no road access, and there will be no timber harvesting in the basin.

Senator CHURCH. Under the scenic area concept, are you planning to construct campground facilities around the lake itself?

Mr. CLIFF. Yes, I think we need to do something to control the use in there, and to prevent people from polluting the lakes, and we need fire protection facilities. We will keep them just as primitive as we can.

There will be only trail access. The lake is now heavily used by motorboats. We would like to phase out the use of the motorboats, but there are hundreds of boats that now use the area.

Senator CHURCH. How do they get to the lake with the motorboats?

Mr. CLIFF. They pack them in or tote them in on boat carriers, and they pack the motors in on backpack. There are over a hundred boats stored up there over the winter. It is a heavily used area, and it is going to be more heavily used.

Senator CHURCH. Are there any boathouses or anything of that kind that have been constructed around the lake?

Mr. CLIFF. I understand there is one boathouse. There is also a guard station.

Senator CHURCH. Are there any sanitary facilities now in existence there?

Mr. CLIFF. Yes, there are some. There have to be some. But we need more.

Senator CHURCH. Thank you.

Mr. CLIFF. Continuing with my statement, we estimate that there were 10,000 visitor days of use in this small Marion Lake area in 1967. In view of all these factors, we recommend that this area not be included in the wilderness.

The Regional Forester has designated 1,596 acres around Marion Lake as a scenic area. It will be managed for recreation purposes without roads or timber harvesting.

Another major factor in our decision not to include area 14 is the very substantial volume of high quality commercial timber it contains—over 900 million board feet.

The harvest from the area will generate nearly 600 man-years of employment per year. The inclusion of area 14 in the wilderness would have a serious adverse effect on the economy of adjacent communities.

Demand for national forest timber in the Santiam Valley is exceedingly heavy. The proposed wilderness already contains a very substantial amount of high quality timber land. There are no ecological associations found in area 14 which are not already represented in the proposed Mount Jefferson Wilderness.

We did not recommend inclusion of area 15 because of plans to develop road access and campgrounds at Square and Long Lakes. This recreation development in close proximity to the north Santiam Highway will provide adequate sanitation facilities needed to protect these heavily used areas. It will also provide a base camp for day use of the wilderness.

Area 16 does not offer a suitable boundary and would add little to wilderness values already present in our proposal.

PROPOSED SAN GABRIEL WILDERNESS, ANGELES NATIONAL FOREST

This proposal results from a review of the Devil Canyon-Bear Canyon Primitive Area, Angeles National Forest, in California.

It encompasses 36,137 acres of the rugged and beautiful San Gabriel Mountains, approximately 35 miles northeast of Metropolitan Los Angeles.

Two major canyons cut deeply into this area, which lies on the north side of the west fork of the San Gabriel River. Its live streams are covered by a canopy of hardwood trees of many species. The canyon slopes are covered with impenetrable brush, taller than a man on a horse.

The ridgetops and scattered pockets along the slopes contain mixed conifer stands. From the sharp high peaks a large portion of the Los Angeles Basin is visible.

We believe that this small but significant area will be another good addition to the National Wilderness Preservation System.

A more detailed description of the proposed wilderness is contained in the Secretary's report.

The proposed wilderness contains extensive stands of dense and highly flammable brush and fire control will be a major consideration in management. The south half of the primitive area was burned over by the gale fire in 1957.

Firebreaks have been constructed outside the west and north boundaries and there is a natural rock barrier along the east side. The area is surrounded by high standard surfaced highways on three sides and a good gravel road on the fourth. Twenty small helicopter landing spots have been developed within the area to permit rapid access by firefighters. These will be retained. Safety zones will also be cleared of excess fuel around the more popular camping spots.

The San Gabriel Wilderness proposal was presented for public consideration at a hearing in Altidina, Calif., on July 27, 1966. The views presented were unanimously in agreement with the Forest Service proposal. Accordingly the area included in S. 2531 is identical with the proposal presented at the hearing.

The proposal includes one area not previously in the primitive area, and recommends that five small areas within the primitive area not be included in the wilderness. These areas are shown on page 9 of the Secretary's report and on the display map before you.

Area A encompassing 2,490 acres in Bobcat Canyon is recommended for addition. It is suitable for wilderness and has a well-defined boundary. There are no important resource uses which would be foregone by wilderness designation and the area has no potential recreation development sites.

Areas 1 and 5, of about 5 acres each, are private land on the edge of the primitive area, and therefore should not be included in the wilderness.

Areas 2 and 3 encompass a 500-foot strip along the Angles Crest Highway and Crystal Lake Highway. The deletions will provide for future highway maintenance and management needs.

Area 4, containing 632 acres along the west fork of the San Gabriel River, is recommended for deletion because it contains an improved road and therefore does not qualify for wilderness. Also a planned area future flood control development will encroach further on this area.

Senator CHURCH. Before we move on to the proposed Washakie Wilderness could we see the map of San Gabriel another moment, please?

Did you have at your hearings, Ed, any serious dispute about the boundaries of this San Gabriel Wilderness? Was there substantial support for including any other areas that you have not discussed, or was there considerable agreement as to boundaries?

Mr. CLIFF. No, there was unanimous opinion on this one, I am glad to say. There were no proposals for additions, or for deletions.

Senator CHURCH. And you have actually added more than you have deleted in this case, have you not?

Mr. CLIFF. Yes, that is true. It amounts to 1,200 acres more, in round numbers.

Senator CHURCH. There is no serious controversy that you are aware of concerning this proposal?

Mr. CLIFF. None whatever. It had the endorsement of the Federal agencies concerned, and of the State and local agencies, as well as of citizen groups.

Senator CHURCH. Fine. Thank you.

PROPOSED WASHAKIE WILDERNESS, SHOSHONE NATIONAL FOREST, WYO.

Mr. CLIFF. The proposed Washakie Wilderness results from study of the Stratified Primitive Area, Shoshone National Forest, in Wyoming. The proposal recommends (1) that 189,024 acres of the Stratified Primitive Area and 7,366 contiguous acres be added to the National Wilderness Preservation System, and (2), that primitive area status be lifted from 14,906 acres now included in the primitive area.

We also recommend that the existing 483,130-acre South Absaroka Wilderness lying immediately adjacent to the Stratified Primitive Area be combined with the 196,390 acres of the Stratified Primitive Area recommended for wilderness classification. The combined area, totaling 679,520 acres, would be named the Washakie Wilderness, as a memorial to the great Chief Washakie of the Shoshone Indian Tribe.

The proposed wilderness is part of the Shoshone National Forest in Fremont, Hot Springs, and Park Counties, all in northwestern Wyoming. It is approximately 200 miles northwest of Casper and 80 miles southeast of Yellowstone National Park.

The area offers opportunities for unusual adventure, challenge, and excitement, and experience in self-reliance, initiative, and judgment in human safety and survival. Its unusual geology and the petrified remains of forest, ferns, and animals are its most unusual features. An important consideration in developing our proposal for the Washakie Wilderness is the relation of the Stratified Primitive Area to other wilderness and primitive areas in Wyoming.

Wyoming has a relative abundance of designated wilderness and primitive areas. Only one State, Idaho, has more than Wyoming's 2.4 million acres. Nearly 28 percent of the national forest land in Wyoming is in wilderness or primitive area.

About 29 percent of the proposed wilderness (56,685 acres) is forested, and 62 percent of these forested acres are of commercial quality.

A public hearing on the proposal was held in Riverton, Wyo., on December 8, 1966. Sentiment was overwhelmingly in favor of designating the Stratified Primitive Area as wilderness and a number of those who testified recommended a wilderness encompassing over 50,000 acres more than our proposal.

The various areas involved in these recommendations are shown on page 18 of the Secretary's report and on the display maps.

Areas F and 5 (2,598 acres) in Horse Creek: These areas were not included in the original Forest Service proposal. However, further study in light of the views presented at the hearings revealed that these areas are suitable for wilderness. Their inclusion would extend the wilderness for nearly 2 miles along a major access trail and place the very scenic Boedeker Butte in the wilderness. The proposed boundary follows major and minor ridges and water courses that are well defined on the ground.

The administration's proposal recommends that the following areas now a part of the Stratified Primitive Area not be included in the Washakie Wilderness.

Area 1 (8,602 acres), Middle Fork of Wood River.

This drainage contains approximately 900 acres of patented mining claims in the Dundee Mountain-Bald Mountain-Smuggler Gulch area of the Stratified Primitive Area.

The studies made by the Geological Survey and Bureau of Mines revealed that there is potential for copper, molybdenum, and other minerals outside the patented lands in this drainage. Active exploratory work is being done in this district.

The boundaries of the proposed wilderness in this area have been placed on natural ridges and streams which are readily recognizable.

Area 2 (634 acres), Lean-to Creek.

This area is not included in our proposal because it is primarily valuable and needed for recreation development.

Areas 3 and 4 (3,443 acres), Lincoln Point-Wiggins Fork. Areas 3 and 4 are now part of the Stratified Primitive Area but we recommend they not be included in the proposed wilderness.

Those who recommend against this suggest that the areas include outstandingly scenic lands, under the escarpment, which should be included for their scenic, esthetic and natural foreground values. They suggest that the boundary be placed along the foot of the slope.

Our primary consideration is the need to establish a satisfactory boundary. In the Wiggins Fork and Caldwell Creek areas we have recommended a boundary which follows a series of small ridges and drainages to connect prominent topographic features. The proposed line will be readily recognizable by users and will prevent accidental violations of the wilderness. The boundary is placed on features which provide the best possible shield for the wilderness resource inside from nonwilderness activities outside the boundary. A line could be drawn to include the face of the escarpment, but it would require extensive surveying and signing to make it recognizable to the visiting public.

Area 3 also contains lands which are needed to meet long term public needs for auto access recreation and to provide a take-off place for travel into the wilderness.

Area 6 (1,331 acres), Parque Creek and Ramshorn Basin.

We recommend that area 6 not be included in the wilderness because it faces into areas from which timber has been harvested.

The existing boundary follows an indefinite line across the face of a slope. The proposed boundary follows prominent topographic features.

The Ramshorn Basin will be an important recreation area, and will be managed for other resource use. These nonwilderness activities would erode the wilderness resource on the slopes of area 6.

The following areas, contiguous to the existing Stratified Primitive Area, are recommended in our proposal for inclusion in the wilderness.

Area A (1,472 acres), South Fork of Wood River, was recommended in order to place the wilderness boundary on good topographic features.

Area B (3,296 acres), East and West Forks of Sixmile Creek, was proposed to include the scenic upper basins on the west side of the Ramshorn. We were able to establish the boundary on good, definable topographic features.

The following were recommended by various groups and individuals during the hearings as expansions of the administration's proposal.

Area C (4,260 acres), Middle Fork of Wood River, lies in the same drainage areas as area 1. As I explained earlier, this Wood River area was not included in our proposal because of private holdings and existing and potential mining activity. Area D (8,130 acres), Bear Basin. Proponents for this expansion urge that it should be given wilderness designation primarily because it is important elk habitat.

One reason for not including this area is the fact that it is penetrated by approximately 2 miles of road into Bear Basin.

Another reason is that a recent national forest recreation survey identified a recreation development site on this area which will be needed to meet projected public demand.

The area is important elk range, and elk do migrate here through it in the spring and fall. We have identified the important elk calving areas in that portion of the Shoshone National Forest. None of them are located with area D. There is no evidence that wilderness designation is essential to the maintenance of elk herds. The necessary coordination between recreation and elk management is achieved by careful advance planning. In Wyoming, we work closely with the State game and fish department in these efforts.

Area E (1,740 acres), Double Cabin. Proponents of this expansion urge that it be included as a foreground area and elk habitat. However, these lands do not qualify for wilderness because they contain substantial areas from which timber has been harvested.

Area F–1 (2,000 acres), Lincoln Point. Area F–1 was not included because it does not qualify for wilderness. Timber has been harvested some quite recently, on both sides of Lincoln Point, on the slopes into Cartridge Creek and on the slopes into Wiggins Fork.

Areas G, H, and I (2,120 acres). Proponents of these expansions urge that they be included as foreground area and because they are elk habitat.

Area G has a boundary that is difficult to recognize and it faces into areas where timber has been harvested.

The boundaries for areas H and I would not be recognizable on the ground unless they were heavily signed. A portion of area I was logged over for railroad ties between 1920 and 1926.

Areas H and I also contain commercial timber. The Washakie Wilderness Report indicates that operable timber volume in these areas is about 10 million board feet. This is an error.

That volume is the total operable volume found in Fivemile and Sixmile Creeks, only a part of which lies within areas H and I.

Area J (30,240 acres), East and West DuNoir Creeks.

Proponents of this expansion point out that it is prime, wild habitat for important elk herds, and it also serves as a migration route of

these herds to and from vital winter feeding areas such as the East Fork Elk Winter Pasture. They also stress the scenic beauty of the area. They express concern that timber harvesting in these areas would destroy valuable elk habitat, and that public travel which would occur on access roads would disrupt elk migration.

Area J contains about 13,575 acres of commercial quality timber with an estimated volume of over 100 million board feet. About 30 million board feet of this timber is operable under present market conditions and logging methods.

The presence of commercial timber in this area is not the reason we did not include area J in our proposal. The area we have proposed for wilderness contains a much greater commercial timber volume.

One of our principal reasons for not including area J is that nearly all of the mature lodgepole pine stands throughout the drainages of both East DuNoir and West DuNoir Creeks were logged over in the period between 1920 and 1926.

These operations involved the cutting of most of the trees which were of a size that could be hewn into railroad ties. Some of that early logging also took place within the spruce fir type. Sled and wagon roads were cut through the timeber for access. Most of these roads are still plainly evident, although many are no longer passable because of fallen timber. However, a number of miles of these roads are regularly used with four-wheel-drive vehicles by hunters, fishermen, and other recreationists. Other evidence of timber harvesting is still plainly noticeable because of the stumps, campsites and skidways.

In view of this evidence of human activity, these areas, even though very scenic, do not qualify for wilderness under the criteria of subsection 2(c) of the Wilderness Act.

This subsection defines "wilderness" in part, as an area "retaining its primeval character and influence * * * with the imprint of man's work substantially unnoticeable."

The past logging and jeep roads in area J have left substantially noticeable imprints of man's work. Area J no longer retains its primeval character and influence.

The inclusion of area J in the proposed wilderness would lower the quality of the wilderness system. It would have the effect of lowering the quality level to which the act directs us to manage all wilderness in the system.

In addition to the question of suitability of these areas, we considered other public values, particularly future recreation needs. Most of area J offers outstanding back country recreation opportunities. In addition, the recent National Forest Recreation Survey identified five development sites within area J as being necessary to meet public needs for auto access type family recreation. Opportunities for recreation use on adjacent national forest land will become increasingly important to protect the park values in nearby Yellowstone and Teton National Parks from being lost due to overcrowding.

After adoption of our Washakie Wilderness proposal, nearly 53 percent of the Shoshone National Forest will be managed for wilderness. Most of the remaining 47 percent, including the DuNoir Basins, should remain available for general recreation and other resource uses.

An additional factor is the DuNoir Glacier, within area J—the only glacier in Wyoming not already in a designated wilderness, primitive area, or roadless portion of a national park. This is the only opportunity we know of in this general area to make a glacier easily accessible for general public study and enjoyment.

There are no ecological associations or types in area J or any of the proposed expansions which are not already well represented within our proposal or in other nearby designated areas.

Wilderness designation is not necessary for the maintenance of elk herds. Elk do migrate through the DuNoir drainages in the spring and fall, just as they do through many other parts of Wyoming national forests and just as they do through the areas below the proposed expansions. Normal recreation use and roads do not disrupt these migrations. Thousands of elk migrate each year to the Elk Refuge in Jackson Hole. Most of these elk cross a number of roads including at least one oiled highway. If a special circumstance in the DuNoir area is found necessary to justify it, the forest supervisor has authority to close specific roads, trails, and areas to vehicular traffic for the period of the migration or to otherwise modify the management and use of the area.

Our local forest officers have determined that there are no major elk calving areas with area J. Further, even if some elk calving did take place here, wilderness designation is not essential for the management of such areas. Timber harvesting in patches and strips benefit elk by increasing the amount of desirable habitat.

In making our review and recommendations as provided for in the Wilderness Act, we have carefully followed our basic multiple use charter which directs us to manage all the renewable surface resources of the national forests so that they are utilized in the combination which will best meet the needs of the American people. We urge enactment of S. 2751, S. 2531, and S. 2630.

Thank you, Mr. Chairman.

Senator CHURCH. Thank you very much, Ed. I would like to ask this question, first of all: Taking into consideration the additions and deletions that you propose in this last case, what kind of a net reduction is involved in the size of the proposed wilderness area as compared to the former primitive area?

Mr. Cliff. About 7,600 acres, Mr. Chairman.

Senator CHURCH. Out of a total of how many acres?

Mr. CLIFF. A little over 200,000 acres. Our proposal would be 196,000 acres.

Senator CHURCH. I have a letter here that has been sent to me by Senator Carl Hayden, chairman of the Appropriations Committee. I want to read you the letter and then ask the questions that he requests me to ask for the purposes of this record. The letter reads:

DEAR FRANK: It has come to my attention that there has been an erroneous interpretation of the intent of Congress by the Departments of Agriculture and Interior with respect to mineral leasing provisions of the Wilderness Act of 1964, particularly as it is being applied to leasing applications in the Washakie Wilderness area.

I have been advised that the Forest Service will not approve the issuance of oil and gas leases within a wilderness area, or proposed wilderness area. If this is true, in my opinion, their action is contrary to the expressed provisions of the Wilderness Act, and I feel that this situation should be corrected.

I regret that because of other commitments, it will not be possible for me to be present on Monday, February 19th, and participate in the subcommittee hearings on S. 2630, the Washakie Wilderness bill.

In my absence and to clarify this matter, in order that we may be assured that the Wilderness Act will in the future be administered in accordance with the intent of Congress, I will appreciate your asking the appropriate administration representatives the following questions:

Now here are the questions: First, "Have any U.S. oil and gas leases with the right of surface entry been issued in wilderness or proposed wilderness areas since the passage of the Wilderness Act in 1964?"

Mr. CLIFF. No. There have been no oil and gas leases issued in wilderness or primitive areas with the right of surface entry since the passage of the Wilderness Act. Possibly there may have been a case of an exploratory permit where directional drilling from outside the wilderness area would be possible, but I don't know of any cases that have been approved.

Senator CHURCH. So your answer to Senator Hayden's first question is "No?"

Mr. CLIFF. That is right.

Senator CHURCH. His second question is, "What is the practice of the Forest Service when requested by the Department of the Interior for its recommendation to an application for a Federal oil and gas lease within a wilderness area?"

Mr. CLIFF. Well, as you understand, Senator, the oil and gas leases are issued by the Interior Department, after referral to the Department of Agriculture where national forests are concerned. The Department of Agriculture has the opportunity to recommend for or against the issuance of a lease or permit.

Even before the Wilderness Act passed, it was our policy to recommend against oil and gas leasing in primitive areas, and wilderness areas. The Wilderness Act provides that policies and authorities in effect at the time of the passage of the act continue.

We have continued out policy of recommending against applications for oil and gas leases in established wilderness areas and primitive areas, except where these resources could be exploited by directional drilling from outside.

It is possible in places, and it is common practice in the oil and gas industry, to extract oil and gas by directional drilling. We have not objected to that, but we have objected to the construction of roads, the use of drilling equipment, and all the other disturbances that would result from oil and gas exploration with other types of drilling.

Senator CHURCH. The practice you are following now is consistent with the practice that you followed prior to passage of the Wilderness Act. Is that correct?

Mr. CLIFF. That is right. That is absolutely correct.

Senator CHURCH. Does the Department of Agriculture possess a veto power in connection with the decision as to whether or not an oil and gas lease will be issued, under the present law?

Mr. CLIFF. It is not an absolute veto power, as I understand it. The Secretary of the Interior has final authority to issue these leases on the lands derived from the public domain.

We have an advisory role, but in every instance, the Secretary of the Interior has followed the recommendation of the Secretary of Agriculture with respect to these lands.

On acquired national forest land, which are mainly in the East and are not involved in these wilderness areas, the Secretary of Agriculture does have a veto power. The Secretary of Agriculture has final say on whether or not there will be oil and gas leasing on the acquired national forest lands.

Senator CHURCH. The third question is as follows: "If all applications for U.S. oil and gas leases with the right of surface entry have been rejected by the administrative agencies, what is the basis of such rejection in the face of the clear directive and the legislative history of the leasing provisions of the Wilderness Act which permit oil and gas leasing until December 31, 1983?"

Mr. CLIFF. Well, the legislative history as we understand it, said that the authorities and the policies that were in effect at the time the act was passed would be continued. At that time, we had a firm policy and it was our practice to recommend against mineral leasing in primitive and wilderness areas.

It is our feeling that the oil resources outside of these areas should be fully exploited before moving into a precious wilderness area.

This is our basic reason. We don't believe that we are violating the intent of the law.

Senator CHURCH. To be certain that I understand your position, you are testifying that, prior to the passage of the Wilderness Act, there existed a discretionary right on the part of the Federal Government to either lease or not to lease, but this differs from other mining laws, where the locator of a mining claim has certain rights by force of law which are not subject to denial by the administrative agencies. You are testifying further that, prior to the enactment of the Wilderness Act, it was the practice of the Forest Service to recommend against the issuance of oil and gas leases in primitive areas, and that you have continued that practice since the passage of the act, and find nothing in the act that would compel the Forest Service to change the practice. Is that your position?

Mr. CLIFF. That is a very good statement of our position, Senator Church.

Senator CHURCH. Now the final question Senator Hayden asks is as follows: "Under the current procedure of the administrative agencies in rejecting oil and gas lease applications, how would it be possible for wilderness areas to be explored for oil and gas possibilities prior to December 31, 1983?"

Mr. CLIFF. Well, I presume that the only way they could be explored is by studying the geological structure in the areas themselves, and in adjacent areas.

The adjoining areas that are not in wilderness could be explored, or the areas within a wilderness could be explored by directional drilling from the outside.

In the case of the Washakie, we had an application from a major oil company involving an area on the eastern end of the Washakie. They wanted to go in and explore for oil in that area, Considering all of the values involved, and the probability of oil's being there, based on Geological Survey reports, we recommended against it.

We might have recommended against it, even if the probabilities of finding oil had been somewhat better. But the Stratified Primitive Area is mainly made up of igneous material, heavy stratas of igneous material, laid down in a horizontal plane. You will recall that the

Geological Survey and Bureau of Mines did make a survey of this area, and their report is available. The Geological Survey reports, as I understand them, indicated that the sedimentary formations were very deep, and heavily overburdened with the igneous, and that the likelihood of oil and gas in this area is not very good.

Signal Oil Co. feels that it is worth a chance to go in and explore. That is where we differ.

Senator CHURCH. Thank you very much.

Senator Hansen, do you have any questions?

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

I would like to pursue some of the questions that Senator Church has been asking, just a bit further.

You spoke, Dr. Cliff, about the ways in which an oil company could go about making some projections on the possibility that oil might be found within a wilderness area. Let me ask you a hypothetical question.

Let's assume that an oil company did indeed test the area indicated by the letter C on the map. I think one of the oil companies does indeed have some leases in this general area. It may be south of there. I am not certain, but I think it is in that area, and possibly in the cross-hatched area on the map, and they also have some leases, I believe, or at least are interested in the area southeast of section 1, on the other side of the wilderness.

Supposing they were to drill these two areas on either side of the eastern extremity of the proposed Washakie Wilderness Area, and were to develop oil and were to present geologic evidence indicating that this structure, this anacline goes right through the wilderness.

What then would be the position of the Forest Service, in receiving an application for an oil lease in the wilderness area?

Mr. CLIFF. Well, that is a hypothetical question, but first we would ask them to see what they could do in extracting oil underneath there with directional drilling from the outside.

If the evidence indicated that the oil and gas resources were of such overwhelming nature and national importance that they transcended the value of wilderness, we would have to take this into account and consider the facts as presented.

We do have authority to permit the exploitation of oil and gas in a wilderness or primitive area if it is justified under the circumstances. Up to this point, we have not felt that it is justified. I think we would have to take a hard look at all the facts, and the national needs, including wilderness needs, and try to form some judgments. Of course, we would be assisted in this by our colleagues in the Department of Interior, who are the real experts in the oil and gas business.

Senator HANSEN. I understand you, then, to say that you do have the authority to permit exploitation of oil and gas within a wilderness area, but whether or not this would be done would reflect your considered judgment as to the importance of the development of this resource, compared to the damage that would be done other important resources that are preserved and protected by the wilderness designation?

Mr. CLIFF. That is correct.

Senator HANSEN. I have no further questions on that.

If I may, let me preface several statements and questions I have by reading into the record from a letter that I wrote to one of my constituents not too many days ago.

It may be helpful at this point in setting the stage for the considerations that I would like to share with you, Dr. Cliff:

I am persuaded that we must look at the total picture of the recreational uses and potential recreational uses and abuses in the entire State of Wyoming. I am impressed by the fact, for instance, that 53 percent of the Shoshone National Forest will be either the primitive or wilderness status under the present proposal.

Further, at least 3,717,384 acres, including the Robles area, the Grand Teton the Yellowstone Park, within the immediate vicinity of the proposed wilderness, Washakie Wilderness, are already designated for preservation in the wild state.

This becomes relevant when we look at the extreme pressure which Grand Teton and Yellowstone are getting for recreational uses.

This pressure becomes greater every year, and Park Service and Forest Service planners are rapidly coming to realize that the national forests surrounding these parks must be called upon to bear some of the heavy use burdens that now fall on the parks.

For this reason the Park Service wishes to retain some areas surrounding the boundaries of proposed wilderness for multiple use purposes.

I think this focuses attention upon the timbering that is an important use—but only one of the important uses—to which forest areas are oftentimes put. In this regard, I intend to follow through by exercising continuing legislative oversight in the development of these timbering resources.

I am convinced that some of this area that we are talking about here this morning is very delicate, it is very tender, it can be easily damaged or destroyed, and I am certain that a lot of the people who have seen the timber operations in this part of the Shoshone Forest are deeply disturbed over what they have seen.

They tell me that the erosion has increased very markedly, that there has been much more cutting by some of the thunderstorms and cloud bursts that we have in this area, now that the timber has been removed, than was the case before.

They are concerned also about the fact that, while generally an area of rather heavy snowfall, there are areas, because of the short growing season, and because of the scarcity of moisture during the growing season, that do not bring about the regenerative forces of nature so as to re-timber an area as quickly as might otherwise occur in other parts of the country.

Because of this, I would like to ask you and the Forest Service to keep me apprised, if you will, of your plans for timber sales and timber development in this area, and I would like to know ahead of time, before the fact, rather than after the fact, if I may, so as to be better apprised, to see as best I can, that the Multiple Use Act is indeed being followed.

I say that because there has been widespread concern over the timbering operations in this area. I would like to introduce at this time into the record an eight-page letter that was written to me by M. M. Nelson, the Deputy Chief of the Forest Service, wherein he treats in detail a number of questions I have raised, and that have been raised by others as to the justification for the Forest Service's position on the different tracts that are in controversy, either within or outside the area as proposed by the Forest Service.

I ask unanimous consent, Mr. Chairman, that it be inserted into the record at this point.

Senator CHURCH. Without objection, it will be so included.

(The document referred to follows:)

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C. February 15, 1968.

Hon. CLIFFORD P. HANSEN,
U.S. Senate.

DEAR SENATOR HANSEN: This letter is in response to your request that we provide additional information about the proposed Washakie Wilderness. Specifically, you asked for the Forest Service reasons for not including within the proposal 13,858 acres in the Middle Fork of Wood River identified as Areas 1 and C; 30,240 acres identified as Area J in the headwaters of East and West DuNoir Creeks; Areas 3, 4, and F–1, encompassing 5,443 acres in the Lincoln Point and Wiggins Fork area; and 8,130 acres identified as Area D in the Bear Basin area. The above letter and number designations refer to the map on page 18 of Secretary Freeman's report on the proposal, a copy of which is attached. All of these lands were proposed for inclusion by the Wyoming Wildlife Federation and others at the administrative hearing held in Riverton, Wyoming, on December 8, 1966.

These proposed additions were carefully studied. A discussion of each area including our reasons for not recommending their inclusion in the Wilderness System are as follows.

Area 1 and C Middle Fork of Wood River

Area C was never in the Primitive Area. Area 1 is presently in the Primitive Area but is recommended by the President for declassification.

This drainage contains approximately 896 arces of patent mining claims in the Dundee Mountain-Bald Mountain-Smuggler Gulch area of the Stratified Primitive Area.

The studies made by the U.S. Geological Survey and Bureau of Mines, Department of Interior, during the summer of 1965 revealed that there is exploration potential for copper and molybdenum outside the patent lands in this drainage.

The patent mining claims and the mineralized area lie in the Kirwin Mining District in which there is activity in exploratory work. Mining development on the patents and exploration, with its accompanying access, would be incompatible with wilderness values.

This area is not an essential part of the proposed Wilderness.

The boundaries of the proposed Wilderness have been placed on natural ridges and streams which are readily definable.

East and West DuNoir Creeks (Area J)

These areas have never been part of the Primitive Area.

The primary justification given by proponents of this addition was that it is prime, wild habitat for important elk herds, and it also serves as a migration route of these herds and others to and from vital winter-feeding areas such as the East Fork Elk Winter Pasture. They also stressed the scenic beauty of the area. Concern was expressed that timber harvesting in these areas would destroy valuable elk habitat, and the public travel which would occur on access roads would disrupt elk migration.

A principal reason for not recommending the inclusion of Area J in the Wilderness is the fact that nearly all of the mature lodgepole pine stands throughout the drainages of both East DuNoir and West DuNoir Creeks were logged over in the period between 1920 and 1926. These operations involved the cutting of most of the trees which were of a size that could be hewed into railroad ties. Those trees too large or too small for that purpose were left standing. This resulted in the removal of from 30 to 60 percent of the volume, depending on the stand. Some of that early logging also took place within the spruce-fir type. Much of the logging was done in the winter. The ties were skidded to the streambanks and floated out with the high waters from the spring snowmelt. Sled and wagon roads were cut through the timber for access. Most of these roads are still plainly evident, but many are no longer passable because of fallen timer. However, a number of miles of these roads are regularly used each summer with four-wheel-drive vehicles by hunters, fishermen, and other recreationists. The evidence of timber harvesting is still plainly noticeable because of the stumps, chips, campsites, skidways, etc.

In view of this, these areas, even though very scenic, do not qualify for Wilderness under the definition provided by Congress in Section 2(c) of the Wilderness Act which says in part: A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are *untrammeled by man*, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this act an area of undeveloped Federal land retaining its *primeval character* and influence, without permanent improvements or human habitiation, which is protected and managed so as to preserve its *natural conditions* and which (1) generally appears to have been affected primarily by the forces of nature, with *the imprint of man's work substantially unnoticeable*. . . ." (Italics added.)

We would object to an interpretation that the past logging and recently used jeep roads in the DuNoir Drainages represent "primeval character or influence" or are "substantially unnoticeable," because it would lower quality standards for the entire Wilderness Preservation System. The criteria used in determining suitability or nonsuitability for inclusion of lands in the system is also our guide for administering areas once they are included. For example, the Wilderness Act permits ". . . any activity, including prospecting for the gathering of information about minerals or other resources if such activity is carried on in a manner compatible with the preservation of the wilderness environment." It would be difficult, therefore, to tell a miner that his use of a motor vehicle to make a few trips into a Wilderness for prospecting purposes would leave evidence more "noticeable" or less "compatible with the preservation of the wilderness environment" than the old timber-cutting and well-worn four-wheel-drive roads found in the DuNoir Drainages.

In addition to the question of suitability of these areas, we considered other public values, particularly future recreation needs. The National Forest Recreation Survey completed in 1960 identified five development sites within Area J as being necessary to meet the public needs for auto-access-type family recreation by the year 2000. As you know, the main access routes from the east to Yellowstone and Teton National Parks pass through the Shoshone National Forest. Opportunities for recreation use on adjacent National Forest land will become increasingly important to prevent National Park Values from being lost to overcrowding. In 1964, a formal planning effort by the Froest Service in cooperation with the Park Service was initiated for the areas surrounding Yellowstone and Teton National Parks. During these planning efforts, the Park Service people have pointed out that by 1972, if their planned recreation developments are on schedule and the current upward trend in use continues, they will reach maximum capacity for taking care of people in the parks. Overnight use will, therefore, have to be accommodated on private or National Forest lands outside, the parks These accommodations need to be located so that people can spead the night there and still visit the parks on a daily basis. The potential recreation sites in Area J are especially important in meeting this need. Those in Areas 2, 3, and D are also important.

If Congress adopts the President's proposal for the Washakie Wilderness, nearly 53 percent of the Shoshone National Forest will be managed for Wilderness purposes and will not be accessible to the majority of Wyoming's vacation visitors. We believe most of the remaining 47 percent of the Shoshone National Forest should remain available for general recreation purposes rather than being managed for Wilderness.

One additional factor that should be considered is that the DuNoir Glacier, within Area J, is the only major live glacier in Wyoming not already in a designated Wilderness, Primitive Area, or roadless portion of a National Park. There is an opportunity, if it is left out of the Wilderness, of making this glacier accessible for public study and enjoyment by constructing a good, high-standard hiking trail from a future nearby road.

Area J also contains about 13,575 acres of commercial-quality timber with an estimated volume of over 100 million board feet. About 30 million board feet of this timber are considered operable under present market conditions and logging methods. About half of this operable volume (15 million board feet) would be removed in the first harvest cycle. This timber resource is important to established industry at DuBois, Wyoming.

There is no evidence to support a conclusion that Wilderness designation is necessary to the maintenance of elk herds in that area. Elk do migrate through the DuNoir Drainages in the spring and fall, just as they do through many other parts of Wyoming National Forests and just as they do through the areas below the proposed additions. However, experience does not support a conclusion that

normal recreation use and timber management activities will necessarily disrupt these migrations—certainly the existence of roads or timber-harvest areas, in themselves, would not. As you know, there are several thousand elk which migrate each year to the Elk Refuge in Jackson Hole. Most of these elk cross a number of roads including one oiled highway. If a special circumstance in the DuNoir area is found to justify it, the Forest Supervisor has authority under Secretary of Agriculture Regulation U–6 (C.F.R. 251–25) to close specific roads, trails, and areas to vehicular traffic for the period of the migration or to otherwise modify the management and use of the area. The Wyoming Game and Fish Department could also adjust hunting regulations as necessary to prevent disturbance of migration in the fall. These measures would be worked out in cooperation with the Wyoming Game and Fish Department personnel and would be included in the Ranger District Multiple-Use Plan.

Local Forest Officers, in cooperation with personnel of the Wyoming Game and Fish Department, have determined that there are no major elk-calving areas within the proposed addition. Further, even if some elk-calving did take place within the proposed addition, there is no evidence to support a conclusion that Wilderness designation is essential for the management of such areas. On the contrary, a majority of the elk-calving in Wyoming takes place on lands not of wilderness character. We recognize that there may be a need to modify management and use activities during the calving season. We do this in other National Forest areas. These measures are worked out in cooperation with the personnel of the State Game and Fish Department.

It should be pointed out that elk on the summer range depend upon a combination of open areas for feeding and nearby timber for cover. Thus, timber harvesting in patches and strips benefits the elk by increasing the amount of timber-opening edge available. Forage production is also increased because of better sunlight and moisture conditions.

In regard to the elk-wilderness relationship, it is interesting to note that the Umatilla National Forest in eastern Oregon reports nearly twice as many elk as any other National Forest land in the Nation (an estimated 30,800 head): yet, it has no designated Wilderness and is, in fact, served by a road system; and timber harvesting programs are carried on over most of the Forest. There is one roadless area covering about 100,000 acres in the northern portion of the Forest, but the elk are distributed throughout the Forest. The Umatilla National Forest contains 1,188,882 acres. In contrast, the Teton National Forest, which encompasses 1,729,322 acres with 563,460 acres designated as Wilderness, and the Shoshone National Forest, which encompasses 2,458,648 acres with 1,286,174 acres presently designated for Wilderness purposes report an estimated 13,200 and 12,600 elk respectively. An estimated 5,740 elk were harvested from the Umatilla National Forest in 1966; while in the same year, the combined harvest from the Teton and Shoshone National Forests was 5,910 elk.

Some of those who proposed the addition of the DuNoir Drainages to Wilderness expressed the need to control the use of over-the-snow vehicles in order to prevent the disturbance of wintering elk herds. Such machines are prohibited in Wildernesses. However, while the area recommended for inclusion does offer good snowmobile terrain, it is not used by the elk in winter. Its closure to snowmobiles would, therefore, have the effect of forcing those machines into lower country where they would interfere with wintering elk. Access road development in Area J would increase the value of the DuNoir Drainages as snowmobile terrain.

The Forest Service recognizes the importance of big game on the National Forests. We work closely with the personnel of the Wyoming Game and Fish Department in achieving a proper balance between the game animals and their habitats and in coordinating other National Forest uses and activities with wildlife needs. As an aid to this work, we have recently completed a very comprehensive game range analysis for that portion of the Shoshone National Forest which includes the Stratified Primitive Area.

Areas 3, 4, and F–1 (Lincoln Point—Wiggins Fork)

Areas 3 and 4 are now part of the Stratified Primitive Area but are recommended for declassification by the Forest Service. Area F–1 has never been included in the Primitive Area.

Proponents of these additions suggest that the areas include outstandingly scenic lands, under the escarpment, which should be included for their scenic, esthetic, and natural foreground values. They suggested that the boundary be placed along the foot of the slope and on presently unsurveyed section lines east and south of Lincoln Point.

Area F–1 was not included in the President's proposal to Congress because it does not qualify for Wilderness under criteria set forth in Section 2(c) of the Wilderness Act. Timber has been harvested, some quite recently, on both sides of Lincoln Point on the slopes into Cartridge Creek and on the slopes into Wiggins Fork.

A primary consideration in the Forest Service decision to not recommend Areas 3 and 4 for Wilderness was the need to establish a satisfactory boundary. Our 44 years of experience in administering designated Wilderness has taught us much about the proper location of boundaries. We have found that far fewer administrative problems occur if the public is able to readily recognize the boundary on the ground. In Wiggins Fork and Caldwell Creek areas, we have recommended a boundary which follows a series of small ridges and drainages to connect prominent topographic features. The proposed line will be readily recognizable by users and will prevent accidental violations of the Wilderness. A line could technically be drawn to include the qualifying country on the face of the escarpment, but it would take extensive signing and/or fencing to make it recognizable to the visiting public.

Another principle of Wilderness boundary establishment used here is the desirability of placing the boundary on features which provide the best possible shield for the wilderness resource inside from nonwilderness activities outside the boundary. Ridges or high, rocky rims usually serve this purpose best.

Area 3 also contains lands which are needed to meet long-term public needs for auto-access recreation. The inclusion of the qualifying portion of Areas 3 and 4 in the Wilderness would increase the number of acres in Wilderness status, but it would add little to the enjoyment of visitors within the Wilderness.

Bear Basin (Area D)

This area was never a part of the Stratified Primitive Area. Proponents for its inclusion argue that it should be given Wilderness designation because it is important elk habitat.

A major reason for not including the area in the President's proposal is the fact that it is penetrated by approximately 2 miles of road into Bear Basin. The National Forest Recreation Survey also identified one recreation development site which will be needed to meet projected public demand in the year 2000. The area is not an integral and essential part of the proposed Washakie Wilderness.

The area is important elk range, and elk do migrate through it in the spring and fall. With the help of local Wyoming Game and Fish personnel we have identified the important elk-calving areas in that portion of the Shoshone National Forest. None of them are located within Area D. As stated earlier in our discussion of the DuNoir Drainages, there is no evidence that Wilderness designation is essential to the maintenance of these elk herds. Any conflicts which might occur between recreation and elk management will be resolved by special provisions in the Ranger District Multiple-Use Plan developed in cooperation with the Wyoming Game and Fish Department.

In urging all of these additions, a number of those who submitted views at the Forest Service hearing in Riverton expressed the concern that Wilderness should not consist of only "rocks in the Crest Zone." The proposed Wilderness is characterized by deep, narrow valleys exposing strata which were built up by volcanic activity. Broad flat-topped mountains and plateaus separate these valleys, and the unique geology is one of the area's principal charms. The area was not chosen as a forested Wilderness or to represent all ecological associations in Wyoming's mountains. However, we have carefully studied all proposed additions; and there are no ecological associations found in any of them which are not already well represented in the proposed Washakie Wilderness, the adjacent Teton Wilderness, or in other Wildernesses or Primitive Areas in the National Forests of northwestern Wyoming. Approximately 29 percent of the land proposed by the President for addition to the Wilderness System is forested, and 62 percent of that forested area supports timber of commercial size. A report prepared for Congress in 1961, when it was considering Wilderness legislation (S. 174), shows that the Wildernesses and Primitive Areas in Wyoming, other than the Stratified Primitive Area, contain 828,600 forested acres (38 percent of their total area) and that 44 percent of these forested acres support commercial-quality timber. That same report shows that approximately 10.8 percent of the commercial-quality timber acreage on the National Forests of Wyoming is in Wildernesses or Primitive Areas.

Total recreation visits to the Shoshone National Forest in 1966 was 715,200 visitor-days (12 patron hours make one visitor-day). Of this, 120,800 visitor-days or 16.9 percent of the total was made in the Forest's two Wildernesses and three Primitive Areas. The Stratified Primitive Area was the least popular. It received

only 5,700 visitor-days use (4.7 percent of the total wilderness use) even though it includes 15.8 percent of the designated acres on the Shoshone National Forest.

You also asked us to provide you with information about the timber resources available for harvest by industry in the Dubois area. The installed capacity of the Dubois mill is 52 million board feet annually. It can feasibly draw timber from the Wind River Working Circle on the Shoshone National Forest, a portion of the Teton National Forest, and a portion of the Bridger National Forest. The total combined allowable harvest on the Bridger and Teton National Forests is 70 million board feet. However, the portions of those Forests within reach of the DuBois mill have a combined allowable harvest of only about 45 million board feet. In addition to the Dubois mill, five other mills with a combined capacity of 51 million board feet annually are competing for the timber on the Bridger and Teton National Forests.

The Wind River Working Circle of the Shoshone National Forest has an allowable harvest of 19.6 million board feet.

Your interest in this important and complex multiple-use question is appreciated. Please call on us again if we can be of further assistance.

Sincerely yours,

M. M. NELSON, *Deputy Chief.*

Senator HANSEN. I would like to ask for the inclusion in the record at this point an excerpt of a letter from Mr. Neil H. Rahm, regional forester of the northern region, wherein he responds to some questions that were asked by me and referred to him by the Chief of the Forest Service, Dr. Cliff, who is here with us this morning.

I want to refer specifically to one part of his letter. I read now from Mr. Rahm's letter. Am I pronouncing his name right, Dr. Cliff?

Mr. CLIFF. Yes.

Senator HANSEN. He says:

The Park Service pointed out that by 1972, if their planned recreation developments were on schedule, and the upward trend in use continued, they would have reached maximum capacity for taking care of people over night in the park.

We then reviewed the available national forest land along park entrance roads which were located sufficiently close to the park, where people could spend the night, either in camp grounds, trailer courts, or motels, and still visit the park on a daily basis. These areas were then identified on forest service plans as "hold areas," to be reserved until such time as the need developed for more public accommodations.

We also have to consider the extent of private lands available for future public service development. It was decided at this meeting that we should prepare a joint map for the entire area, and indicate on this map existing and potential overnight accommodations and capacities for both Park Service and Forest Service lands.

This map was completed in 1967, but it is now being revised by region two to include additional information which we over looked in the first go around.

I would like at this time to present and ask unanimous consent for the inclusion in the record of the map to which I have just referred.

Senator CHURCH. Without objection, it will be included by reference.

Senator HANSEN. Before I left Jackson, Wyo., my home town, to come back for this session of the Congress, I spent most of an afternoon with the supervisor of the Teton National Forest, and he explained in detail what the Teton is doing, along with and in conjunction, I think, with the Targhee, the Custer, the Gallatin, and the Shoshone, to make it possible for people who come out to visit this great northwestern part of Wyoming, and the contiguous areas in your State of Idaho, Senator Church, and in the State of Montana to enjoy this great area, without being forced to get reservations ahead of time. If they propose to visit either Grand Teton or Yellow-

stone National Park, which as I have already indicated by the year 1972 would be completely filled, they would have to go on a reservation basis, unless expanded use can be made of this area.

The superintendent of the Teton National Forest told me what was being done, and I was quite impressed with that, and the map that I have introduced into the record points up what is being done.

Now I understand, Dr. Cliff, that some of the reasons for excluding certain areas that have been proposed for inclusion on the south and the southwest sides of the proposed Washakie Wilderness Area were among others, that you think these are important to the overnight accommodations and picnic areas that people must use.

Am I right in that?

Mr. CLIFF. That is right. And this is especially true with regard to the DuNoir drainages. There are five identified potential sites in the DuNoir Creek area. There is one in Bear Basin that will be needed for recreation use by people who want auto access.

We have been engaged with the Park Service for several years now, analyzing the coordinated development plans of the national parks and the surrounding national forests, just as you have described.

A number of organizations have been urging this regional planning approach, and the development of public facilities outside the national parks, and in the national forests.

As you can see by the map, the Yellowstone National Park is almost surrounded on three sides by wilderness and primitive areas, and there are just corridors coming up from the east that give access.

Our present national forest-developed facilities are taxed to capacity right now. We can develop more along those corridors, but the best sites have already been developed. If we proceed with this regional plan, we are going to have to go out further, over Togotee Pass on the Washakie side and the Wind River side, to develop some of these facilities. This is one of the principal reasons we feel that these areas should not be included. We have to preserve opportunities for this recreation use.

Senator HANSEN. Dr. Cliff, we have a great many values—a great many interests and concerns that we must keep in mind. You have referred to the presence of game and wildlife in this area, and there will be persons testifying specifically on these problems before these heatings are concluded, but I would like to hear from you, if I may, as to whether the Forest Service has given adequate consideration in your judgment to the proposals that it has made and which are embodied in the bill that I have introduced, adequate for the management of the elk, deer, bear, mountain sheep, moose, and fish that are in these areas, and the availability of these important wildlife resources to the public.

Mr. CLIFF. Yes, we have, Senator. We hired a full-time wildlife biologist in 1963 to work on the Shoshone Forest, and specifically at Dubois, in this area. He has been studying elk migration and the elk calving areas, the elk habitat problems, as well as other wildlife needs in this area, for the past 5 years.

We have given strong attention to this for many years. We have identified the principal elk calving grounds and the migration routes. We have worked with the local game people on this. Of course, I don't agree that you need to set up a wilderness area every place you have an elk migration route, or a calving ground. Most of our elk

range in the west is outside of wilderness, and some of our best and most productive herds are outside of wilderness.

Some of our most critical problems of harvesting, proper harvesting of the elk crop, are in wilderness areas, and——

Senator HANSEN. Why is that?

Mr. CLIFF. Well, it is because wilderness and primitive areas are relatively inaccessible, and we don't get the hunting use that is needed to properly harvest game crops.

Right north of the two DuNoir drainages, is the 450,000 acre Teton Wilderness. There are no livestock in there, except packer stock, and one of the most critical big game management problems we have is in that Teton Wilderness because it does not get adequate harvesting.

There are problems of over protection of these big game herds that have to be dealt with, and two of the notable ones are in this general area—the northern Yellowstone herd and the Jackson Hole herd.

There are other examples where in the West, some of our best and most productive elk herds are in areas which are developed and used for multiple purposes, and they are accessible. The elk migrate, and they calve, and they can be protected without the wilderness designation.

I could name dozens of situations if I had time, and give you the evidence that this is the case. So I don't give much credence to the argument that you need wilderness status to protect elk habitat.

Senator HANSEN. One of the concerns that I have heard expressed a number of times is the effect that a timbering operation will have upon game hunters. Under that broad overall question, two statements immediately come to mind.

One is that the elk habitat, or the game habitat, will be changed rather markedly with a timbering operation. No. 2, that as a timbering operation proceeds, if it is done in the manner that I think most of us have seen put into application in this part of the country, it will bring with it the opening up of an area with innumerable roads.

Now what, in your judgment, will be the effects of these two situations on the management of game animals?

Mr. CLIFF. Well, in the first place the opening up of the dense forest stand, by timber harvesting, if it is done properly, will improve forage for big game.

There are many examples of this across the country. You get a growth of shrubs and lesser vegetation that is desirable for big game.

You increase the so-called edge effect—the mixture of openings and edges—which is desirable for big game habitat, if it is properly done. I can cite many examples of this, where it has been beneficial to deer and elk, particularly.

Now the other impact, the one of roads, which makes the elk range more accessible, of course exposes the big game animals to more hunting, which in many cases can be desirable. It exposes them to some interference that was not there before the roads were built.

These things can be controlled. The control of hunting is a function of law enforcement and game regulation. This can and is being done, all the time, by State game departments, by fixing the seasons and bag limits, and limiting hunting, if necessary, as I pointed out in

my testimony, if there is possibility of interference with game on migration routes or during calving, this can be avoided by the timing of other resource use, by closing certain roads, or by closing certain areas during the critical period.

So it is a matter of management and law enforcement. Game management is a profession that can be practiced, and it can be practiced on land that is even very close to civilization. It has been demonstrated all over the Eastern United States, and all over the West, as well.

Senator HANSEN. From some observations over the years, I think one of the really useful tools that we have recognized in Wyoming insofar as game and fish management is concerned is the memoranda of understanding that might be entered into between State officials and Federal officials.

I joined with some other Senators in proposing legislation which would clearly define and leave no doubt as to the intent of the Congress insofar as the management of a game and fish and wildlife within State boundaries is concerned, but that, as the present time, is simply some legislation that is before the Congress to be considered and I hope to be acted on favorably.

But in the meantime, would you look with favor upon working out cooperative wildlife management arrangements, wherein the State of Wyoming specifically in this area could be right on the ground, and could have a full say, or at least be heard in what it believes ought to be done in the way of management of our wildlife resources?

Mr. CLIFF. Senator Hansen, we do look with favor on these kinds of arrangements, and we do have those kinds of arrangements right now. The Forest Service has not been a party to the argument or disputes over control of resident game in the various States.

Senator HANSEN. We appreciate that, I might add.

Mr. CLIFF. Our regulations and policies recognize the role and the right of the States to manage the game animals themselves. We have cooperative agreements with all of the States in which national forests are located.

We consider our role to manage the habitat on the lands for which we are responsible. We have close working relationships with the States, and we have these overall memoranda of understanding. In a number of places, we have memoranda of understanding covering specific areas, specific herds, and we encourage this. We want to go just as far as it is necessary and desirable in this direction.

Senator HANSEN. One of the growing and one of the very important recreation uses that is going to be made of this entire northwestern Wyoming mountain area is what we call snowmobiling. Have you given any consideration to the impact that this particular use may have on the economies of the towns in northwestern Wyoming, of the impact it may have on game migrations and wintering areas, and the contribution it can make toward a full year-round use of these areas by the recreationing public?

Mr. CLIFF. Yes, we certainly have. Snowmobiling is something relatively new. It is becoming very popular in many places. Of course, we don't permit snowmobiles in wilderness areas, or in primitive areas.

These are prohibited, the same as any other mechanized method of travel. We do permit snowmobiling outside of wilderness areas.

People like to get into some of these back areas, and if there are roadways or trailways, they can be used in the wintertime without damaging the terrain.

Snowmobiling could be permitted in these areas that we have proposed not be included. I don't think it would have any effect on the elk migrations in the areas themselves. The elk are wintering outside of these areas. They are down below.

The snowmobiles have access to these areas now. We may have to do something about controlling the use of snowmobiles on the winter elk ranges, but the winter ranges are outside of this wilderness or outside of any area that anybody has proposed for inclusion in the Washakie Wilderness.

Senator HANSEN. You are saying that this particular use might build up on these elk winter ranges to the point——

Mr. CLIFF. It could. They have to go through the wintering areas to get to the high areas, and there could be interference. But whether these wilderness proposals are approved or rejected there would be no impact on the elk wintering ranges.

Senator HANSEN. I want to get a little more information, if I may, on your timbering practices. I think I am somewhat familiar with the economic importance of timbering to Wyoming and the number of jobs that it provides. But I am concerned about the manner in which this timbering is being accomplished.

Do you think that there is any threat posed by your present timbering management practices to this area that I think is really in pretty delicate balance?

Mr. CLIFF. Well, I don't know what specific area you think is in delicate balance.

Senator HANSEN. The area from the East and West DuNoir Creeks, and the area that has been recommended by some for inclusion in the system, and the area which you do not recommend be included.

Mr. CLIFF. Certainly one of the things that we have been conscious of for many years is the watershed relationship. We don't want to do anything in the way of timber harvest or road construction or anything else which will damage watershed values. This consideration is paramount in our multiple use planning.

Senator HANSEN. Do you have the authority, sufficient authority, adequate authority, in your judgment, to take whatever steps are necessary in order to see that the total landscape is protected and held secure adequately?

Mr. CLIFF. Yes, we do. We have all the authority we need, and we exercise that authority. The greatest conflict between the timber harvesting and the maintenance of esthetics is the impact of certain harvesting practices on the landscape.

Some species, and lodgepole pine is one of them, are managed best through even-age management. This involves clear cutting in patches or strips, and this is objectionable and abhorrent to many people.

Clear cutting or patch or strip cutting temporarily disturbs the landscape But it is the only way we can properly regenerate a disease-free forest in this forest type. Selective cutting of lodgepole pine results in diseased progeny if you have disease already established as we do in this area.

I am sure we can handle the watershed aspects. As a matter of fact, we can improve water yields by timber practices. We have demonstrated this. On the other hand we withhold from operation any areas which cannot be managed without watershed damage.

The impact on esthetics is more difficult, but I think this can also be handled. One of the outstanding examples is right in your own Jackson Hole, where we have done this kind of management. Harvesting is fitted into a pattern of natural openings that look very normal and natural from just a little way off. This is the sort of landscape planning that we are trying to do on our timber sale areas everyplace.

Senator HANSEN. Mr. Chairman, I would like to introduce at this point in the record a letter from Dr. Cliff written to me the 5th of February, which deals specifically, I think, with some of the points he is now making. Which also includes citations on the appropriate parts of the Federal Code which, as I understand, spell out in detail the grant of authority that you have to do the job that you think is necessary and indicated and adequate in order best to protect the natural resources.

Senator CHURCH. Without objection.

(The letter referred to follows:)

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 5, 1968.

Hon. CLIFFORD P. HANSEN,
U.S. Senate.

DEAR SENATOR HANSEN: This is in response to your January 18 letter in which you said that it was your understanding that the Forest Service has been working on a classification for some Forest Service lands to be described as "near natural areas".

The term "near natural areas" was once used to describe a broad category of National Forest lands which were specifically designated for management in a near natural condition. We no longer use this term. However, National Forest Wildernesses and Primitive Areas do meet this description. Attached is a map brochure showing the location of all National Forest Wildernesses and Primitive Areas and a copy of the regulations governing their administration and use.

We also have authority under Secretary of Agriculture's regulation U-3 (Title 36, Code of Federal Regulations, Section 251.22) to classify areas to be managed primarily for recreational use substantially in their near natural condition. Examples of areas set up under this classification are scenic areas, geological areas, archeological areas, historical areas, and botanical areas. Attached for your information is a list dated January 1, 1964, which gives a brief description of all such areas which had been so designated at that time.

Secretary of Agriculture's regulation U-4 (Title 36, Code of Federal Regulations, Section 251.23) gives the Chief of the Forest Service authority to establish a series of areas to be known as "research natural areas". These areas are to be retained in a virgin or unmodified condition except where measures are required to maintain a plant community which the area is intended to represent. Attached for your information is a list of experimental forests, experimental ranges, and research natural areas.

Your continuing interest in the National Forests is appreciated. If you have additional questions, please call on us again.

Sincerely yours,

EDWARD P. CLIFF,
Chief, Forest Service.

Senator HANSEN. I have no further questions, Mr. Chairman.

Senator CHURCH. Thank you, Senator.

I have received a letter from Senator McGee from Wyoming, which has been called to my attention this morning. It is directed to me,

and it reads as follows. I think I will read the letter into the record. He asks that it be included, and also, the text of an amendment that he proposes to the bill. I think while you are here, it would be well to read the letter, and then ask for your comment on it, so that we may have the record complete with respect to it, insofar as the position of the Forest Service is concerned.

The letter reads:

Dear Mr. Chairman: Enclosed you will find an amendment to S. 2630, to designate the Stratified Primitive Area in Wyoming as a part of the Washakie Wilderness. In effect, my amendment to S. 2630 would add roughly 40,000 acres to the Forest Service proposal as found in the bill. The basis for offering the amendment is founded on two concepts:

The first of these is that while there is some controversy over this additional acreage, it is better to err on the side of too much rather than too little. The second concept is to bring to the attention of the committee not only the controversy but the pertinent data which could resolve the controversy.

In short, to test the validity of the amendment. As I understand it, such testing is one of the chief functions of a committee hearing. The five areas which my amendment seeks to add to the acreage described in S. 2630 are the upper east and west DuNoir Creek area—

That would be the area J on the map, would it not?—

the Lincoln Point Area—

That would be F–1 on the map—

the Wiggins Fork Area—

Is that designated as area 3?

Mr. WORF. Correct.

Senator CHURCH. Area 3 upon the map:

And the Bear Basin Area—

Which is designated as area D on the map.

It is argued that the DuNoir Basin is an elk habitat which needs the protection of wilderness designation. The other areas are submitted on the grounds that the boundary line should extend down the escarpment and approach, rather than following the peaks and ridge lines.

I ask that you include this letter in the record, as well as consideration of the enclosed amendment. The insights and judgments of the Public Lands Subcommittee will be of the utmost and abiding interest to me. Indeed, I shall count on your findings as a basis for my own conclusions.

The letter is signed by Senator Gale McGee, and included with the letter is a proposed amendment. Without objection, the proposed amendment will be included in the record at this point.

(The amendment referred to follows:)

AMENDMENT TO S. 2630

A BILL To designate the Stratified Primitive Area as a part of the Washakie Wilderness, heretofore known as the South Absaroka Wilderness, Shoshone National Forest, in the State of Wyoming, and for other purposes

To amend S. 2630 to include the following areas designated on Map "B" on page 18 of the U.S. Forest Service report "A Proposal—Washakie Wilderness—Shoshone National Forest-Wyoming":

Area J. (Upper East and West DuNoir Creek.)
Remainder of Area F–1. (To include Lincoln Point.)
Remainder of Area 3. (Wiggins Fork.)
Remainder of Area D. (Bear Basin.)

Senator CHURCH. I wonder, Ed, if you could give us your comment on Senator McGee's amendment?

Mr. CLIFF. Well, Mr. Chairman, my testimony and the examination by Senator Hansen went into all of these proposals in some detail. We just don't think that the DuNoir Creeks qualify as wilderness under the definition of the Wilderness Act, because of past activities, and present evidence of the handiwork of man.

Furthermore, as I have just elaborated, we don't believe that wilderness designation is either necessary or desirable for the protection of the elk migration routes. This is rather a function of management, and of law enforcement.

Furthermore, the DuNoir drainages contain at least five identifiable areas that need to be developed for public recreation of the type that can be reached by automobile.

Lincoln Point, as I testified previously, has been cut over on two sides. Wiggins Fork, area 3, presents some interesting problems relating to definition of boundaries. When the Stratified Primitive Area was set up, that line was drawn on a map, and as you can see, it doesn't follow any topographic features, or even landmarks.

It is just an arc placed around that basin. It can't be identified as presently drawn, without a great deal of engineering and surveying, and then it would have to be heavily signed for people to recognize it.

There is one recognized public recreation area that needs to be developed at the north end of the corridor, as a jump-off place for travel into the wilderness. That area may look level on the map, but there are not many public use sites that are desirable for development in it.

We could, as I testified, define a line under the escarpment, but it would not be easily accomplished. This is unsurveyed country. There is no General Land Office survey of this particular area.

The Bear Basin area, area D, is already penetrated by a road, and there is one needed public recreation site in there.

A part of area D, the part lying to the west, has wilderness characteristics, and if a proper boundary could be defined which segregated that part from the part penetrated by the road, it might justifiably be added. We wouldn't have very much quarrel with adding part of the Bear Basin area, if we could get a desirable boundary line.

I think that completes my comments on Senator McGee's letter. I appreciate hearing it. I think with what I have said, and with the testimony that has already been given our analysis is defined, and I am sure that the witnesses that will follow will give their analysis of the same situation.

Senator CHURCH. Do you know of any other natural boundary in the area D portion, other than the one you have settled upon, that would meet your requirements?

Mr. CLIFF. The road goes into the basin, about the center, as indicated by the pointer on the map. The part that might be added lies to the west.

Senator CHURCH. To the west of the road?

Mr. CLIFF. West of the road, and we would have to find someplace that you could define as boundaries—preferably on topographic features. We considered that, and decided that the boundary we have recommended best, and the most feasible boundary in the area.

This is elk range, and elk do migrate through it. But we didn't consider this a compelling reason to put it in the wilderness.

Senator CHURCH. The very dark green area on the map, which is designated as 5 and F, I understand the F part was originally proposed by the Forest Service for exclusion from the area.

Mr. CLIFF. That is correct.

Senator CHURCH. But as a result of the local hearings, the Forest Service decided to include it.

Mr. CLIFF. In our original proposal, we proposed to exclude both 5 and F.

Senator CHURCH. I see.

Mr. CLIFF. After the hearings, and after taking another look at the situation on the ground, we decided we could find suitable boundaries, and that this area, indeed, rates wilderness classification, so we added it after the hearings.

Senator CHURCH. This is encouraging to me, because it demonstrates that local hearings do, in fact, have utility and that you are listening to the testimony of local people. Sometimes, you know, the Forest Service is accused of making up its mind about matters of this kind, and then holding hearings which are purley perfunctory, but I think that accusation is not well founded. This is indicative of the fact that you are holding hearings with the purpose of accumulating all of the testimony possible from people who are interested, whether they live close by or afar, and that you are taking that testimony into account in the final decisions that you reach. I must say that that certainly commends itself to me.

Mr. CLIFF. Thank you, Senator. We try to do the best job we can of analysis before the hearings. As you will see as you proceed with these hearings on wilderness, we have made changes after the hearings have been held. We made some changes on the Mount Jefferson after the hearings were held—rather small areas, but significant areas—and this is the case in a number of others

Senator CHURCH. I think this is very important, because it is extremely difficult for us to sit in Washington and to look at a set of maps, and to listen to the testimony, and to make a judgment from here, and for that reason, we included provisions in the wilderness bill that call for local hearings in the field in order to give the people who are interested the maximum opportunity to make their case. If that mechanism is functioning properly, then you come here with the presumption on your side, and I think that is how we have to proceed.

We want to hear from any of those who feel that you have made the wrong decision, and who want other areas included. Of course we will give whatever they have to say careful consideration, but your case has the presumption with it, as long as we are convinced that you have, in fact, been conducting these local hearings in the way that was intended by the Congress when those provisions were written into the bill.

That, at least, is my own view of how we need to approach this matter, because it would be a mistake if we were simply to try and substitute ourselves in place of the Forest Service, at this point, unless a very strong case can be made before us that some serious mistake has occurred. So I am glad to know that you are modifying your original proposal in the light of local hearings, as you move along.

Very well, have you any further questions, Senator Hansen?

Senator HANSEN. No, I don't think I have. I just might add one word, by way of my personal endorsement of what you have said about local hearings. I think it is apparent to everyone, and certainly quite specifically apparent to those who have come from Wyoming to testify at these hearings today, that we have a very complicated problem facing us.

We have perhaps more factors involved in the consideration of where these boundary lines should be drawn than any place, I would guess, that might be proposed for inclusion in the Wilderness System in the United States.

I say that first of all, because the strong magnets of Yellowstone and Teton are bringing ever-increasing numbers of people to this area. The Park Service says that by 1972 they are going to be absolutely filled up, and unless other provisions can be made to care for the people who come out here, they are going to have to limit access to these two great national parks.

We have game animals—we have a great variety of game animals; we have fishing; we have timber; and we have recreation, both summer and winter, all of which are involved, including this snowmobiling to which allusion has already been made. So it certainly is an extremely complicated set of ingredients that go into the total mix, out of which we hope can come a solution which will meet and answer the demands that can be put upon this area, and take into consideration as well the needs that we know are going to be ever-increasing in size and pressure as we move toward the end of this century. I am looking forward to hearing from the other witnesses. I know that we will have a lot of conflicting testimony, and I want to compliment you, Dr. Cliff, for having been most responsive to our questions this morning.

Mr. CLIFF. Thank you.

Senator CHURCH. Yes, and I reiterate that. We thank you for your fine testimony.

Mr. CLIFF. Thank you.

Senator CHURCH. It is 20 minutes past 12 and I think that now we should adjourn for the lunch hour. The committee will resume its hearings on these three bills beginning at 2 o'clock this afternoon, when we will hear from the citizen witnesses who have come.

From the Floor: Mr. Chairman, may I make a request that the Forest Service maps be left for continuing discussion?

Senator CHURCH. Yes, of course they will be left. The Forest Service maps will be left, for the reference of other witnesses.

Very well, the hearing stands adjourned until 2 o'clock this afternoon.

(Whereupon, at 12:20 p.m. the subcommittee recessed to reconvene at 2 p.m. the same day.)

AFTER RECESS

(The subcommittee reconvened at 2 p.m., Senator Lee Metcalf presiding.)

Senator METCALF. The subcommittee will be in order.

This is a continuation of the hearings on S. 2531, S. 2751 and S. 2630. We are honored and privileged to have as our first witness this afternoon one of the coauthors of S. 2751, the Senator from Oregon, Senator Hatfield.

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

Senator HATFIELD. Thank you, Mr. Chairman. I am honored to appear before you today in support of S. 2751, to establish the Mount Jefferson Wilderness within the Willamette, Deschutes, and Mount Hood National Forests in Oregon. I am extremely pleased that this 85,000-acre primitive area, protected under regulations of the Department of Agriculture since the early 1930's, is now being considered for wilderness designation under the 1964 Wilderness Act. It will make an outstanding addition to our National Wilderness Preservation System.

The proposed Mount Jefferson Wilderness is an area with rushing streams, placid lakes, alpine meadows, volcanic peaks, and active glaciers. It contains nearly 150 lakes and several miles of crystal-clear streams. Nearly 160 miles of trail lead the hiker or horseman through green mountain meadows splashed with the colors of the lupine, Indian paint-brush, asters, and the delicate monkey flower. In early morning or late evening a traveler may surprise a stately bull elk, a feeding deer, or other species of wildlife. Spectacular vistas await those who want to climb the many peaks and buttes. Mount Jefferson with its flanking glaciers and the three spires of Three Fingered Jack offer special challenges to the climbers.

Designation of the Mount Jefferson Wilderness will preserve for all time a portion of the primeval timber heritage out of which the great State of Oregon grew and which is still the mainstay of our growing economy. When the pioneers arrived they found a beautiful land where lush green forests stretched from the shining crests of the Cascades to the Pacific Ocean. Within these forests our forefathers built the cities and towns of which Oregon is so proud today. The forest crops are being harvested and our foresters are carefully husbanding the land to be sure that future generations will have a sustained yield of wood products.

Nearly 90 percent of the proposed wilderness is forested and 70 percent of those forested acres are representative of the high-quality timber that has made our wood products industry so great. However, including this timber in the Mount Jefferson Wilderness will have little effect on the timber supply now available for industry. Most of it has been included in the primitive area since 1930, and has not been included in the allowable cut for the national forests involved.

There have been suggestions that the proposed wilderness be expanded by about 30,000 acres to include lands along its west side and along the Santiam Highway. Many have urged that these additions are needed to provide a greater "buffer" for the primary wilderness attractions such as Jefferson Peak.

I believe accessibility is one of the great assets of this area. It provides unique wilderness opportunities that can be easily approached with a family car over good, standard roads.

Another major consideration is the high timber values in these proposed additional areas. If they are added to the wilderness the amount of timber available to support the important local timber industry would be reduced by nearly 11 million board feet annually. Serious economic hardship could result if the available timber supply

was reduced by that amount. In view of this, and in view of the pressures currently being created by the export of logs, I recommend no enlargement beyond the area which would be added by the bill I introduced.

It is important that future generations of Americans will have the opportunity to walk through the ageless forests that greeted out forefathers. Designation of the Mount Jefferson Wilderness will guarantee this opportunity. I urge enactment of S. 2751.

Thank you very much, Mr. Chairman; I want to indicate that I am most anxious to have the testimony that you have set forth here in your agenda as part of the record, and will certainly be most interested in reviewing this record with the other members of your subcommittee at a later date.

Senator METCALF. Thank you very much, Senator. This is a significant statement. As I understand it, your point is that this area incorporated in your bill has been a part of a primitive area for more than three decades.

Senator HATFIELD. That is right.

Senator METCALF. And therefore, it is not considered under a sustained timber yield operation, but any additions would seriously curtail the timber supply in the particular area.

Senator HATFIELD. Yes. Of course, as you know, Mr. Chairman, the bill does enlarge what has been primitive area up to this time by a few thousand acres. At a later time, I would like to discuss with the committee that part which has created some difficulty with certain Indian lands. A very small portion of the proposed increased area does include certain Indian lands that I think the committee would be interested in going further into detail on.

But the proposed bill, as it stands, does enlarge the former primitive area, and none of this has been under a timber harvesting program, but any addition would bring into the wilderness designation certain acreage and certain lands which are under sustained yield, and would be available eventually under the conservation programs practiced by the forestry department for our timber industry.

Of course, as you know, Mr. Chairman, timber provides the most jobs in our State and, therefore, we are keenly interested in not only the preservation for recreational purposes of certain timberlands but we are equally concerned that people in our State can have gainful employment. Recreation, after all, should be a program for those who are wage earners, as well as for people who are independently wealthy, or are in professional pursuits. I think that if we do not provide enough jobs and job opportunities the wage earner will not be able to enjoy recreational activity on unemployment compensation checks or welfare checks.

Senator METCALF. Well, for awhile, I thought you were describing some of the area in Montana.

Thank you very much.

Senator HATFIELD. Thank you.

Senator CHURCH. Thank you, Senator Metcalf, for starting the hearings this afternoon. I am sorry, Senator Hatfield, that I missed your statement, because I usually am richly rewarded by everything you say.

Senator HATFIELD. Thank you very much, Senator.

Senator CHURCH. Having completed the testimony of the Government this morning, we begin this afternoon with our citizen witnesses, the first of whom is Mr. C. R. Gutermuth, vice president of the Wildlife Management Institute, who has often testified before this committee, and who is always welcome.

STATEMENT OF C. R. GUTERMUTH, VICE PRESIDENT, WILDLIFE MANAGEMENT INSTITUTE, WASHINGTON, D.C.

Mr. GUTERMUTH. Thank you, Mr. Chairman.

It is a pleasure for me to be the leadoff citizen witness here today.

I am C. R. Gutermuth, vice president of the Wildlife Management Insititue, with headquarters in Washington, D.C. The institute is one of the older national conservation organizations, and its program has been devoted to the restoration and improved management of natural resources in the public interest for more than 50 years.

I can be quite brief, Mr. Chairman. Like other of the national conservation organizations, the Institute is pleased that these proposals to confer wilderness status on selected public lands have been forwarded to the Congress. We are disappointed, of course, that the Congress has not already been able to designate the first wilderness under the terms of the 1946 act. The initial proposal, the San Rafael Wilderness, has encountered some serious differences of opinion here in Congress. Perhaps the lesson to be learned from this experience is that more effort should be made on the field level to reach an accord between the Federal agency involved, State agencies, and interested groups and individuals. It may be possible to resolve some of the boundary disputes and other of the more obvious difficulties in advance of the final consideration of the legislative proposals. These difficulties ought to be worked out on the ground.

We realize that the Federal agencies experienced some delays in getting their wilderness review programs into operation. Those early problems seem to have been largely overcome, and it is hoped that many more submissions will be forthcoming. The only recommendations that have been received so far are from the Department of Agriculture, and we wish to commend that Department and the Forest Service in this regard.

S. 2531, San Gabriel Wilderness.—There is widespread agreement on the proposed San Gabriel Wilderness and it is hoped that the bill can be approved without delay. We heard a splendid presentation from Ed Cliff this morning, indicating that there is practically no dispute or concern about that particular bill, and we hope it is enacted promptly.

S. 2630, Washakie Wilderness.—The Washakie Wilderness proposal presents some of the difficulties to which I just referred, Mr. Chairman. Our staff has no firsthand knowledge of the country. Some of us have flown over and driven around much of it, but we do not have the intimate knowledge possessed by the U.S. Forest Service, the Wyoming Game and Fish Commission, and many of the others who have commented on the proposed wilderness boundaries. For this reason, the institute is forced to look to these agencies and local conservation groups for guidance.

It is understood that there is agreement to exclude certain acreage currently within the existing primitive area. These are identified as

areas 1, 2, and 6. This decision is based on the presence of mining activities, roads, logging, and difficulties in establishing an easily recognized boundary line. These exclusions are agreeable to us. Similarly, we agree with the inclusions of areas A, B, and F, recommended by the Forest Service.

It is hoped that a decision will be made to retain in the wilderness area the relatively small acreage that has been protected for years under the primitive area designation in the Caldwell Creek and the north fork of Wiggins Creek drainages. These areas, according to the biologists of the Wyoming Game and Fish Commission, are vitally important to elk. These small areas would be excluded by S. 2630.

Also, we are persuaded by the position of the Wyoming wildlife agency to urge the inclusion within the wilderness of much of the acreage in the Bear Creek Basin and in the east and west forks of the DuNoir River. I will not repeat the strong justification that is made for the inclusion of these two areas in the January 1967 statement of the Wyoming Game and Fish Commission, which appears on pages 58 and 59 of the Forest Service's Washakie Wilderness proposal. The argument made in behalf of retaining the wilderness character of these areas is compelling. It is realized that the inclusion or the exclusion of certain areas is largely a matter of value judgment. In Bear Creek Basin and the east and west forks of the DuNoir River, it is believed that the recommendations of the Wyoming agency should receive priority consideration.

S. 2751, Mount Jefferson Wilderness.—Again, Mr. Chairman, we do not have firsthand knowledge of the Mount Jefferson area. Some national and regional groups are recommending the extension of the proposed wilderness boundary line to the westward as a means of buffering against civilization's approach on the relatively narrow area.

Unless there are compelling reasons to the contrary, and I am aware of no serious objections, we would favor inclusion of the Lake Marion area, the Square Lake area, and the Firecamp Lake area in the wilderness.

In addition, we would ask that the committee fully explore with all of the witnesses having on-the-ground knowledge of the area the proposed westward extension of the wilderness boundary beyond that recommended by the Forest Service. From my own long experience with the members of this committee, I am positive that they will want to be assured that the boundary line on the western side complies with the expectations of Congress as expressed in the Wilderness Act.

Thank you very much.

Senator CHURCH. Thank you very much, Mr. Gutermuth, for your testimony.

I understand from your statement that you favor the three proposals, as the Forest Service has presented them, but would like this committee to examine the possibilities of certain additions that are suggested.

Mr. GUTERMUTH. That is right.

Senator CHURCH. But your organization is not sufficiently familiar in detail with these areas to take a stronger position than that; is that right?

Mr. GUTERMUTH. I have spent considerable time out in that country myself, Mr. Chairman, on Public Land Law Review Commission

tours this summer, so while I am quite familiar with the country and many of the problems, the point is that I am not in a position, and I don't think any of our people are in a position, to actually recommend where these boundaries should be.

Senator CHURCH. Yes.

Mr. GUTERMUTH. I am a little bit concerned, however, that in some of the proposals that have been considered, and in these hearings, the boundaries have been designated up on the crest of mountains, in one place, and then the next time they go to some other natural barrier, like a stream, or in fact, some kind of other distinguishable line. It occurs to me that there ought to be some uniformity in all of these selections, as to some type of a definite boundary, rather than to be fluctuating in all of the various areas that are considered from time to time.

We have a lot of them before us, and I am in hopes that maybe a little bit more uniformity can be worked into the boundary designations that are going to be selected, not only here, but in all of them, as we move along.

Senator CHURCH. Any questions, Senator Metcalf?

Senator METCALF. No, except that I want to say that for all the years that I have been in Congress, both in the House and here, Mr. Gutermuth has been testifying for these programs that are in the public interest, and certainly, your testimony will be given a great deal of consideration.

Mr. GUTERMUTH. Thank you, Senator Metcalf.

Senator CHURCH. Senator Hansen?

Senator HANSEN. Mr. Gutermuth, I am impressed with the last statement you have just made, that is, your appeal for greater uniformity or some accord that might be reached on the designation of boundaries. I have studied the proposal of the Forest Service, and could you point out, with the map there on your left, or however you would like to, wherein you would take exception with the factors, with the criteria that has been used by the Forest Service in designating boundaries?

Mr. GUTERMUTH. Well, I don't think, Senator Hansen, that I would want to actually attempt to point out where they are. The thing that disturbs me is that in some areas they have recommended that the boundaries go down the crest of mountains, and some promontories along the line, and in other places, they pick an entirely different form of boundary. One would think that there is some impelling reason for this selection in the various localities, but I believe that there is a way in which they could select boundaries that would be a little bit more uniform and would be applicable to all of these areas.

Of course, on the long, narrow strip in the Mount Jefferson area we have met with the various people who have intimate knowledge of the area, and there is considerable question as to whether or not that western boundary is the exact location that it should be.

There is a great desire on the part of many people who are knowledgeable in those areas, while we are always going to be confronted with timber values and other problems that Senator Hatfield just spoke of, the fact still remains that as we move along in this country, with the increased population, we are going to be very thankful for all of these acres that have been set aside. So here you have a desire

on the part of people to not necessarily just pick the crest of the ridges as boundaries, but to move over to where they would afford greater protection to this narrow strip of land, and I believe that there is a certain wisdom in that. Some of those precipitous slopes there are not adaptable to good mining, or good timbering operations. At least it would be costly. On the other hand, in concluding, maybe I should say that I have the greatest respect and admiration for the Forest Service, and the way in which they have carried on their program, and they have been good custodians of our wilderness areas over these many years. I have a great faith in them.

Senator HANSEN. It was my understanding that some of the points the Forest Service had in mind, in going along the crest of a watershed, or following a stream, was the obvious advantage that it would be to all and sundry in being able to determine where the boundary of a wilderness was; whereas, if they were to select arbitrarily, say, a line that had not been as yet surveyed, along a mountain slope, or through a valley, that this sort of designation would require first a survey in order that it might be established, and then a description, and, following that, a decision.

And personally, I found some merit in following streams and watersheds as natural boundary lines, that I should think most anyone could easily discern and follow.

Now, is it your thought that these criteria could be replaced by some other system?

Mr. GUTERMUTH. No, I don't have a better system, but what disturbs me a little bit is the fact that in one place, they have designated the crest of prominent ridges, and they hold that this positively must be this boundary, in this particular instance. In the next case they will move over into a valley, and in another case they will pick a river, we will say. And they say in each case, "Now, this positively must be the boundary." I am inclined to think that the reasons that impelled them to select a river valley, for example, as a good obvious marker, could in a great many cases be the case, rather than the ridge. In this particular case, Mount Jefferson, as I understand it, they have selected a ridge as being the western boundary of this area, and they say that this positively must be the boundary line.

But in reality, I am not familiar enough with it to point it out, it is conceivable that some of those rivers could just as well be a good boundary line in this particular case and those precipitous slopes along the western side of this ridge be avoided and thus afford greater protection to the Mount Jefferson Area.

Senator HANSEN. I wouldn't argue at all that we should be restricted in our designation of wilderness areas by the place that God happened to put a stream, or build a mountain range.

Mr. GUTERMUTH. No.

Senator HANSEN. But, on the other hand, I should think we can all recognize that when you are describing areas such as wilderness areas, we don't have an area that will be entirely surrounded by watershed, nor do we usually find one that would be circumscribed by streams, so that both systems, I should think, might very well have to be used.

I don't think, and I am simply repeating now, that we ought to look at an area and say, "Well, it has got to be here, because here is

a stream," or "here is a mountain range." But on the other hand, if we can agree generally upon where it might be, and what we might want to include, then I should think there is some merit in using natural features that occur, rather than arbitrary lines that would have to be determined by a survey.

I say that because in my own country, we have had a number of surveys, and they don't always parallel each other. I know one time, a group may find this to be the line, and later on, as is the case right north of my little town of Jackson now, the line coming from the north doesn't run into the line from the south.

I don't know who is right, but I know that the two lines just don't join, and this, of course, is one of the problems that I suspect the Forest Service contemplated when it chose, rather than to designate lines along section lines, in unsurveyed country, that they thought there would be some obvious advantage in streams and ridges.

Would you agree generally in that?

Mr. GUTERMUTH. Yes, that is right. That is in line with what I had in mind, but what disturbed me a little bit was what I call the more or less arbitrary decision, that in one particular case a ridge must be the boundary, and in the next case it is some other distinguishing formation.

Now, if a stream is a good, distinguishable boundary in one locality, and there happens to be another good stream in another locality that we are considering, I can't see why a stream, if it is the perfect boundary in one locality, couldn't as well be a perfect boundary in one of the others. That is the point I was trying to make.

Senator HANSEN. Yes. Of course, I think you have already said that your organization was not intimate and familiar with this area, and you didn't care to make any specific suggestions as to what might be included or excluded on the basis of your knowledge.

Was that right?

Mr. GUTERMUTH. No, except as I tried to bring out in my statement, I am inclined to think that these areas in the Washakie, areas J and D, we advocated that they consider the views of the Wyoming department. I listened carefully to the testimony this morning. I have a difficult time taking very much issue with anything that Ed Cliff says, because he is not only a truly outstanding forester but a great wildlife man, and a great friend of wildlife and conservation, a person whom I admire very much. On the other hand, I think there is ample evidence to show that where we have had areas opened up with a lot of roads and other forms of human encroachment, you will find that the elk population, pretty much, as I recall, go down, and while you can control certain aspects of the public use of these areas, I still think that the consideration and the recommendations of the Wyoming department should be weighed very heavily by this committee because I believe that they are on pretty sound ground.

Now, it isn't just a question of whether or not roads are going to interfere with the migration routes of the elk. It is not a question of whether they could not give adequate protection to an area during the calving season. It is just the overall human use and the cutting that is going to go on in there, and all other activities are going to be the things that will control this elk population up to a point. Those are the factors that I would like to see considered by this committee.

Senator CHURCH. Thank you very much, Mr. Gutermuth.
Are you finished, Senator Hansen?
Senator HANSEN. Yes, I am.
Senator CHURCH. Our next witness is Mr. Kenneth B. Pomeroy, the chief forester of the American Forestry Association. Mr. Pomeroy?

STATEMENT OF KENNETH B. POMEROY, THE AMERICAN FORESTRY ASSOCIATION

Mr. POMEROY. Mr. Chairman, members of the committee, with your permission, I would like to file this statement in support of S. 2531, S. 2630, and S. 2571, and then take just a moment to tell you why our association is interested in these proposals.
Senator CHURCH. Yes, the statement will be included at the end of your oral presentation.
Mr. POMEROY. We have some 55,000 members in the American Forestry Association, and these people have a great variety of interests. The one thing that binds them together is the feeling of conservation through wise use, and one of these uses is the enjoyment of wilderness.
Each year, many of our members will visit wilderness areas in 11 of the States. This year, there will be about 25 such trips, and none of them will be in any of the three areas being considered here. However, we do have six trips into Wyoming, three into the Teton-Yellowstone area, and three into the Wind River Mountains.
While these people all enjoy and cherish wilderness, they also appreciate the need for other uses of the forests. A study of the proposals for the San Gabriel, the Mount Jefferson, and the Washakie Wildernesses indicate that thoughtful consideration has been given to maintaining a balance of major uses.
Therefore, we endorse these proposals. Thank you.
Senator CHURCH. Thank you very much, Mr. Pomeroy.
Any questions?
(The prepared statement referred to follows:)

STATEMENT OF KENNETH B. POMEROY, THE AMERICAN FORESTRY ASSOCIATION

Mr. Chairman, The American Forestry Association is a nationwide citizen conservation organization composed of 55,000 members. The purpose of the Association is the advancement of intelligent management and use of forests, soil, water, wildlife and all other natural resources necessary for a quality environment, healthy outdoor recreation, and the well being of all citizens.
Preservation of a portion of the country's wild lands in a National Wilderness Preservation System is a highly desirable conservation activity. We offer our support for S. 2531, S. 2630, and S. 2571 to establish the San Gabriel Wilderness in the Angeles National Forest of California; the Washakie Wilderness in the Shoshone National Forest of Wyoming; and the Mount Jefferson Wilderness in the Willamette, Deschutes, and Mt. Hood National Forests of Oregon. We concur in the recommendations of the U.S. Forest Service and the Secretary of Agriculture with respect to the boundaries to be designated for these three wilderness areas and urge favorable action by your committee.

Senator CHURCH. Our next witness is Mr. A. T. Wright of the National Capital Wilderness Study Committee. Mr. Wright.

STATEMENT OF ARTHUR T. WRIGHT, CONSERVATION CONSULTANT

Mr. WRIGHT. Thank you very much, Mr. Chairman. My name is Arthur T. Wright of Alexandria, Va. I am a conservation consultant

with particular interest in the preservation of wilderness. On this occasion, I represent the National Capital Wilderness Study Committee, a group of lay conservationists who reside in metropolitan Washington, D.C., and who are actively interested in the promotion and extension of the National Wilderness Preservation System as founded by the Wilderness Act of 1964.

We support the Forest Service's recommendation for the San Gabriel Wilderness and wish to commend the agency for enlarging the size of the wilderness area beyond that of the existing Devil Canyon-Bear Canyon Primitive Area. It is a real pleasure to support without qualification a Forest Service proposal which contains maximum wilderness acreage.

With respect to the Mount Jefferson Wilderness, we believe that the 28,000 acres of additions sought by Oregon conservationists, mainly within the Forest Service's area 14 on map B, page 14 of brochure, should be approved by this committee, which acreage, when added to the Forest Service proposal of 96,462 acres, will create an outstanding wilderness area of about 125,000 acres.

The Forest Service's exclusion of acreage contiguous to the primitive area which it roaded and logged during a period of wilderness review, when all such activity should have been withheld pending a final determination of this west side buffer zone's best use by the public, must be questioned. Such predetermination of the course of future events as regards wilderness designations gives to the Forest Service an unfair decisionmaking advantage over the Congress and the public—an advantage which Congress probably did not intend it to exercise. With the expertise which they surely possess, Forest Service officers can readily identify potential wilderness system additions and, if unsympathetic, can proceed by management decisions to assure the nonwilderness outcome they desire. If such irreversible decisions are made hastily, without adequate study, the Nation surely will suffer the consequences of the mistakes which can be made in such circumstances.

Turning now to the Washakie Wilderness proposal, we support the additions recommended by Wyoming citizens and conservationists, particularly the upper DuNoir Basin addition of about 29,000 acres. We agree with the view expressed by the Wyoming people that Congress did not intend that the wilderness system be confined solely or even primarily to "goat rock"-type wilderness, and instead that it must surely have been the congressional intent that wilderness areas encompass all ecological types including forested areas. Forested lands have exceptional wilderness value and, as pointed out by the Wyoming citizens, provide needed biological "edge effect" between developed areas and the barren high country. As has been noted, these unroaded forest lands are of extreme importance to the resident elk herds.

Now, Mr. Chairman, on this point, I might digress from my written statement here to mention that I didn't think that this morning's testimony by Dr. Cliff adequately gave very much attention to the resident elk herd problem, vis-a-vis elks in migration.

As I understand it, resident elk herds will leave a roaded and cut area, even though the area may remain on a migration route, and while it is true that they will use the area for that purpose, it does

create, when they gather in other areas, the Yellowstone elk problem, where there are so many of them that they have to be harvested. This is due to the creation of an artificial hunting situation, which isn't really hunting at all, the point being that if resident herds can remain in areas which are not roaded, or logged, that you have better hunting for the hunters

Continuing now with the written statement—If the Forest Service plans to permit the roading and logging of the upper DuNoir Basin (area J) and the Fivemile and Sixmile Creek areas (areas H and I), we find this hard to understand, in view of the fact that these areas are at high elevations where the forests struggle to exist on steep slopes of rocky, shallow soil susceptible to erosion. These lands constitute a critically important watershed for the Yellowstone River, and should not be disturbed. We see little difference here between the Washakie and the Mount Jefferson situations regarding the exclusions of timberlands from the wilderness areas. For example, on page 7 of the Forest Service's Mount Jefferson brochure, the Service says, "Timber production potential at lower elevations is good. It is relatively poor at higher elevations because of the shallow, rocky soil and the short growing season." Timber production also must be poor at the higher elevations in the Washakie and, if harvested, would prove very costly to the American taxpayer in terms of the cost of constructing logging roads and reforesting the area in exchange for the little timber-sale revenue to be derived from it.

It is our hope that this committee will see fit to rely on the soundly based and objective views of the Wyoming citizen-conservationists.

May I digress again for a moment, sirs, to address myself to the problem raised by Dr. Cliff this morning, with respect to Yellowstone National Park and the need for accommodating greater numbers of people, because of the overflow situation there. They need to accommodate people in the Washakie area by means of having recreational areas. Now, it seems to me that this is tantamount to saying that you can't have wilderness, because of a need to overcome or to handle the overflow crowds in Yellowstone Park.

And this, I think, is an unsound reason for not putting land into wilderness protection. These areas can also be roaded and logged, even if they are recreational areas, and this could be just simply another reason for developing an area beyond its potential. I also have this point to make in that regard, as I am not at all sure the American tourist is going to settle for something like a recreation area in the vicinity of Washakie in lieu of going to Yellowstone. If Yellowstone gets the big publicity play, and this is where people want to go, I am not sure just how well they will take to second-rate substitutes, which I think you could call, in this regard.

I think of the Yosemite National Park situation, where Camp Perry is heavily overused, and other camping sites in the park are relatively unused. This is simply because of the tendency of people to go where there are many more people, and where they find the best scenic advantage.

Thank you very much.

Senator METCALF. Thank you very much, Mr. Wright, you have touched on some very important matters that the committee will consider.

Senator Hansen?

Senator HANSEN. I might just ask one or two questions. Having lived in Jackson Hole, and having watched the elk out there for a number of years, I am not sure that I know too much about it. We do find migrations taking place in Jackson Hole that seem to be contrary to your testimony.

For instance, there has been some hunting within Grand Teton Park, worked out cooperatively, under the law, as it must be, between the Park Service and the State game and fish commission, and I know one of the reasons for that is that unless some pressure is applied within the park area, the two agencies, the State Game and Fish Commission, and the Park Service as well, feel that more and more elk might tend to migrate down from Yellowstone and from the Teton Wilderness area, to the refuge just immediately north of the town of Jackson, through Grand Teton National Park. But by keeping some pressure on there, the migration route can be kept further east than the forest land, where open hunting can be permitted.

Now, I call attention to that, because this is an area that is traversed with roads, and it certainly receives the impact of a great many visitors. I think last year, we had over 2½ million visitors in Grand Teton. Would this seem to be at variance with your contention that roads would drive elk out of an area?

Mr. WRIGHT. Well, it would seem so, sir, from what you say. But it seems contrary to what I understand from Wyoming people; that is, that the resident elk herds do not stay in an area which is highly developed, and this is distinguished from the migration situation.

And I understand, too, that this is the way some of the Wyoming Game Commission people feel about it, as well, and I have no expertise in this in my own right, but simply that which I understand from those whose opinions I respect.

Senator HANSEN. If you have been in Jackson Hole, and very probably you have been——

Mr. WRIGHT. Yes, sir.

Senator HANSEN. If you have driven from the Grand Teton Lodge down to Jackson at night, if you have done this in recent years on the east side highway, it is not at all unlikely that you might have run into some elk right on the highway there. Have you?

Mr. WRIGHT. I have seen them from the highway, yes, sir.

Senator HANSEN. These apparently—I like to think of this group of elk as a little group, not excessive in numbers, but they seem to be building up in there—spend the day along the Snake River, in the timber there, in a very narrow little stip of land. I suspect it is not more than a mile, and I am sure in most places it would be much less than a mile in width.

They stay there during the day, and they will come out into the elk ranch meadows and along the highway there at night.

Now, would this be of interest to you?

Mr. WRIGHT. Sir, isn't that par to the area? I mean, would this necessarily pertain in area J, for example? It seems to me that there is very little evidence that elk all act uniformly, or that a resident herd in a comparatively remote area would not be seriously affected by roading and logging. I think this is a possibility.

Senator HANSEN. I wouldn't know. All I can say is that the longer I live there, the less sure I am of what I do know about them.

I have no other questions, Mr. Chairman.

Senator METCALF. Mr. Wright, this morning it was suggested that area J isn't of wilderness quality. It is crisscrossed with roads, and it has been logged off, and isn't under the definition that we normally have of a wilderness area that is in its primitive and primeval state. In view of the fact that we need the area for other recreational opportunities, wouldn't it be better to preserve the quality of the wilderness and leave area J off?

Mr. WRIGHT. I don't think so, Senator. I have to rely on the regenerative capacity of nature, and the fact that the future act is for the future, perhaps even more so than it is for the present, and that we have to come up with a real sound wilderness system, one which will have adequate acreage, and adequate extent for future generations of Americans. I just simply don't feel that, because of the minor intrusions which now exist in this area, that this is a reason for keeping it out of wilderness designation, because in time, perhaps not too long a time, I think that area J will be a real good wilderness. I might advert to the Shenandoah National Park situation. As you probably know, the National Park Service has a wilderness proposal for Shenandoah National Park over here in Virginia. Now, that area was once inhabited by mountain farmers, and the land had been overhunted, and all the timber had been cut, and there were few fish in the streams. The land, in short, had been badly used, and in the 35 years since that park has been created, you now have mature forests, abundant wildlife, a good watershed, and the land has recovered. So you now have, in Shenandoah, a real good wilderness area, one we think will be a good wilderness area, and we have to rely on this. In my estimation we simply cannot afford to be stingy in putting lands into wilderness for this reason, and what is more, Senator, while it might be an oversimplification, wilderness is a little bit like money in the bank.

What Congress gives, Congress can take away and, if later developments require, we can go through the same procedures of the Wilderness Act to take land out of wilderness that we are going through now to put it in.

Senator METCALF. So you feel that the point that was made this morning is that the intrusion has been so slight that if area J is included in the wilderness area that in a relatively short time it will return to its wilderness characteristics.

Mr. WRIGHT. Yes, sir. As I understand from Wyoming people, that there have been tie cut camps and other intrusions in other areas of the Washakie, and they have pictures which show nothing but a few old stumps remaining there. But timber is maturing now, and looks like wilderness country. I think this is so, yes, sir. I just don't believe we can afford to be purists in our attitude toward wilderness. Otherwise, we will be short changed out of good wilderness land.

Senator METCALF. Thank you very much for a most helpful testimony, Mr. Wright.

Mr. WRIGHT. Thank you.

Senator METCALF. Our next witness is Mr. Lloyd Tupling, representing the Sierra Club. As I understand it, Mr. Tupling—you are an old friend of this committee—that you are going to have some other people from the Sierra Club with you.

STATEMENT OF LLOYD TUPLING, WASHINGTON REPRESENTATIVE OF THE SIERRA CLUB; ACCOMPANIED BY ROBERT T. IVES, CLAREMONT, CALIF.; SANFORD TEPFER, EUGENE, OREG.; AND ORRIN H. BONNEY, JACKSON HOLE, WYO.

Mr. TUPLING. Yes, I think, in discussing the Sierra Club position, I would like to have Mr. Ives from California and Mr. Bonney from Wyoming and Mr. Tepfer.

Senator METCALF. Will you call them forward and identify them, please?

Mr. TUPLING. I have here Mr. Robert Ives, from California, who will speak on San Gabriel Wilderness; Dr. Sanford Tepfer, of Oregon, to speak on Mount Jefferson Wilderness; and Mr. Orrin Bonney, who will speak on the Washakie Wilderness.

Senator METCALF. Go ahead and present your testimony in any way you see fit, Mr. Tupling.

Mr. TUPLING. Thank you. Mr. Chairman and members of the committee, my name is Lloyd Tupling. I am Washington representative of the Sierra Club, whose 60,000 members make up one of the Nation's largest outing organizations. The Sierra Club has 21 chapters throughout the United States. The Sierra Club was organized in 1892 by John Muir and his associates. The basic objective of the Sierra Club in 1892 was "to explore, enjoy, and protect our Nation's scenic resources." In 1968, the objectives of the Sierra Club are unchanged.

The Sierra Club, by appropriate action of its membership, supports legislation to establish the San Gabriel, Mount Jefferson, and Washakie Wilderness Areas. Our members, with intimate knowledge of these areas, have appeared at the field hearings conducted by the U.S. Forest Service to discuss the land areas to be included within the proposed boundaries. With me today are Sierra Club members who will present statements on each of the wilderness area proposals. They will detail the basis of Sierra Club's case for fixing the content and perimeter of each area. They have relevant, personal knowledge of San Gabriel, Mount Jefferson, and Washakie terrain and resource assets.

The 33,647-acre San Gabriel Wilderness Area proposed by the Forest Service has the full endorsement of the Sierra Club. We commend Senator Thomas H. Kuchel of California for his sponsorship of S. 2531, the bill which will designate as wilderness a unique section in southern California which is only a drive of an hour and a half from our Nation's vast population concentration in the Los Angeles vicinity. The San Gabriel Wildnerness, when established, will reflect the sincerity of Forest Service officials in fulfilling the protective philosophy of the Wilderness Act.

Field hearings were held by the Forest Service on the San Gabriel proposal in June of 1966. It is interesting to note that support for the proposal was unanimous. This unanimity is significant to the other areas we are discussing today because it brought out that:

1. The San Gabriel area contains no commercial timber;
2. The San Gabriel area has no commerically significant mineralization;
3. The San Gabriel area has no private land holdings within its boundaries;

4. The San Gabriel area has no conflicting uses.

In the context of these arguments, it almost seems that the San Gabriel Wilderness has little to recommend it other than its existence for the enjoyment of humans who can appreciate the intangible assets of wilderness, and for occupancy by the flora and fauna to whom nature has assigned this segment of geography.

I do not mean to depreciate the San Gabriel area as worthy of wilderness status. But I wonder about a viewpoint which achieves unanimity because Nature has not endowed a particular piece of terrain with consumable elements. A parsimonious Nature has made San Gabriel a wilderness area by acclamation.

I raise this point because the Mount Jefferson Wilderness Area and the Washakie Wilderness Area which we seek to protect do not evoke unanimous support. Both areas have merchantable timber, there is some mineralization, there are conflicting uses. Yet the 241,000-acre Washakie Wilderness Area and the 124,000-acre Mount Jefferson Wilderness Area—sought by Sierra Club members—are no less cohesive and integrated than the unamimously supported San Gabriel. Are we to penalize the protection of two superb sections of scenic grandeur because Nature was generous in distributing her largesse there? Poverty of consumable assets cannot be the standard for finding total agreement on wilderness boundaries.

Consideration will be given to the value of intangibles—the values that cannot be measured in board feet of dollars per ton. The economic value of these timber and mineral assets is extremely important but they do not completely fulfill the requirements of American society in the last half of the 20th century.

Looking to the future, a noted scientist, Dr. René Dubos, has said that survival of our system may not depend so much on sustaining a minimal standard of living as on the quality and diversity of our urban environment. He points out that besides food, shelter, clothing, and other physical requirements, it is just as important that human life have "an environment in which it is possible to satisfy the longing for quiet, privacy, independence, initiative, and open space. These are not luxuries but constitute real biological necessities."

When we talk about wilderness, we are talking about man's relationship with his environment. We are dealing with a resource which will determine the quality of life in the United States, now and in the future. For these reasons, we are proposing boundary adjustments which will add to the wilderness protection and the wilderness value of the Mount Jefferson and Washakie Areas. Our proposals will not add to allowable cut or to mineral production, but they will not diminish the quality of life in the United States.

That concludes my statement. I would like to submit for the record some additional material, setting forth information regarding the Mount Jefferson Wilderness Area.

Senator METCALF. Without objection, that material will be incorporated in the record at this point.

(The material referred to follows:)

STATEMENT OF THE SIERRA CLUB

This statement is presented on behalf of the Sierra Club, a national conservation organization with a total membership in excess of 60,000 individuals. Many

Oregonians are members of the Pacific Northwest Chapter, one of the largest and oldest non-California chapters of the Club.

The Sierra Club has had a long history of active concern for the wilderness and scenic qualities of the Oregon Cascades in general and the Mount Jefferson Area in particular. Beginning in 1959, we have supported successive proposals of Oregon conservationists for a study of the scenic and natural features of the Oregon Cascades by the National Park Service. We have supported over the years proposals by Oregon conservationists for wilderness classification of portions of the Oregon Cascades, and have protested actions of the Forest Service which have resulted in losses of the opportunities for a wilderness recreation experience losses which we consider to be excessive. In 1962, 1964, and 1966, we supported the recommendation of Oregon conservationists for a substantial enlargement of the Mount Jefferson Primitive Area and its reclassification into Wilderness status. Representatives of the Sierra Club have appeared and testified on its behalf in support of these recommendations at the hearings held in 1964 and 1966 on the subject of the reclassification of the Mount Jefferson Primitive Area.

Our position today on the proposal for reclassification of the Mount Jefferson Primitive Area into a Mount Jefferson Wilderness is essentially the same as it was when we appeared before the Forest Service at its hearings in Salem, Oregon in 1966. We believe that the maintenance of lands in their primeval untouched state is a matter of great cultural value and importance not only to the people of Oregon, but also to the nation. We have become increasingly alarmed at the rate loss of wilderness and opportunities for a wilderness recreation experience in the State of Oregon. We believe also that the protection and maintenance of substantial portions of lowland old growth Northwest forest is also a matter of great importance to the nation, particularly in view of the continuing program of state, private, and federal agencies charged with the management of our timber resources to eliminate such old growth stands and "return the land to production", as they put it. We do not question this aim for most of our timber lands, but we do believe that our old growth forests must be managed to serve social as well as economic values. We are particularly alarmed at the loss of such lowland old growth forests in the State of Oregon, and see some of the forest lands surrounding the Mount Jefferson Primitive Area as offering what may be the last major opportunity in Oregon for preservation of this resource. We see wilderness and scenic beauty as natural resources coming from the land, and of increasing importance in a nation that is already 70 per cent urban.

It is against this background of concern, and for these reasons, that we are in support of a proposal of Oregon conservationists to add some 30,000 acres to that area of land proposed by S. 2751 to be established as the Mount Jefferson Wilderness. We are wholeheartedly in support of S. 2751 and feel that it has many commendable features. It is a substantial step forward in the right direction, towards assuring that the State of Oregon will have in the years to come a significant wilderness resource. However, we believe that it is necessary to place under the protection of the Wilderness Act all of the lands surrounding the present Mount Jefferson Primitive Area which qualify for a Wilderness status.

Briefly, we urge the addition of the following lands to the Mount Jefferson Wilderness as proposed in S. 2751:

1. The valley of the North Fork of the Breitenbush. This is the area labeled "A" on the attached map. It is a two mile slope containing numerous lakes, ponds, meadows, and small streams; the valley is in a wilderness primeval forest. The skyline road to the north forms a suitable physical boundry along the north valley wall at an elevation of about 4,400 feet. The unroaded portion of the North Fork of the Breitenbush is still a wilderness valley and represents an opportunity to preserve a portion of what all Oregon once looked like.

2. Firecamp Lake and the valley of the South Fork of the Breitenbush. The lakes area is a high elevation plateau, too fragile to sustain the impact of heavy roadside recreational use. One of the two Firecamp Lakes is iucluded within the S. 2751 proposal for Wilderness, but not the other. The Forest Service plans to build a road to this other lake. The lakes are cradled in a small three-sided basin, formed by an especially scenic ridge. The lakes offer a fine view of Mount Jefferson and are an integral part of the wilderness and a physical part of the mountain itself. The South Fork of the Breitenbush was invaded by logging roads after the primitive area was first being considered for reclassification as wilderness. We recommend that the wilderness boundary bend around the end of the existing road, proceed downstream, and the over the western upper slope of Triangulation Peak. The enclosed area contains numerous streams, scenic and

heavily forested slopes, high country meadows and an enclosed steep walled valley. The interior of this addition is at least as much of a true wilderness as a great deal of the high country within the Primitive Area boundaries. This is the area labeled "B" on the map.

3. The valley of Whitewater Creek. In 1961, the Forest Service announced that it was considering reclassification of the Mount Jefferson Primitive Area and solicited comments from interested citizens. However, before this agency had the opportunity to review all the comments, many of which included recommendations for addition of this valley to the proposed wilderness, they conducted a logging sale to take place far up this valley at the very base of Mount Jefferson. We feel very strongly that the large cuts and the logging road which remain in the primeval forest in this place are one of the most unfortunate examples of insensitivity to scenic and wilderness values in the entire Northwest. It is most unfortunate that this timber sale was conducted in this place by the Forest Service even before any hearing were held on the proposal to reclassify the Mount Jefferson Primitive Area. In order now to achieve better protection for the fragile high country meadows of Jefferson Park, and to protect the scenic beauty of the natural setting of Mount Jefferson, we propose that the Wilderness boundary here be moved about three miles west to Cheat Creek, to permit the logging road to revert to nature and the logged area to grow back. We think this addition is absolutely necessary to protect the heavily overused high country at this point of the Wilderness, which now is only three miles wide.

There is ample precedent of inclusion of the existing road within the Mount Jefferson Wilderness. The Forest Service often maintains that clear cuts and logging roads are temporary, because the trees grow back and the roads can revert to nature. There is no reason why this cannot be the case here. Formerly roaded and logged areas now within the Great Smoky National Park have been proposed by the Park Service for Wilderness classification. There are other areas and units of our national parks and national forests which will be so proposed in the future. We think that the essential point to stress here is that the Wilderness is much too narrow for its own protection, and that only a moving back of the boundaries will protect it adequately. In view of the fact that the logging road was constructed and the forest was clear cut during the period that the Mount Jefferson Primitive Area was being considered for reclassification, we suggest that the wisest course here would be to include this valley within the proposed Wilderness. This is the area labeled "C" on the map.

4. Woodpecker Ridge and Minto Mountain. This is the area labeled "D" on the map. Woodpecker Ridge is just to the south of Whitewater Creek, and has a gentle rounded top. Its western slope has been logged, but the northern and southern flanks are still wild. The view from the slopes of Mount Jefferson looking down Pamelia Creek now is an outstanding view of a scenic wilderness forest valley with no apparent marks of man. If the southern slopes of Woodpecker Ridge are logged, this view (already an extremely rare sight in Oregon) will be lost. The foreground of Minto Mountain is also especially scenic, with alpine meadows, creeks, and rock outcroppings. The valley of Minto Creek is also extremely scenic, and the entire area should be included as a buffer zone to provide wilderness protection for the higher country beyond.

5. Bingham Ridge, Marion Lake, and Big Meadows. This is the area labeled "E" on the map. Bingham Ridge is a steep-sided plateau rising between Minto Creek and Marion Creek; its western slopes have been logged. The plateau is forested and the slopes are extremely precipitous and of high scenic quality. Marion Lake is a little over a mile in length and is one of the few remaining lakes of substantial size available for wilderness preservation in the Northwest Coastal Region. The Forest Service proposes Scenic Area classification for Marion Lake. Since motorboating is an already existing use of the lake, it is still permissible to include this area in the Wilderness and of the auspices of the Wilderness Act. Of all the major alpine lakes in the region, Marion Lake alone remains as a wilderness lake. It is recommended strongly that the lake and its approaches be included in the Wilderness. At Marion Lake, the boundary cuts sharply to the west. The boundary proposed by the Forest Service extends down to elevations around 5,000 feet, leaving a western slope of another 1,400 feet out of the Wilderness. Most of this slope is now roadless and undeveloped. It contains meadows and a thick tangled forest. It is some of the wildest country on the entire west side of the Primitive Area.

The Big Meadows road forms a clearly defined physical boundary for the area. It is recommended that the boundary parallel the road, and if exchangeable, the

private inholdings to the south of Big Meadows. The slopes above the road are virgin primeval forest, still untouched.

6. Square Lake-Long Lake. This is the area marked "F" on the map. Square Lake is located about a mile by trail above the Santiam Highway. Unwise motor vehicle access, now partially blocked off, has resulted in some exessive impact at the lake. Long Lake is almost untouched. These lakes are easily accessible, but off the beaten track and far too small to sustain high capacity outdoor recreation demands. They are well suited to Wilderness type use.

The sum total of all these proposed additions is approximately 30,000 acres, which would make a Mount Jefferson Wilderness of about 125,000 acres. Many of our members feel that this is hardly enough; and they point to the tremendous increase in use of Wilderness in the Oregon Cascades—a use which has about doubled in the past seven years. In the Mount Jefferson Primitive Area alone, over 6,800 persons visited the area in 1966, and stayed an average of 4.2 days, according to Forest Service figures. At page 7 of the Forest Service Proposal for a Mount Jefferson Wilderness, is stated an estimated trend in use indicating an increase of about 20 per cent per year. Such a trend would mean that use of the Mount Jefferson Area will double about every five years. Unless the area is larger, as presently proposed, a serious saturation point will be reached quite soon.

EFFECT ON THE TIMBER INDUSTRY

The primary source of opposition to the creation of a Mount Jefferson Wilderness larger than that area proposed for establishment by S. 2751 has been from groups and individuals who fear the impact of this proposal upon the timber industry. We, on the contrary, believe that the additions we have proposed are not only extremely modest from the standpoint of wilderness opportunities in Oregon, but also insignificant in their impact on the local timber industry.

The great bulk of the areas proposed by us to be added to the Wilderness boundaries set forth in S. 2751 are forested, and do contain commercial stands of timber. We estimate that there would be a reduction in the annual cut of the Detroit and Mill City Ranger Districts of the Willamette National Forest—the districts comprising the wilderness on the west side—of about 10.9 million board feet. This represents about an 11 per cent reduction in the annual cut of 98 million board feet in both of these above mentioned Ranger Districts. This sounds like a significant amount, until it is considered in the context of the entire Willamette National Forest. This forest embraces an area of 1.6 million acres, of which 1.3 million acres are commercial timber land, now open and available for cutting. The Willamette National Forest has an inventory of 48 *billion* board feet of saw timber. The annual allowable cut of the Willamette National Forest is 615 million board feet per year. This one forest cuts each year almost half the amount of timber that is cut each year in the entire *state* of Idaho, often though of as a timber producing state. The Willamette National Forest is the largest timber producing forest in the entire United States. A reduction of 10 or 11 million board feet per year in annual cut might be significant in other national forests, but it is not in the Willamette. This reduction would be approximately a 1.8 per cent reduction in the annual allowable cut of that forest. The Forest Service estimates that one million board feet of timber will employ 1.3 loggers or about 3.2 millworkers. If these figures are accurate, all proposals to expand the proposed Mount Jefferson Wilderness would affect some 45 to 50 jobs in the forest products industry in the local area.

The effect of this withdrawal of commercial timberland upon these users of the forest should be balanced against the effect on the increasing number of recreation users if the area in question is not put into the Wilderness. As noted above, these users are increasing at the rate of 20 per cent per year. These are people who seek a wilderness experience. They will continue to seek this experience on whatever land is available. It follows that if more land is available, more persons can enjoy a wilderness experience, and the number of persons doing so is far greater already in the Mount Jefferson Area than the number of persons who might be affected by the removal of some timber supply. To be noted also in this context is the fact that there already has been a substantial drop in employment in the timber industry of the local area. In August of 1967, the Simpson Timber Company closed a plywood plant at Lyons, and a veneer plant at Idanha. These two communities are those nearest to the west side of the Mount Jefferson Area, and the total number of jobs lost by these two closures

alone was 400, or eight to ten times what might be effected by a withdrawal for Wilderness purposes. These plants closed not because of a lack of supply, but because of a weak plywood market.

It is also instructive to compare the effect of this withdrawal upon the timber economy of Oregon as a whole. The State of Oregon has an existing inventory of some 536 billion board feet (international ¼-inch rule). In 1966, 8.9 billion board feet of timber was cut in Oregon, 3.2 billion of it coming from the national forest. The simple point of all this is that an 11 million board feet annual cut lost by dedication to wilderness recreation is hardly a matter of economic importance to the nation, the State of Oregon, or even to the local economy.

We are greatly concerned that Oregon has been shortchanged in its dedicated lands, and may not be able to provide for the recreation demands of the future. Bonneville Power Administration studies predict that tourism and recreation will replace timber and agriculture as Oregon's primary industry by the year 2000. If Wilderness use continues to increase at the present rate, seven times as many persons will be seeking what remains of wilderness recreation opportunities in Oregon as seek it now. And yet for all this, there is set aside in Wilderness and Primitive Areas in Oregon now only 750,000 acres of national forest land. This is less dedicated land than presently exists in the North Cascades Primitive Area of Washington State alone, not to mention all the other dedicated areas in that state. The State of Oregon, with half again as much total land as the State of Washington (62 million to 43 million acres) has reserved in all national parks, state parks, and Forest Service areas only a total of 970,000 acres, or only about one-third as much as its smaller sister state (2.5 million acres). The State of Washington by contrast has set aside nearly 6 per cent of its total land area, and most persons in that state do not think this is enough. Here in the Mount Jefferson Wilderness Area proposals, we have a chance to add some small portion to Oregon's inventory of wilderness.

The present proposal for a Mount Jefferson Wilderness, while commendable as far as it goes, does not appear reasonably designed to obtain the preservation of a suitable area as Wilderness. Focal points are too close to roadheads, some scenic corridors are excluded, wilderness valleys are excluded, and alpine lakes are excluded. Precipitive construction of logging roads and timber sales have caused a gross loss in the wilderness resource at the very time that this area has been under consideration for Wilderness classification. Despite these losses, there is still an opportunity to create a viable Wilderness unit.

The additions recommended will add significantly to the Wilderness. Primeval forests, valleys, ridges, rivers, and streams will be added. The additional areas have value not only as wilderness but also as buffers for focal points beyond. While commercial forest lands are involved, the nation, the region, and the State can afford the loss—our commercial forests exceed the foreseeable demands upon them. On the other hand, the area within the boundaries of S. 2751 is not likely to meet, for very long, the foreseeable demands for wilderness recreation. If its present narrow borders are not widened and expanded, overuse will soon make it incapable of offering the type of environment proposed to be created by this bill.

Mr. TUPLING. Now, at my right is Mr. Robert Ives, who is here from California to present the Sierra Club statement on San Gabriel Wilderness.

Senator METCALF. Mr. Ives, we are delighted to have you here, and to hear your testimony on the proposed San Gabriel Wilderness Area.

Mr. IVES. Mr. Chairman, my name is Robert T. Ives and I live at 264 East Green Street, Claremont, Calif. I am appearing on behalf of the Sierra Club, a national conservation organization with some 56,000 members, many of them from southern California. Our main office is at 1050 Mills Tower, San Francisco, Calif. The Sierra Club has been dedicated to the preservation and enjoyment of wilderness for 75 years, ever since the club was organized in 1892 by John Muir.

I am chairman of the club's southern California regional conservation committee. I would like to express the club's support for Senate bill 2531, to designate the San Gabriel Wilderness as an addition to

the National Wilderness Preservation System. This support is based on studies of the area that were made by the natural science section and the conservation committee of our Angeles chapter. I myself have hiked in the area, both in the canyons of the lower portion and on the pine slopes of the Mount Waterman ridge in the upper portion.

The club supports the proposed acreage of 36,137 acres and the proposed boundaries, which in most cases extend close to existing roads. The club is pleased to note the addition of 2,490 acres in the Bobcat Canyon area to the wilderness proposal.

We support the proposal because we believe it important to preserve several substantial representative samples of each biome in as natural a state as possible. A substantial portion of the proposed wilderness lies in the chaparral community characterized by drought-resistant shrubs that burst into flowers in the spring, dry out in the summer and fall, and spring up again from underground stems after fires. The canyon bottoms support a streamside community with trees characteristic of more northerly forests such as the White Alder and the Big Leaf Maple. The transition zone of the upper slopes contains several species of pine, incense cedar, white fir, and big-cone Douglas fir. We note the presence of rainbow trout in the area, California mule deer, desert bighorn sheep, brown bears, raccoons, coyotes, and grey foxes.

We urge that the number of heliports designed for fire protection be kept as small as possible. We understand that most of these are and will be located on ridgetops. We wish to encourage the Forest Service to keep them as small and as inconspicuous as possible.

Finally, we urge the Forest Service to keep the dirt road to the south running along the west fork of the San Grabriel River in its present modest status, with locked gates to preclude general vehicular usage.

The wilderness proposal is a good one. We are pleased to support it.

Senator METCALF. Thank you very much, Mr. Ives. Do you have any questions of Mr. Tupling and Mr. Ives, Senator Hansen?

Senator HANSEN. No; I don't. I think, though, Mr. Chairman, it might be appropriate to introduce and to ask for inclusion in the record at this time a working paper that has been prepared by the Forest Service, under the direction of William A. Worf, which contains some interesting statistics. It is headed "Wildernesses, Primitive Areas, and National Park Wilderness Areas in the Vicinity of the Proposed Washakie Wilderness."

Under the national forest wildernesses are included the four areas, Bridger, North and South Absaroka, and the Teton, with a total of 1,780,994 acres. Proposed for addition in the Washakie proposal is 196,390 acres. Primitive areas still being studied in Wyoming are the Glacier, 177,000 acres, and the Popo Agie, 70,000 acres.

In Montana, the Absaroka, the Beartooth, and the Spanish Peaks, for a total of 590,800 acres are under study, and in the Grand Teton and Yellowstone Parks, a total of 1,850,000 acres for a grand total of 4,418,184 acres.

Without objection, I would like to ask that this be included in the record.

Senator METCALF. Without objection, that will be incorporated in an appropriate place in the record, to be selected by the staff.

(The information follows:)

Wildernesses, primitive areas, and national park roadless areas in vicinity of the proposed Washakie Wilderness

	National forest acres
National forest wildernesses:	
Bridger	383,300
North Absaroka	351,104
South Absaroka (to be renamed Washakie)	483,130
Teton	563,460
Total	1,780,994
Proposed for addition: Washakie proposal	196,390
PRIMITIVE AREAS STILL BEING STUDIED	
Wyoming:	
Glacier	177,000
Popo Agie	70,000
Montana:	
Absaroka	64,000
Beartooth	230,000
Spanish Peaks	49,800
	590,800
National park roadless areas:	
Yellowstone	[1] 1,700,000
Grand Teton	[1] 150,000
Total	1,850,00
Grand total	4,418,184

[1] Very tentative figures to be firmed up as a result of studies currently underway by the National Park Service.

Senator METCALF. Who is next, Mr. Tupling?

Mr. TUPLING. The next witness, Dr. Sanford Tepfer, of Eugene, Oreg.

Senator METCALF. Dr. Tepfer, delighted to have you before the committee.

Mr. TEPFER. Yes, sir. Thank you.

Mr. Chairman and members of the committee, I would like to submit the formal written statement, but I intend to expand it, with my own remarks, rather than reading it directly.

Senator METCALF. Without objection, your statement will be incorporated in the record at the conclusion of your remarks.

Mr. TEPFER. Thank you.

I am Sanford S. Tepfer. My address is 2011 Elk Drive, Eugene, Oreg. I am professor of biology and head of the department of biology at the University of Oregon in Eugene. I have just retired as chairman of the Pacific Northwest Chapter of the Sierra Club.

My statement represents not only my own views, but also the consensus of my department and the views of the Pacific Northwest chapter, containing approximately 1,550 members. Most of these reside in western Oregon and western Washington.

I would like to address my attention first to the philosophical question of total need for wilderness in our society, at some time in the future, when we are dealing with much greater populations than we have present now.

To me, the controlling arguments about how much should be included within the boundary of the proposed Mount Jefferson wilder-

ness is a question that must be determined in the light of future populations, rather than present-day economics alone.

I am not trying to say that we can ignore economic arguments. I am simply saying that it is impossible to have too much vision. I would speak to the idea that we have to make our decisions now if we are going to preserve anything as wilderness. Any decision made at this time to exclude areas that are proposed for wilderness is an irrevocable decision, because those lands will be placed under the multiple-use, sustained-yield logging, and very quickly, once a road——

Senator METCALF. Well, now, we discussed this a moment ago, and we had an area J which was recommended to be incorporated in a wilderness that had been logged over, and has a network of roads.

Mr. TEPFER. Yes; but not with present-day logging methods, with all the machinery, and all the blasting, and all the roads.

Senator METCALF. It doesn't always result in the fact that a logging or logging operation destroys an area for future incorporation into the wilderness.

Mr. TEPFER. That is right; but it is never quite the same as if you get it before it has been logged.

Senator METCALF. Then we should take area J out.

Mr. TEPFER. Area J in the Washakie?

Senator METCALF. Yes.

Mr. TEPFER. All I know about area J is what I heard this morning, sir. From what I heard of area J, I think that the intrusions have not been sufficient to exclude it, but if you look over the logged-over country in western Oregon, I think you would say that it would be a long time before you could even think about it in the same fashion.

I will get back to that point, though, on another matter, in a minute.

I am saying that if we draw the line for preservation at a time of any future national emergency, the Congress makes the line, the Congress can move the line. You are saving the trees, and they will be there. You are saving the land, and you can change the decision, if necessary, although, I hope it would never be necessary.

Most of the discussion in the Jefferson has to do with the west side areas that are designated by No. 14 in pale blue on the map.

I would like to speak first in connection with the statement made this morning that one of the functions of a wilderness area is to preserve an example of the forest heritage.

Well, the Mount Jefferson Wilderness indeed will preserve a segment of the forest heritage of Oregon, according to the present boundaries, but most of the commercial forests of Oregon are Douglas-fir forests, and very, very little of the forest that is set up for preservation is indeed Douglas fir forest.

Somewhere between 2,000 and 3,000 acres of it are; but the rest of it is Alpine and sub-Alpine types, other species. There are mountains, glaciers, meadows, beautiful, magnificent country; but the forests are not, in fact, representatives of what the forests were in western Oregon, because that is high country. Most of the effort in setting lines on area 14 was to include some of the somewhat lower elevation Douglas-fir forest. Not the best of it. The best of it is already open to logging, and that is fine.

The next point is the question of jobs. The statement was made by the Forest Service that, if area 14 were excluded, we would lose 600-

some-odd jobs in the lumber industry in Oregon. Well, that may very well be true. I have no way of challenging that figure. I would accept it. I think that we need to look, in the first place, at the duration of those jobs, and the answer, of course, immediately is, "This is sustained yield logging, the jobs will go on forever."

Don't you believe it. We don't log with a mule anymore. We have machinery, and further ahead into the future, fewer jobs are involved in the same kind of logging. That must be balanced against the jobs that an increase in the recreation industry would provide in the future, and the recreation industry buildup in the State. Admittedly, lumber is the major industry in Oregon. I have just heard a figure that it represents 47 percent, but it is falling all the time in its relative importance in the State. It is bound to continue to fall. It is the nature of the trends in our population, in our industrial base, and in the increased time for recreation that people have that provides for greater demands on the wilderness, greater demand on the other recreational facilities.

Senator METCALF. You say lumbering is falling as far as the employment of people is concerned, but not as a major industry as far as production of dollars worth of goods.

Mr. TEPFER. That is right. I think that it is falling in terms of its percent of the total, as other industries are building up. The lumber industry is not growing and other kinds of industry are.

I have a figure that Oregon has reserved only seven-tenths of 1 percent of its commercial timber for preservation; that is, reserved from cutting seven-tenths of 1 percent. A comparable figure for the State of Washington is 8 percent. I don't know what it is in other States. All that we are asking is a very small increase in this very small percentage of commercial timber that is in fact reserved. Obviously, all we can do is ask. It is the Congress that has to make the decision.

I would like now to direct my attention to the small areas including lakes, area E, Marion Lake, on the west side, shown in pink, area 15, on the southeast corner, representing a small section with two important recreation lakes, Square Lake and Round Lake. The Forest Service wishes to exclude these from inclusion in the wilderness, so that they can be developed for mass recreation. They are rather heavily used. They are relatively near to roads, although you can't drive into them. I would make this plea: That they be included in the wilderness so that they will have legal protection from despoliation in the future that they would not have if they were not in the wilderness. It would in no way inhibit the present level of use, nor an increase in the level of use. The Forest Service doesn't intend to put a road into Marion Lake. They said so this morning. Why can't we include it in the wilderness?

An argument may be, "Well, there are so many people there, we have to build toilets." Why can't you build pit toilets in the wilderness areas? There are pit toilets in wilderness areas all over the country. I can see no reason for that as an excuse. There is no question of commercial logging in either of these two areas.

Next, one of the major problems in the entire Mount Jefferson Wilderness at this time of reclassification is the shape of it. Not the total size, but the shape. It is long, it is narrow, and it has a vulnerable

center. It has a narrow waist. It is hemmed in on the east by the Warm Springs Indian Reservation, and we can't control the development of that. It is shown up there in the upper right-hand corner of the map.

It is hemmed in on the west by commercial timberland that is already under development and will remain under development.

Well, what is the problem? The problem simply is that one of the most beautiful spots in this wilderness, and one of the most important ones for recreational use, is an area known as Jefferson Park. Jefferson Park is a high mountain meadow, with lakes, located just north of Mount Jefferson, above the headwaters of White Water Creek, flowing to the west. At that point, the wilderness area is something in the neighborhood of 3 miles wide. This has made Jefferson Park now so accessible that it is subject to heavy 1-day use, and it can't stand it.

A fragile mountain meadow in the wilderness is just as subject to overuse as Yosemite Valley is. The same sort of problems can occur. We who believe in preservation foresaw this problem and in 1962, when the Forest Service said it was studying this region for reclassification, we begged them not to log the valley of White Water Creek on the west, that part outside the boundary of the wildnerness. Area No. 14 is traversed by road. We asked that that not be logged, that this would open up Jefferson Park to heavy and destructive use.

Before it was possible even to hold the hearings held in 1963, the Forest Service built the road and took out the first logging cuts. Immediately, the use of Jefferson Park has gone up enormously, and the place is simply wearing out.

Therefore, at this time, and this is in reference to your comments on area J in the Washakie, we are asking that the wilderness be put back down the White Water Road, and close the road. Now, that isn't the same kind of wilderness there, but we think it should be included in the area of wilderness to keep out the motor vehicles, to slow down the wearing out of the most magnificent mountain meadow area in there.

It is necessary to protect it, in our opinion. Of course, that compromises the standards of what constitutes wilderness. That has been logged, just a couple of years ago. That is, there are sections logged, not the entire area, and there is this one road in it. It would be a long time before it would be wild again, but it will reduce the usage.

Jefferson Park can stand fairly heavy use, but not as heavy as it is now getting. We have a problem, then, of viability on size and shape that must be considered for a small wilderness area like this which would be less important in some of the larger ones in Wyoming.

I would also like to call your attention to the fact that a point was made this morning that the Forest Service was to be congratulated for paying attention to local hearings, and local opinion. They certainly didn't listen to us on White Water, because we predicted what would happen, and it did happen. The last hearings that were held by the Forest Service in Salem in 1966 had a vast predominance of testimony for the west side enlargements that we are asking for now.

My last point is that the decision is up to the Congress. It is irrevocable in one direction, as far as I am concerned. If you draw that line on the west side, you can never move it westward within our lifetime. If it were necessary, you could still move it eastward.

Thank you gentlemen.

Senator METCALF. Thank you, Mr. Tepfer. Your prepared statement will be printed at this point.

(The statement referred to follows:)

STATEMENT OF SANFORD S. TEPFER, THE SIERRA CLUB

I am Sanford S. Tepfer, 2011 Elk Drive, Eugene, Oregon 97403. I am Professor of Biology and Head of the Department of Biology at the University of Oregon. I have just retired as chairman of the Pacific Northwest Chapter of the Sierra Club. My statement represents not only my own views, but also the consensus of my department, as well as of the Pacific Northwest Chapter of approximately 1550 members, of whom about 1250 reside in Oregon and Washington, about 550 in the Willamette Valley region extending south from Portland.

Speaking for these groups and for myself, I am asking your commiteee to amend S. 2751 establishing the Mt. Jefferson wilderness, to increase the size of the proposed wilderness from the approximately 95,450 acres in the Bill to about 125,000 acres. I commend the committee for adding two areas now included in the bill but not proposed by the Forest Service. I believe that there are valid agruments for adding several other areas, listed in order of priority,

1. Several areas along the western boundary of the proposed wilderness, including:

a. The remainder of the Firecamp Lakes region.

b. The North and South Forks of the Breitenbush River.

c. The valley of Whitewater Creek.

d. Woodpecker Ridge, Pamelia Creek, Minto Mountain, Bingham Ridge, Big Meadows.

2. The region around Marion Lake, also on the western side.

3. Square and Long Lakes, on the southern boundary. The boundaries that we propose are shown in testimony submitted by many outdoor organization representatives.

Those interested in outdoor recreation and in wilderness preservation have been struggling through hearings for many years in an attempt to convince the Forest Service that recreational and other values, including the economic advantages of a recreation industry, should be deemed paramount in this highly scenic region, with commercial logging restricted to forest lands farther removed from the majestic volcanoes of the Cascade Crest. When reclassification was first proposed by the Forest Service many years ago, we submitted recommendations to add much of the critical area now suggested. The Forest Service responded by logging and road building in the valley of Whitewater Creek, then proposed reclassification essentially as they propose today. We protested the logging of the disputed area to no avail. At the request of outdoor clubs, a formal hearing was held in 1964. Shortly afterwards the Wilderness Act became law, and the study and reclassification procedures had to be repeated. At hearings held in Salem in 1966, proponents of the enlarged wilderness outnumbered opponents four to one.

I would like to give both specific and general arguments for amending the bill to enlarge the area. High mountain wilderness is extremely fragile. It can be destroyed by overuse by people and by pack stock as easily as a meadow can be overgrazed by cattle or sheep, and it is just as difficult to restore it. The scenic grandeur of Mt. Jefferson is traditionally enjoyed by outdoorsmen from camping sites in Jefferson Park, the name given to an area of fine meadows and small lakes located just north of the mountain. At this point the proposed wilderness area is only about 3 miles wide. On the east lies the Warm Springs Indian Reservation. The boundary cannot be extended in this direction even though the tribe intends to log their lands shortly. On the west lies the valley of Whitewater Creek, logged and roaded in spite of our protests right up to the boundary proposed in this bill. The Whitewater Road makes the fragile Jefferson Park country accessible for short picnic-like trips, thus increasing its use enormously. We are making the unusual recommendation that this valley, although roaded and logged in part, be included in the Mt. Jefferson Wilderness. A mistake made earlier need not destroy the wilderness if the Congress acts today. Marion Lake, as well as Square and Long Lakes to the south, can stand rather heavy recreational use, provided motorized access is prevented. If these areas

are added to the Wilderness Area they will help take the pressure off of Jefferson Park. The principal specific arguments for the addition of the other west-side areas is to preserve some of the Douglas Fir country.

The proposed Mt. Jefferson Wilderness, like the small Mt. Washington Wilderness, the Diamond Peak Wilderness, and much of the Three Sisters Wilderness, contains relatively little timber of prime economic value—such is the result of conflicts of interest. The great forests of Oregon are the Douglas Fir forests. More of them should be preserved to record for future generations what this grand forest was like.

More general arguments could be applied to the enlargement of other wilderness areas presently ready for reclassification and permanent wilderness status, but I shall confine my remarks to Oregon, with which I am familiar after 13 years of hiking, backpacking, skiing, and paddling down wild rivers. I must remind the committee that most of the former great stretches of wilderness have now been committed to sustained-yield logging by the construction of a nearly complete network of logging roads, and the cutting of various sections along those roads. The former wilderness now has a moth-eaten appearance when viewed from the air, or from nearby mountain tops. Once committed to economic exploitation of its timber, which is indeed a renewable resource if properly managed, it is not available for the kind of recreational values that we are seeking, those of a wilderness. Fifteen years ago, it would have still been possible to make vast extensions of wilderness area boundaries. Today this is no longer possible.

We are able only to ask for pitifully small extensions of areas such as the Mt. Jefferson to include as yet untouched nearby lands within protected boundaries. With the continuation of clear trends for increases in population, and for increased use of wilderness well beyond what the expansion of population, and for increased use of wilderness well beyond what the expansion of population would explain, it is now reasonable to make these relatively small extensions that are still possible.

In studying Forest Service figures on the amount of timber that will be preserved if the present bill is enacted, please note that mose of this timber is of the less desirable alpine and subalpine types. Only 3100 acres of large, old growth Douglas Fir and Ponderosa Pine will be preserved. The rest is relatively poor timber, hemlock, subalpine firs, lodgepole pine, and other species. We have calculated that Oregon has reserved only seven-tenths of one percent of all its commercial timber land from cutting (4 billion board feet out of an estimated 536 billion board feet.) Can't we afford to reserve a bit more? We believe that the future economic benefits of the trees in the expanding recreation industries in Oregon greatly outweigh their value as lumber. If a national emergency ever exists that would require great increases in timber usage, it would always be possible, by Act of Congress, to reverse a decision made at this time for increased preservation.

Once land is roaded and logged, it will not ever be wilderness in our lifetime, or the lifetime of our children. The forest will grow back indeed, but in neat packets suited for harvest rather than in wilderness. A negative decision on our request is an irrevocable one; an affirmative decision is only pro tempore. In another ten years the dedicated and protected wilderness areas will be the entire wilderness remaining. Any lands that are to be preserved must be preserved now. Gentlemen, the decision is yours.

Mr. TUPLING. Mr. Orrin Bonney will discuss Washakie.

Senator HANSEN. Before Mr. Bonney starts, may I just take this occasion to say that we were delighted to have him here today. He is well known in Wyoming, and I think certainly deserves commendation for the excellent work he has done on the Wind River Mountain Range. He is probably the most expert in knowing about all of the peaks, the access trails to those important back-country areas up there, Senator Metcalf, and I am very delighted and pleased that he can be here today.

He is a man that has traversed this country, and though not everyone may necessarily agree with him on his conclusions, I can say that

he speaks from firsthand knowledge, and I am delighted that he can be here to testify today.

Senator METCALF. Mr. Bonney, we are looking forward to your testimony.

Mr. BONNEY. Thank you, Senator. Mr. Chairman and persons here today, I think the Senator has probably introduced me pretty well. I live in the Jackson Hole country of Wyoming, not too far from the Senator in the summertime, and we both love the Wyoming country, and want to see everything done that can be done for Wyoming, both of us.

Senator METCALF. If you work as hard for Wyoming as Senator Hansen does, then I am sure you will try to do everything for Wyoming.

Mr. BONNEY. I am speaking for the Sierra Club, but I can't divorce from that my own feelings on the State and the desire to preserve the nature of it, so I may get my own feelings mixed into it somewhat.

First, I would like to commend the Forest Service for putting the Boedeker Butte area into this proposal. This occurred subsequent to the Riverton hearing. With all due regard to the Forest Service, they recognized an error had been made, and they put out their brochure showing Boedeker Butte as a typical area of the wilderness which ought to be preserved, and the picture they put in their brochure didn't show that. Everything that was in the picture was excluded from the area.

Now, I make mistakes myself and try to correct them, too, so they have corrected the mistake, and they put Boedeker Butte in the proposal. At the moment I am just elaborating on my remarks. I have a written document to go into the record, and it is long, and I don't want to read it.

Senator METCALF. It will be incorporated in the record.

Mr. BONNEY. I don't want to take up your time with it, but I would like to make some comment here.

I think that our discussion of Boedecker Butte points up one of our great problems concerning where to put the boundaries.

The Forest Service, as they did on Boedecker Butte, ran their line on the top, practically precluding the whole scenic area, like defining the boundaries of the Mall by the top of the Washington Monument.

You don't have anything, and they didn't have anything here on Boedecker, nor on some of these others, because they went to the top of the buttes and the top of the pinnacles.

I don't know whether anybody here is familiar with surveying, but I don't think a surveyor could get on top of some of these pinnacles. I am a mountain climber, and I would have difficulty. I don't think a surveyor could get there to survey these boundary lines.

You can ask any surveyor, and he would tell you he would much rather be working on these lower points, which we have designated on our map. These are all high points easily seen on the ground. A surveyor would be much happier getting out on those outlying points and laying out his line than he would scrambling along the tops of the pinnacles.

The Forest Service, in this brochure, characterize this Washakie wilderness as a country characterized by deep, narrow valleys, some of them true canyons, and broad flat-topped mountains and plateaus.

They go on to describe how it was built up from volcanic material, how it is deposited in horizontal layers, and these are cemented by water action. They say they are extremely unstable, and break down irregularly, resulting in steplike cliffs and buttes. But the Forest Service also says this, and I think this is important to the whole matter of Washakie boundaries:

> The narrow valleys, with the narrow strips of timber in the bottoms adjacent to precipitous canyon walls, create a primitive charm. Numerous small parks and side drainage offer chances for complete seclusion.

I agree with the Forest Service, and what they have said, that it is these narrow strips of timber at the base of the great escarpments that give the area its charm. You can turn to the proposal which the Forest Service has prepared. You can look at the picture not only of Boedecker Butte, which I mentioned, and also look at Norton Point.

You know what their boundary does on Norton Point. Here is beautiful scenery. This is a view from the campground, the development at Double Cabin Campground. Here is this beautiful scene, with Norton Point pinnacle rising up, and all this forest covered pinnacle.

What does the Forest Service do in the boundary lines? I don't think that Dr. Cliff himself this morning realized what they are doing there. I don't think he has been there to see this country and had checked the boundaries and seen what it was. They have come clear up above all this timber to lay out their points.

Senator METCALF. You are indicating the timber in the picture about half way up the slope?

Mr. BONNEY. Yes.

Senator METCALF. Where the timberline is?

Mr. BONNEY. Yes, and they have gone above that.

Theoretically, they can get some of the timber values, but even there the timber is of very little value. It is hard to reach. As you get toward timberline, the timber gets more scrubby and scattered, but still there is some timber in there.

Where there is a narow valley cut, they will take that out, but they ruin the whole country when they go in, as they did when they timbered in area J.

Over in the DuNoir, only about the eastern third of that was timbered. The rest is virgin. Some of the most beautiful timber in Wyoming is there in the entire western part of that blue section on the map. They went in with tie hatchets. They took a tree big enough to make a tie out of, cut it down, chopped it, and hauled it out with teams and floated it down the river.

Nowadays it is an entirely different technology. In fact, I contend that the technology has deteriorated rather than improved. They go in there with big machines and bulldoze out everything. Some of the people from Wyoming will show you pictures of where they have just taken out every tree, every sapling, every shrub. Everything that is on the ground has been bulldozed out.

The trees that we would make two-by-fours out of in any other part of the country are burned. All they make from that timber is two-by-fours. That is all U.S. Plywood makes. They take big trees that can make dimension lumber and everything. What they can't take, they bulldoze into a pile and burn. The ground is stripped bare. That is one

thing that the Wyoming people have been complaining about. They are complaining about it in this DuNoir area.

We had the hearing at Riverton, and it was apparent that these boundaries should be extended. I did not have a chance to count the statements that came in. They came in to the Forest Service and are supposed to be sent to Congress. They were kept in Denver, and have never been sent to this committee or this Congress, as the Forest Service said they would do, and as the law provides they should do. They are still in Denver. They should be here, so that you gentlemen on the committee would have a chance to see the record, and see what the people there said, and see what the Forest Service said.

Of the people who testified at Riverton 61 percent were in favor of extending these boundaries to include the DuNoir. You pick up the newspapers from Wyoming, and see the headlines in the front pages of everybody, realizing what is at stake, demanding that this should be preserved.

There are people who can show you pictures where the old tie cutting took effect, and it has all returned pretty well to nature. It shows the effect of nature. That is what the Wilderness Act is, the effect of national forests, where the influences of man are diminishing. That is true, even in the old eastern section shown on the map. Down below is a great need for recreation areas. There must be added facilities. We must have increased recreation areas in the national forests.

From where you sit, you probably can't see the green area. That is all forest area, the lines on the map there. There are vast areas of timber, so that we don't need to disturb these scenic strips of timber.

Right below the East DuNoir is Trail Lake. That is an ideal recreational area. In the old days of the tie cutting, they built a dam on a lake there. Now it is filled with waterfowl and trumpeter swans, and there is a jeep road in there that I could not drive with my high-wheeled International. It could be made into a road, and people could get in there, and they could establish a very beautiful and fine recreational area there. The people could go from there back up into the timber, and into the country up higher that is beautiful and scenic.

There are several other areas there, all outside the proposed area. I don't think the Forest Service, if they showed you the plans, showed any of these areas within that colored area there.

Trail Lake would be ideal for recreation. It is easy to reach. They could build a road there inexpensively, and there are many other places there where they could do it.

The other line, still talking about these strips of timber along the escarpment—if you can indicate the forest line which follow the high summits of peaks. That is the forest line. The lines that we have drawn are there.

Show the lines that the conservationists and the Wyoming people have advocated. They pick up the high points. There will be a pinnacle sticking up outlining these main scenic features, and we run from one of those to the other. We come out to the low part, and the outlyers, and not take in the rim and the top of the peaks.

Now, I think these public hearings not only in Riverton, like the Forest Service had, but hearings as we have here are of great benefit. They are one great chance for the American public to say what they think and what thy feel, and it gives a chance for both the bureaus

and the Congress to consider what the people themselves are thinking, and what they are feeling. It also gives us some opportunity to hear what the other side has to say, and we can think about it. Maybe sometimes they are right.

On section E we have pretty well determined to agree with what you might say the other interests, the Forest Service and others, say. We originally had that area there, but now we are willing to give it up. It is going to be desirable for recreational uses at Devil Lake, and it is perfectly all right with us to take that out of the proposal. I think that was a result of the hearing, and we heard what the other side had to say about it, so that it sometimes works both ways.

Now, what is the value of all this? There is a lot of eyewash in this thing, but really the problem here, and the difference, is on timber. I don't kid myself about it. There are a lot of things said, but timber is the real problem here.

These interests want to go in and cut the timber, and we feel that it will completely destroy the beauty of the country, completely ruin one of the greatest economic values that Dubois and Fremont County has.

Over in the Jackson Hole country, Teton County, we have our scenic benefits there. We are probably the most prosperous or nearly the most prosperous county in the whole of Wyoming, although our population, Senator, is something like 2,000.

Senator HANSEN (presiding). A little more.

Mr. BONNEY. Maybe I shouldn't put it that low, but of all the counties in Wyoming, we are fourth largest in the sales tax receipts that go to the county. That is for a small county. That is because of the two and a half million visitors that the Senator mentioned.

Dubois pays that, and Fremont County, and the big advantage over this is not the few sticks of timber that they get out there, but the future of people coming in to see the wild herds of animals, and these scenic features.

What is the timber worth? I will just have to take their figures. In their brochure, in this J area of the DuNoir, I understand there is an appraisal of similar timber in that section of maybe 55 cents a thousand cubic feet. I understand there have been timber sales advertised in the newspapers there of similar timber with a $2 minimum per thousand.

They say here in their proposal that they have submitted to this Congress that there is 30 million commercial feet of timber in there. Gentlemen, do you know what that represents, at 55 cents a thousand? That is $16,500. That is the dollars and cents involved. If you take the $2, at 30 million feet, you have $60,000 involved, as against the economy of the whole town of Dubois and against the economy of all of Fremont County, and Wyoming, too.

Wyoming gets lots of sales tax. Part of their government is supported by the visitors that come there in the summertime, and support it. All that is balanced against this little, measly, in the entire DuNoir, $60,000, if you take the minimum that they are advertising that timber for; $60,000. It is gone forever.

Left like it is, it will support the Wyoming economy, and Fremont County, and the town of Dubois, for generations. But take it away, and in a few months it will be gone, and it is gone forever. This generation can't restore it, and the next generation can't. That is what we are talking about.

Now, coming out on these outlyers, and getting these little thin strips of timber, the Forest Service says that will be 10 million board feet of lumber, and it is necessary to the timber industry of Dubois. They say that is necessary. Ten million feet of lumber at 55 cents is $5,500, necessary to the lumber industry of Dubois, or, if you take the $2, 10 million feet at $2 is $20,000, necessary to an industry the size of U.S. Plywood & Champion Paper. Actually, I think the lumber industry should be ashamed of itself.

There are vast areas, which I don't know whether you can see on the forest map, there, all over this section of Wyoming, in the Wind River district, and we have not asked for them. We have asked only for this little minimum, very little of it have we asked for. We have left the whole thing to the lumber industry. We have not sought to be greedy, as they have sought to be. We should get together. We should get along together there. But they have to have everything.

There is one other thing that I would like to speak to here. I think, from some of the remarks that Senator Hansen made this morning, that he wants to watch this same thing, too.

It became apparent at the Riverton hearing that the large proportion of the people in Fremont County wanted this east and west DuNoir preserved.

The Forest Service representatives were there, and knew that that was in issue, that this was something that had to be decided. They knew that under the Wilderness Act the decision should be made in this Congress, before this body, and I don't think they should attempt to make this decision and cut this timber off before it can be decided here.

I am willing to go with the decision of this body, but I am not willing to have this all determined and have it all become moot before it has a chance to be discussed and determined here.

Now, I don't know whether this is true or not, and the Forest men would have to verify it, but I have been told since I came to Washington on this trip that the Forest Service is already coming up from Long Creek, and gone over into Wolf Creek drainage, where she is pointing out on the map, and made an attempt to cut there, and tried to forestall any action by this Congress to put that into the wilderness.

I am sure that the Senator has asked for that information, and I think it should be forthcoming from the Forest Service. It should be determined if they have gone in on any of this area that we are discussing.

If they have, they should be stopped, and certainly no further timber depredations should take place until Congress has the opportunity to make the decision.

Concerning the elk, I think sometimes I am like Senator Hansen. I don't quite understand the elk. I live in the town of Kelly, and I have gone home from Jackson one night in probably late September or early October, and I had to wait until 250 elk crossed the road in front of me, so that I can't say that elk never cross the road.

However, there on one side of the road was the elk refuge pasture, where they raise the hay for the elk, and on the other side the pasture itself. They were not under pressure from hunting.

It was the fall of the year, when the elk naturally come down. In the wintertime you can go on the elk refuge, and it seems as if they are as tame as cattle. You go in the mountains in the summertime, and you cannot get near one.

It is maybe a different habit at the time of year, or something, but I think that once you do come in with lumbering operations and disturb their summer range, and their migration routes, and bring it under pressure of hunters, or build jeep roads into area J and let a half dozen hunters go up on the first day of hunting season, that the elk would be scattered up in the hills, and might never come down that migration route again.

Wyoming has gone to a lot of expense in an area south of this proposed Wilderness area where the Wyoming Game Commission has bought an elk pasture. They bring the elk in there and feed them in the wintertime, so that they won't come down and get on the ranches and cause trouble there.

I do think the elk would be disturbed, particularly by the timber cutting, and by the type of roads that they build there. Maybe they are used to our Jackson Hole country, and know they have lots of friends there in the wintertime. I don't know. Anyway, it is a free meal, so that that probably influences them in coming down to the elk refuge.

I believe my written statement will take care of most of my other comments, and I will be glad to answer any questions.

Senator HANSEN. Mr. Bonney, I want to thank you very much for an excellent statement.

I have before me a copy of your prepared statement that is very comprehensive, and I know that the members of the committee will study it carefully, because they recognize the background from which you speak, and will be impressed, as I am, with what you say.

May I just make one or two observations? I am sure you will be the first to want to have the record straight, and I think it ought to be noted that Teton County shares in part of the sales tax take in Yellowstone Park, so that what we get there does not reflect simply the tax or exclusively the tax collected within Teton County.

A number of years ago, with the passage of the sales tax, the question of what do we do about Yellowstone Park was posed, and for the good fortune of my county, Teton and Park County, the sales tax receipts from the park are divided between those two counties. I know that you would want me to point that out.

I might also say that the Forest Service does not have in its presentation the detail, the specific statements that you referred to, that were taken at the Riverton hearing. There is this one paragraph:

I will read now from the Forest Service brochure entitled "A Proposal, Washakie Wilderness-Shoshone National Forest—Wyoming":

> Thirty-one percent of the statements favored the Forest Service Proposal, with a majority of these specifying that the Wilderness not be increased beyond this size. Sixty-one percent favored the Forest Service Proposal plus part of or all of the additions proposed by the Wildlife-Sierra-Wilderness Society group. Two percent were in favor of Wilderness classification for the Stratified Primitive Area but were opposed to anything larger. Three percent were opposed to Wilderness classification for any of the area. Three percent did not state a position on any of the proposals.

In addition to that, I am told that the Forest Service does have on hand, and it is available for perusal by this committee, a complete transcript of the Riverton field hearings.

Copies of all organizational statements made at the Riverton hearing, and also individual statements submitted to the Forest Service are on file both in Denver and here in Washington, and are avail-

able to this Interior Committee. I would not be surprised at all but what the Forest Service would be glad to show any particular statement to anyone who may be back here, and who would have a particular interest.

Mr. BONNEY. That is excellent. I am glad to know that.

Senator HANSEN. I knew you would be.

You do raise a good question, a question that I have heard expressed many times. I think it probably strikes more at the heart of this controversy than any other one thing.

That is, What does the Forest Service plan insofar as the utilization of the timber is concerned? I note that still here this afternoon, is Mr. Worf.

I don't mean to put you on the spot, Bill, but would you feel that you might respond to the question that was posed by Mr. Bonney, as to what the Forest Service has in mind in its immediate or in its early plans, say, within the next year or two, insofar as the utilization of the timber in the east and west DuNoir area is concerned? Would you feel able to respond to that?

May I identify for the record Mr. William A. Worf, of the Washington office of the U.S. Forest Service.

I might say parenthetically that Mr. Worf has been supervisor out there, and I know he is familiar with this area.

I appreciate your willingness, sir, to respond to that question. Please feel free to talk about the plans of the Forest Service with regard to the utilization of the timber in area J, and also, if you would, what you would contemplate in areas such as that indicated on page 6.

If you would, you might also indicate what the Forest Service plans in the form of timber development in the Wiggins Fork area, area generally E and F, 1 and 3.

Would that be right, Mr. Bonney?

Mr. BONNEY. Yes.

STATEMENT OF WILLIAM A. WORF, U.S. FOREST SERVICE

Mr. WORF. First I will speak about area J. The total volume of timber in the area J, as was pointed out by Chief Cliff this morning, is about 100 million board feet of commercial quality timber.

We believe that under present market conditions, and present conditions of equipment, that only about 30 million of that is operable. In the first harvest cycle we would harvest approximately 15 million feet. This would be over several years, not immediately, not all at one time.

There are no sales that are being offered in that area at this time, and we have no immediate plans to offer a sale.

There is one road about 2 miles long, and a sale within the area that was offered before the hearings.

Senator HANSEN. That is on East or West DuNoir?

Mr. WORF. It is not in the DuNoir Range, it comes up on this Bonneville Creek area, right here, on the map. It comes about 2 miles into area J.

Senator HANSEN. Was this sale made prior to this hearing, or the Riverton hearing?

Mr. WORF. I will have to check the exact date on that, but I am reasonably sure it was prior to the Riverton hearing.

As I say, the 15 million feet would be removed during the first harvest cycle.

As far as the Wiggins Fork area is concerned this area below the primitive area boundary now in Wiggins Fork was harvested in an insect control project a few years ago.

Senator HANSEN. For my benefit, for the committee's benefit, those areas would be F–1 and E?

Mr. WORF. In F–1 and E, and other portions outside of those; yes, sir.

Senator HANSEN. I see.

Mr. WORF. It is very unlikely that there would be any timber harvesting, or there would be very little timber harvesting in areas 3 or 4, because these are the steep, rocky slopes which would not be considered operable under present conditions.

Senator HANSEN. Do I understand you, then, to agree generally with what Mr. Bonney has said about inadvisability of trying to harvest the timber on an area that is as straggled as I assume that to be?

Mr. WORF. On the steeper, rockier slopes, this is correct. I think those slopes, and most of the slopes within the area 3 would be of this nature. There are some of the flatter areas that might possibly be managed for timber purposes.

Does that answer your question?

Senator HANSEN. I think that answers the questions.

Thank you very much, Mr. Worf.

STATEMENT OF ORRIN BONNEY—Resumed

Mr. BONNEY. I might say that the topographic map was prepared by Mr. Shoemaker, and we had that at the Riverton hearings. It was sent here, and probably should become part of the record, to show where these lines are.

The forests, actually the trees, appear on there in green, and the two different boundary lines.

This was what was submitted at Riverton, however, and like I say, we backed off on some of it since.

Senator HANSEN. Without objection it will be incorporated into the record by reference.

It may be that if it was presented at the Riverton hearing, that a copy of this map would also be on file with the Forest Service.

Am I right in assuming that, Mr. Worf?

Mr. WORF. This is the only copy. This is the copy from that hearing record.

Senator HANSEN. I see.

In reference to another hearing in which I have a real interest—not that it pertains to the hearings on the Washakie—but since you are here, I would like to ask you for your opinion of a proposal that was endorsed by the Dubois City Council, a resolution endorsing the building of a road into an area from which could be viewed the Gannet Mountain, Dinwoody Glacier area.

Mr. BONNEY. I don't feel that the road should go beyond what is already constructed in there. That would be over the top of Whiskey Mountain, or somewhere near there.

Senator HANSEN. That is my general idea.

Mr. BONNEY. I am told that it is up through the reservation from Horse Ridge. At the end of Horse Ridge, as has just been pointed out to me, is probably one of the most scenic spots in the entire United States. But I feel it would be ruined by a tourist road up to that point. I would much rather see it stay as it is. The moment you put in a road, you have the pressure on it, just like you do at Old Faithful in Yellowstone. They can get in here by pack train or hiking. I have been there, and carried a pack all the way into that area of Horse Ridge, and really enjoyed myself because I was back there where it was all natural.

There are very often mountain sheep in that area that can be seen in the summertime. There are many things there that would be completely destroyed by the effects of civilization, which a road always brings.

Senator HANSEN. You are saying, then, that you would not favor the intrusion of a road into that primitive area. Is that right?

Mr. BONNEY. That would be my feeling on it and that, in the boundaries of the primitive area there, there should be no road beyond those boundaries. There may be some justification for some adjustment of those boundaries. They can't be adjusted very much, because the ridge defines them on the west, and the Indian reservation defines them on the east and south. On the glacier area, there cannot be much change in boundaries, but I would not be in favor of seeing a road go in there.

We may have to take another look at the northern boundaries, and talk to the people in the county and see where they feel they should be, but I don't believe a road should go in there.

Senator HANSEN. Just one further and final question, Mr. Bonney. In your judgment, are the values that you see endangered, and those which you seek so earnestly to preserve, jeopardized almost exclusively by the timbering? Is this your main concern for asking that extra areas be included in the wilderness system, or are there other factors, as well?

Mr. BONNEY. There would be two main factors there that would disturb it.

One would be the timbering, which will certainly destroy it forever, and it is not worth it. There is just not enough involved in the timber and, of course, if it is put in the wilderness classification it can never be timbered. That is a protection against change of attitude in the Forest Service, or anywhere else. It is a full and final protection, and just one man can't say, "We have changed our minds. We are going to timber it off." That protects it, the act of putting it in the wilderness classification. The fact that there are no roads in there protects it from being overrun by people.

I believe in having the people see this proposed wilderness, and believe in building these recreational areas. There are numerous recreational areas, and we have not included any of those within the boundaries that we feel should be established as wilderness.

At Double Cabin you can go right in there, and are on the boundary of the wilderness area, but there is an area there that should be developed so that people can come there and hike into the wilderness. There are numerous other areas suitable for development, also.

Senator HANSEN. Maybe I am in error, but it was my understanding from the testimony presented this morning that there are four specific locations within area J, on the extreme western edge of the Forest Service proposal, that the Forest Service believes should be developed as campsites. Am I wrong about this?

Mr. BONNEY. Dr. Cliff did not point out the location of those sites. I don't know whether there is anybody here that can point them out.

If I were picking the sites, like I mentioned previously, one would be Trail Lake. The other sites I would pick out would be at fairly low elevations above what we used to know as the Pickett Ranch. I think it is now known as the Diamond G. It would be easy to get a road in there and is not too rugged. But there are numerous sites that could be developed in there without ever going into what should be the wilderness area. In fact, it would be difficult to get a road into most of that country.

Brooks Lake is right on the border of it. That is an established recreational area.

Pinnacles Campground is one of the projected sites. That is on the western side of Pinnacle Buttes.

Brooks Lake Falls is an existing campground, and those are all on the route to Yellowstone, so that people can camp overnight.

Senator HANSEN. I refer again to the Forest Service manual, and on page 24, under areas not recommended for wilderness, they speak of area J.

East DuNoir Creek and West DuNoir Creek contain areas where timber has been harvested, four-wheel drive access, special use improvements, and potential recreation sites, which must be developed to meet projected public needs.

I may be in error as to the number of sites. Somehow I was thinking there were four.

Would you know, Mr. Worf, if that is right?

Mr. WORF. There are five.

Mr. BONNEY. Could you point them out, Mr. Worf?

Mr. WORF. Not from memory, no but they are all within area J.

Senator HANSEN. I don't think I have any further questions.

I certainly do thank you for your statement, Mr. Bonney. We appreciate your coming here. Your prepared text will be printed at this point.

Mr. BONNEY. I appreciate having the opportunity, Senator.

(The statement referred to follows:)

STATEMENT OF ORRIN H. BONNEY AND LORRAINE G. BONNEY, THE SIERRA CLUB

STRATIFIED PRIMITIVE AREA—SIERRA CLUB STUDY, AUGUST 1966

THE PROPOSAL

Senate Bill No. 2630 and House Bill No. 13560, 90th Congress, propese to designate the Stratified Primitive Area as part of the Washakie Wilderness, heretofore known as the South Absaroka Wilderness, in the Shoshone National Forest, State of Wyoming.

We will discuss here only that portion now known as the Stratified Primitive Area since the other portion now known as the South Absaroka Wilderness has already been established by Congress as part of the wilderness system. We will refer to it as the Stratified Primitive Area, and our discussion will pertain thereto, and to the proposed additions and deletions.

PUBLIC HEARING

A public hearing was held in Riverton, Wyoming, December 8, 1966. The majority of the views expressed, and particularly those of the residents of Fremont County, Wyo., were in accord with the findings of the study team as expressed herein.

Prior to this hearing the U.S. Forest Service had submitted a proposal and had invited persons interested to appear at the hearing and to submit written statements upon the premise "Any views submitted will be included with recommendations of the Secretary of Agriculture to the President and to Congress." However, these were not submitted to the President, and at the present time (February 1, 1968) have not been submitted to Congress, but, on the contrary, have been left in the files of the regional forester of the Denver office. One of these was the full and complete report by the Sierra Club study team.

It is not known whether this was because the majority of the public views felt that a larger area should be preserved than did the Forest Service.

PERSONNEL OF SIERRA CLUB STUDY TEAM

The Sierra Club studies were made by a team of nine members. They all did it as a public service, without compensation of any kind, and all of them paid their own way from their homes to Wyoming. None of them had any conflicting commercial or other interests. All were experienced backpackers and outdoorsmen. They were selected as best qualified for the study from a list of some sixty volunteers.

The leader, Orrin H. Bonney, graduate of the University of Colorado, has been a practicing lawyer for forty years. He has explored, and is known as an authority on the Wyoming back country and wilderness. With his wife, Lorraine, he is the co-author of *Guide to the Wyoming Mountains and Wilderness Areas*, and other books on Wyoming. He is a former officer of the American Alpine Club, and is a member of the Sierra Club, Wilderness Society, Alpine Club of Canada, and other organizations.

Lorraine Bonney, co-author of the above books, graduate of the University of Alberta, and world traveler, was a member of the team. The Bonneys divide their residence between Kelly, Jackson's Hole, Wyoming 83011, and 625 East 14th Street, Houston, Texas 77008.

Three members of the team had forestry experience. Dave Corkran, now working on his Ph. D. and teaching at San Francisco State College, worked for the forest service seven summers in Oregon. Jim Brundy, legal resident of Cheyenne, Wyoming, a graduate of Harvard College (B.A. 1963) and the University of California (M.A. 1965), is now doing statistical and computer programming for the U.S. Forest Service. Jim Underwood is now attending Syracuse Forestry School; he was also assistant leader of National Outdoor Training School at Lander, Wyoming.

Other members of the team were Nancy Baggott, of Los Angeles, B.A. in physical geography; Robert R. Marshall, B.S. in Electrical Engineering, aerospace industry and teaching; Jean Searle, Los Angeles, prominent in conservation studies and working on a local newspaper; and Francis Walcott, an active Sierra Club member and secretary of the Sierra Club Council.

It was a competent group, giving intelligent study and consideration to the problem of what should be included in the wilderness.

The information and study made by the team was then referred to the Board of Directors of the Sierra Club, and to the Council of the Wilderness Society at their annual (1966) meeting, and to the Wyoming Wildlife Federation, and was given full discussion and consideration by these organizations. Each member of the study team was also encouraged to submit without restriction his own personal ideas to the hearing officer, independent of the group findings.

THE STUDY

The study team made an eleven-day reconnaissance into the Stratified Primitive Area and adjoining Shoshone National Forest lands, north of Dubois, Wyoming. The team approached and entered the area via six different roadheads, thoroughly covering the perimeters and much of the interior.

In addition to this, five members of the study team made other trips into the region.

The area, with fantastic scenery and a petrified forest attracting knowledgeable rockhounds, is largely undisturbed by world publicity and tourist throngs. This "Never-heard-of-it-before" aspect adds to the charm of wilderness adventure here.

The study team concluded:

(1) That the existing Stratified Primitive Area should be classified as a Wilderness Area;

(2) That the boundaries should be corrected and extended to include the bases of all escarpments and the related scenic features;

(3) The Wilderness Area should be extended westward to become contiguous with the Teton Wilderness Area in order to protect the still wild DuNoir Valley, and no timbering should be done on the DuNoir extension.

Timbering operations on the DuNoir would jeopardize the established wildlife range and the elk migration route to the East Fork Elk Winter Pasture. The Sierro Club hopes to protect this primeval forest and the elk herd.

The boundary corrections and the DuNoir extension recommended by the Sierra Club hopes to protect this primeval forest and the elk herd.

The Forest Service proposes to combine Stratified Primitive Area with the existing South Absaroka Wilderness, the combined area to be identified as the Washakie Wilderness Area. The Sierra Club believes this will be satisfactory and desirable.

FOREST RECOMMENDATIONS

The Forest Service recommends that 189,024 acres of the original 203,930 acres of the Stratified Primitive Area, and 7,366 contiguous acres, be designated as wilderness by Act of Congress and added to the National Wilderness System.

Area J, East and West DuNoir Creeks, 30,240 acres

The DuNoir Extension.—To include the entire Pinnacle Buttes escarpment Upper West DuNoir Creek, Dundee Meadows, Kisinger Lakes, most of the Wolf Creek drainage, Murray, Clendenning, and Froms Lakes, the entire DuNoir and Coffin Buttes escarpment. The Sierra Club strongly recommends this addition.

This addition would be defined by a line beginning on the Teton Wilderness Area north of Brooks Lake, then going west and south of Bonneville Pass to and below the west side escarpment of Pinnacle Buttes, which will be included within the wilderness; then to the hydrographic divide between Wolf Creek drainage and the Brooks Lake-Long Creek drainage which will be followed to the point designated on the topographical may as VABM Picketts (elevation, 9,544 feet, Section 1, T44N, R109W); thence easterly across the valley.

Local opinion.—The local sentiment in Wyoming also supports the Sierra Club recommenations as to the DuNoir extension.

The Wyoming Wildlife Federation recommends that the NuNoir Valley should be included within the wilderness designation and opposes timbering operations there.

Mr. William I. Crump, District Supervisor of the Wyoming Game and Fish Commission covering this region, definitely states: "We have been opposed to the DuNoir valley timbering proposal . . . Both drainages of the East and West Forks of DuNoir . . . support resident herds of elk at this time. I feel these herds will be forced into more remote areas leaving a void in this excellent elk habitat if timbering operations are conducted in these drainages."

The ranchers interviewed on the DuNoir favorably support the wilderness designation and are in fact actively opposed to the timbering operations there.

Description of the DuNoir Extension.—The extension starts at Bonneville Pass, a broad, perhaps mile-wide meadow with grazing cattle. Both sides of the pass are heavily wooded and very attractive. Dundee Creek and tributaries descend from the pass to lower meadows in a beautiful network of streams.

There is minimum evidence of a few select trees being taken for saw timber along the ridge above West DuNoir Creek. A jeep road runs south from Murray Lake in Dundee Meadow to Picket Ranch (now managed by Perc Yarborough and called Diamond G). This jeep road could be closed and the forest would soon revert. The upper DuNoir is better forested and the lumbering threat is greater than any other section we saw in the present Stratified Primitive Area. The Forest Service is presently attempting to obtain road rights of way into the West DuNoir. Fast action will be necessary to save this part of the country as wilderness. Present timbering activity is still south on the Long Creek drainage.

About 800 cattle graze on the DuNoir. There is some evidence of old tie-hacking

throughout Dundee Meadows, and in the area between Spruce Creek, Basin Creek and West DuNoir, principally along the trail from Dundee Meadows to Kisinger Lakes, and in the upper East DuNoir drainage.

Dave Corkran (former field employee of the U.S. Forest Service in Oregon for seven summers, now working to complete his Ph.D. at University of California, Berkeley, and currently teaching at San Francisco State College) reports: "There are about 2,500 acres of potentially valuable timber land in the extension. Logging was done a the end of the last century, and the effects are still evident. The quality of new growth timber is uneven, though the forest here has made a significant beginning toward recovery of its original character. The return of this region to its natural state and its preservation as wilderness are desirable from ecological, scenic, and recreational standpoints. East DuNoir drainage serves as a migration route for elk from the South Absaroka Wilderness Area to the East Fork Elk Winter Pasture on Bear Creek, one of the major reasons for limiting the region to wilderness usage. As the largest timbered area in the contemplated Stratified Primitive Area, the two drainages would be vital to reproducing in microcosm the ecology which once characterized the Rocky Mountains, or to be more exact, the latter day derivitive of that ecology."

On September 12, 1966, Orrin and Lorraine Bonney visited Kisinger Lakes via Pinnacle Trial (from Brooks Lake) and reported the following: "The Wolf Creek drainage and region of the Kisinger Lakes is wild and natural, scarcely affected by man. Numerous elk were heard bugling their mating call." Not only is there a small permanent elk herd here, but the elk migrate through this valley from higher elevations to winter pasture at the Wyoming Game and Fish grounds on Bear Creek.

Over in the East DuNoir drainage, Trail Lake would be the ideal end-of-the-road wilderness entrance. The lake area itself could be made into a wildlife refuge. The lake was once an old tie dam and fluame used to accumulate water for the spring movement of hand-hacked railroad ties down the creek, giving it a stark attraction that tells the story of the historic past. It now serves no practical use. The study team noted a pair of trumpeter swans and hundreds of ducks on the lake. It could be made accessible for a roadhead. It is a natural as an unimproved recreation site; at a low enough elevation so that fishing could be made attractive there.

Extending the wilderness to include the DuNoir will also make it more accessible as a wilderness experience for more individuals who can see and enjoy its unspoiled nature. The extension will bring the wilderness within hiking distance over existing trails from Brooks Lake, which section has already been developed by the Forest Service as a recreational area, including the extremely popular Brooks Lake and Brooks Falls campgrounds, and the projected Pinnacles Campground.

These trails include: Brooks Lake to Bonneville Pass, 4 miles; Brooks Lake to Dundee Meadows, 6 miles; Brooks Lake via Pinnacle Trail to Kisinger Lakes, 6 miles.

Circle Trip: Brooks Lake-Bonneville Pass-Dundee; Meadows-Kisinger Lakes, returning via Pinnacle; Trail to Brooks Lake (or reverse direction), 20 miles.

The wilderness would not be as accessible from any other point except where equalled at Double Cabin. Furthermore, the use of this access point at Brooks Lake would obviate the necessity and tremendous expense of building other access roadheads to give the average visitor a true wilderness experience.

There is little, if any, merchantable timber on the East DuNoir part of the extension. The attached map shows the U.S. Forest Service appraisal of the timber resources on the West DuNoir extension. We have colored in green those patches of timber deemed merchantable by the Forest Service.

While these patches of timber within the recommended extension are valuable, the harvesting of this minor percent certainly does not justify the loss of the wilderness character of the entire area, destroying its recreation and scenic values, diminishing its potentiality for water conservation, and loss of game habitat.

Today, the most valuable part of the Wyoming economy are its scenic attractions and its tourist trade. Teton County comprising Jackson's Hole, with its two and a half million summer visitors, is one of the four most prosperous counties in the state. Other sections of the state need to attract visitors to the scenic attractions.

In the Wind River Ranger District adjacent to the Stratified Primitive Area, the Forest Service has come in for increasing criticism of the timbering methods permitted there, and for its lack of response to public opinion on the matter.

Not only have the methods been destructive of the scenic and recreational values, but they have been excessively wasteful of the timber resources of our great public domain. No use whatsoever is made of any of the forest products except the largest prime virgin saw timber and this is now being converted into 2 x 4's (elsewhere, usually culled from small logs) rather than being made into top grade dimensional lumber.

Everything else is completely stripped from the timbered sections and destroyed. The use of huge crawler type machines has brought about this deteriorating rather than advancing forest technology. It has resulted in the destruction of all younger tree growth, all shrubs, grasses, erosion of hundreds of years of soil accumulation on the slopes, jeopardizing of water resources, and eliminating wild game.

Instead of following the multiple use principle, this strip timbering has been a single use of the forest and a one-shot use at that. The theory (or wishful thinking) that the timber stands will restore themselves naturally and uniformly has not been demonstrated in actual practice in the Wind River Ranger District.

The Forest Service has put forth extensive Smoky Bear publicity that a forest is harmed and will not restore itself after a fire sweeps through it. Certainly it would be hard to believe the timber would recover from this greater and more complete destruction!

Another result of any timbering operations is the building of roads which end up in jeep trails, the diminishing of game resources, accumulation of litter, and complete loss of wilderness character.

Master plans of management in the Wind River Range District, presumably submitted to and approved by top authority, provide that all roadways and water courses shall be screened and protected from timbering operations. These have not been followed in actual practice.

One need only drive from Dubois to Double Cabin Campground and Recreational Area at the boundary of the Stratified Primitive Area to see the destruction of hundreds of acres down to the very edge of the road and to the last sapling, to know that not even a screening of the roadside has been followed. It would be tragic indeed if this happened to the beautiful DuNoir country.

The timber cutting in the Wind River Ranger District is now on a planned 30 year cycle of complete cutting (on a 200 to 250 year maturing growth cycle) with one dominating company, U.S. Plywood (formerly Teton Studs), whose capital resources give it a practical monopoly and free hand on the designated timber stands.

This small segment—the DuNoir Valley—should be left out of and protected from this complete, vast, and wholesale harvest. Fremont County, as part of our beautiful Wyoming, should have this asset left for its economy after the timber operations have taken their toll, closed their mills, abandoned their unpainted, ramshackled buildings, and moved on.

Area D, Bear Basin Addition, 8,130 acres

The Sierra Club strongly recommends this addition. The so-called road alleged by the Forest Service has been practically obliterated. There was so little trace of it when the area was visited by the Sierra Club study team, it could in no sense be used by any sort of vehicle.

Bear Basin is known as an elk calving area, and would be greatly harmful to big game values if not placed in the wilderness, which it essentially has always been.

The Bear Basin addition would take in the escarpment and steep terrain south and west of Castle Rock, including the three streams which flow into Beah Basin from the east. It also encompasses the Mount Kent escarpment and all those streams flowing into Bear Creek from the Mount Kent area, as well as the headwaters of Bug Creek. This area has little commercial value. The spectacular relief makes it ideal for wilderness enjoyment. There is suitable area outside the recommended wilderness for the recreation needs of campers and hikers.

Forest Service boundary description which excludes, or fails to add, the following areas: Area 3 Exclusion, Wiggins Fork, 3,117 acres; Area 4 Exclusion, Lincoln Point, 326 acres; Area F–1 Addition, Lincoln Point, 2,000 acres; Area 6 Exclusion, Parque Creek, 1,331 acres; Area G Addition; Area H Addition, Headwaters Fivemile Creek, 700 acres; Area I Addition, 1,300 acres.

As the principal reason for these differences, the Forest Service states: "Places boundary on natural topographical features . . ."

The Sierra Club vigorously objects to all of these differences. Essentially the problem of these differences is the means used to define the boundary.

What the Forest Service has done is to move the boundaries back to the high points of the escarpment plateaus, trimming back the present boundaries to exclude the sculptures left in the weathered stone of the escarpment sides and the faces of spectacular pinnacles, all of high scenic value but of no commercial use. Setting forth this wilderness in their brochure (page 3), the Forest Service says:

"The country is characterized by deep narrow valleys, some of them true canyons and broad, flat-topped mountains and plateaus..."

"The narrow valleys, with the narrow strips of timber in the bottoms adjacent to precipitous canyon walls, create a primitive charm. Numerous small parks and side drainages offer chances for complete seclusion."

Yet, the Forest Service, by its boundary designation, has sought to eliminate these narrow strips of timber adjacent to the precipitous canyon walls which they say creates a primitive charm and characterizes the area. It is the elimination of the precipitous escarpment and the narrow strips of timber that the Sierra Club and other conservationists object to most vigorously.

The small patches of virgin timber at the base of the great cliffs enhance the whole wilderness picture and should not be left outside the wilderness for future exploitation. One can look at any of the pictures anywhere in the area, whether in the Forest Service brochure or otherwise, and see that the boundaries should be determined by outliers and not the summits or rims the great scenic features. The entire feature should be included within the wilderness and the boundaries should be extended a reasonable distance away from the base to protect the feature. There are ample outliers on the ground by which a wilderness boundary can be defined, or section lines can be followed; these have always been used to define land boundaries for the entire state of Wyoming as well as elsewhere and should present no particular problem.

Also, experienced surveyors have recently suggested to the study team that the boundary could be more readily laid out on the ground if it were simplified by using straight lines tied into the usual section lines, as most surveys were made with these as a basis. It was also pointed out that the tips of prominent pinnacles were extremely difficult of access to use as ground survey stations, and that lower, more accessible terrain was more desirable to lay out a boundary survey.

The preferable boundary descriptions are illustrated by the comparisons on the attached topographic map (Snow Lake).

Extending the boundary out to include the forested slopes will also protect forever the greatest resource which this forest can furnish—water.

While there are patches of timber valuable for saw logs, saw timber is not the most important item in this forest. It is, in fact, a minor one.

The Forest Service states in their brochure for a Washakie Wilderness:

"*Water:* A continuous flow of quality water from the drainages under consideration for Wilderness represents an important public value. Stability of water supply is the major economic contribution and public service to the dependent downstream lands and users. Mechanical disturbances that would upset the balance of nature would be avoided within the proposed Wilderness. Wilderness management will not change the water yield or quality."

In their official pamphlet covering this portion of the Shoshone National Forest, the Forest Service states:

"Without an adequate forest or vegetative cover to regulate run off or stream flow, this objective, and protection of our basic resource, the soil, cannot be accomplished."

For this reason alone "The narrow strips of timber in the bottoms adjacent to the precipitous canyon walls" should be included within the wilderness boundaries and preserved to avoid the "mechanical disturbances that would upset the balance of nature."

Area 3, Exclusion, Wiggins Fork, 3,117 acres

At least the portion of the slopes east of Wiggins Fork within the original primitive area boundary should be retained in the wilderness classification (shown as 3 on the Forest Service map). If the law providing there should be no timber cutting within the original primitive area has been followed by the Forest Service, this area certainly should retain its wilderness classificaton. If the law has not been followed by the Forest Servce, this still does not preclude its qualification under the Wilderness Act. There has been some timbering in Area E suggested by the conservationists, and it may be excluded.

Area 6 Exclusion, Parque Creek, 1,331 acres

The Sierra Club recommends, as does the Forest Service, that the boundary exclude Ramshorn Basin and the jeep road leading up from the basin. Ramshorn Basin is the logical roadhead, recreational site, and wilderness access point. The existing jeep road could be rebuilt and made suitable for passenger cars as far as Ramshorn Basin, with a minimum expenditure. However, here again, there is no excuse for excluding from the wilderness the area indicated as 6 on the Forest Service proposal because this likewise excludes the narrow strips of timber adjacent to the precipitous canyon walls and follows the tips of the scenic features rather than the natural features which are outliers.

Forest Service Exclusion, Area 1, Middle Fork Wood River, 9,498 acres

One of the reasons given by the Forest Service for excluding this area of the existing primitive wilderness system is the fact that it contains 896 acres of patented claims. The Sierra Club has no objection to excluding the 896 acres but it does not seem justifiable to exclude 9,498 acres on the basis of 896 acres which merely project into the Stratified Area. Mining exploration is not excluded by the Wilderness Act; most of the possible exploration in the region of the excluded area has been completed, including one tunnel of 2500 feet that was run into the mountain in early days, and millions of dollars recently spent by American Metal Climax Company—all without showing minerals in commercial quantities. The Bureau of Mines' appraisal (August, 1966 report) was "that there is no basis for making such a projection," that a discovery of significant minerals will be made at Kirwin extending into the adjacent primitive area. From the entire Kirwin Mining District, practically all of which lies outside the included area, there is a record of only one carload of ore shipped since the district was first prospected some seventy-five years ago. Future exploration is remote.

It must be admitted that Middle Fork Wood River exclusion sought by the Forest Service does not have as great values to the wilderness system of the region as the East and West DuNoir Creeks which the conservationists and local people feel are so essential.

Stratified Primitive Area—Shoshone National Forest

HISTORY

Stratified Primitive Area was established March 25, 1932, under Regulation L–20 and comprised 147,000 acres. In 1950–51, 55,000 acres on the Wood River drainage was detached from South Absaroka Wilderness Area and transferred to Stratified, making a present total of 202,000 acres. Advance mapping techniques revise this figure to 203,930 acres.

The country today is still substantially as stated in the 1932 designation:

". . . characterized by deep narrow valleys and broad flat-topped mountains and plateaus. . . . The many narrow valleys, with the close association of narrow strips of timber in the bottoms with adjacent precipitous cliffs; the feeling of seclusion secured in the numerous small parks and side drainage; make it an area of unusual charm, well worth keeping as nearly as possible in a primitive state."

Gravel and unimproved roads from Dubois, about 28 miles to the south, take one to the fringes of the area. Its Wood River drainage is reached from Meeteetse, about 35 miles to the east, much of it over indifferent rutted roads.

Stratified Area is part of Shoshone National Forest, and lies in parts of Fremont, Hot Springs, and Park Counties, Wyoming. It extends along the south edge of the Absaroka Mountains for about 40 miles from east to west and is about five to ten miles wide. Its rugged topography rises from elevations of 8,000 feet on the valley floors to 12,000 feet, with rocky flat-topped buttes whose vertical sides tower some 1,500 feet above timberline, cirques carved by glaciers, and ornamented with permanent snowfields; the valleys are ribboned with whitewater streams, tributaries of the Wind River, whose headwaters have cut deeply into the south edge of the Absarokas.

A long, spectacular escarpment monumented with numerous pinnacles and buttes forms a walled barrier along the southern portion of the area. Valleys with braided stream beds and heavily timbered flanks penetrate back into the bluffs becoming narrower and steeper at higher elevations. Timberline is at 10,300 feet, although in many places the sheer relief places it at much lower elevations.

The area comprises parts of two superimposed mountain ranges of contrasting rock types. Geologists have been able to trace out the actual relief of the earlier Washakie Range with its topography and original erosion, making it one of the

most interesting and scientific geological studies. The older Washakie Range is composed of rocks of pre-Cambrian, paleozoic, and mezozoic ages which were folded and dissected by erosion in the beginning of the tertiary period seventy million years ago. It is exposed along the south border of the area near Horse Creek and Wiggins Fork.

The Washakie Range was covered by volcanic sediment comprising the present Absaroka Range. These were layered in successive eruptions from Mount Washburn area in Yellowstone Park and Lava Mountain near Togwotee Pass. These rocks filled the valleys of the Washakie Range and overtopped its highest peaks forming a plateau which was then subjected to erosion. The layers can be seen in the canyon walls and have given the name "Stratified" to the area.

Remnants of ancient forests which were buried in the volcanic debris have become petrified, usually by molecular displacement of the original cells, the wood becoming agatized. There are also numerous limb casts. The petrified wood may be found on the gravel bars of almost all the streams, but particularly at the head of Frontier Creek, where even large standing petrified tree trunks and fallen logs are found.

Precipitation in the area averages twenty to thirty inches annually, occurring mostly as snow in the winter. Heavy summer thunder showers are frequent. Temperatures fall from —30 or —40 degrees in winter to +80 degrees in summer. The comparatively heavy precipitation causes rapid erosion and maintains a continuous stream flow.

Also in Shoshone National Forest and adjacent to Stratified Area on the north is the South Absaroka Wilderness Area of 505,552 (net) acres already within the wilderness system. We understand the Forest Service will recommend that these two areas be combined as one contiguous area and under one name with the name Washakie Wilderness Area suggested for the combined area.

The Stratified Area is part of the largest untamed wilderness in the central Rocky Mountains. Designated contiguous boundaries comprise the following:

	Acres
Stratified Primitive Area	202, 000
North Absaroka Wilderness Area	359, 700
South Absaroka Wilderness Area	505, 552
Teton Wilderness Area	563, 460
Grand Teton National Park	310, 350
Yellowstone National Park	2, 221, 773
Total	4, 162, 835

Here, the traveler may wander for weeks with his pack outfit in a region of scenic splendour, abounding in wild game and fishing, and undisturbed by modern civilization.

RESOURCES

Water.—Water is probably the most economcially valuable resource of the Stratified Primitive Area. Run-off from the region provides irrigation moisture for the farms and ranches in the vicinity north of Dubois. The area is part of the watershed which feeds Boysen Reservoir. Probably owing to the soft, porous nature of the local rock, there are no suitable dam sites within or immediately adjacent to the Primitive Area. The area itself has no agricultural value.

Timber.—About 30% of the proposed wilderness area is covered by timber. Much of this is affected by high altitude growth conditions, and most of the forested areas have little commercial value. Pockets of potentially merchantable timber, mostly spruce, fir, and lodgepole pine, exist in the Norton Point region, on Frozen Lake Creek, and around the headwaters of East and West DuNoir Creeks. In the latter drainages, extensive tie-hacking and logging at the end of the nineteenth century impaired the timber producing capacity of the area, though good potential continues to exist.

The original designation of 147,000 acres in 1932 showed the following estimate of dominant cover types:

	Acres
(a) Timberland bearing commercial stands	3, 000
(b) Timberland bearing non-commercial stands	42, 000
(c) Barren areas	62, 600
(d) Brush areas other than sagebrush	1, 200
(e) Sagebrush	600
(f) Grassland	37, 000
Total	146, 400

Grazing.—High ridges and lower meadows provide forage for sheep and cattle. Sheep grazing is limited to the eastern drainages of the Primitive Area. Allotments for 5,000 sheep exist around the East Fork of the Wind River and on Bear Creek. There are allotments for 4,700 sheep on Wood River drainage, and 1,200 sheep on Owl Creek drainage. Cattle are being grazed near the mouth of Frontier Creek, on East and West DuNoir Creeks, and in Ramshorn Basin. Cattle grazing is mostly outside of the present boundaries of the Primitive Area. There are allotments for 300 cattle near Wood River Guard Station. There is no overgrazing.

Wildlife.—The Stratified Primitive Area is the chief summer range of the Wind River elk herd, probably about 1,500 head. The recommended DuNoir Extension and the western edge of the area, along DuNoir Creek, serves as a migration route for elk from the South Absaroka Wilderness Area to the East Fork Elk Winter Pasture. Deer are plentiful. There are some moose, and Bighorn sheep appear to be making a comeback.

Fishing.—Fishing may be considered as only fair, the best streams being Frontier Creek, Wiggins Fork, East Fork, and Emerald Creek. Due to the geological formations there is an almost entire absence of lakes. Sudden and heavy depletion of the fishing resources may occur at any time, due to the terrific cloudbursts which periodically sweep down from the enormous areas of bare, steep rock at the headwaters of all the drainages. The Kisinger Lakes, up the West DuNoir valley, were stocked by plane the summer of 1959 with five inch grayling. The records of the Wyoming Game and Fish Commission indicate that this is an area of severe winter kill, so subsequent recommendations were not to stock these lakes. Prior to that time brook trout were planted, and they too may have winter killed. Orrin Bonney fished Kisinger Lakes for about one and a half hours in September 1966 and found no sign of fish.

Minerals.—With the possible exception of the Kirwin area, commercially valuable minerals are limited to the low grade semi-precious stones and exotic pieces of petrified wood found in certain areas, especially in the Petrified Forest along Frontier Creek. The Petrified Forest has been closed to mineral entry.

The Kirwin area has been subjected to sporadic but intensive mineral exploration for the last eighty years. No commercially valuable deposits of ore have been discovered within or adjacent to the Stratified Primitive Area.

The U.S. Geological Survey's 1965 mineral survey of the area and its environs found little evidence of valuable minerals in significant quantities. The results of the American Metal Climax, Inc., explorations undertaken in the last two years are confidential. But there is no activity in the Kirwin area which suggests that American Metal Climax, Inc., has found commercially valuable quantities of ore. Taken together, the U.S.G.S. report and the lack of intense activity in the Kirwin area strongly suggest that there are no commercially significant mineral deposits within the present or contemplated boundaries of the wilderness area.

Except for the strip about one-half mile wide between Dollar and Dundee Mountains, the U.S.G.S. summarized their study in the area in 1965 as follows (p. E25) :

1. No minable concentrations of minerals were discovered during the present investigation.
2. No minable concentrations of minerals have been discovered by prospectors over a 75-year period.
3. No significant amount of ore has been mined elsewhere in the southern Absarokas.
4. Extensive zones of highly altered rock, commonly associated with ore in most productive districts, are lacking in the Primitive Area.
5. Possible deposits of bedded nonmetallic minerals such as coal and phosphate in the Primitive Area would be too deeply buried by barren rock to be exploitable now or in the near future.
6. Intrusive rocks are likely to have rendered any possible oil and gas reservoirs unproductive.
7. Sand and gravel deposits are small and of poor quality.

The report states (p. E1) : "Deposits of coal, bentonite, and phosphate are found outside the Primitive Area in the same sedimentary formations that underlie parts of the Primitive Area. If deposits of these materials exist within the bounds of the Primitive Area, they are so deeply buried under a thick blanket of younger barren rocks that they would be uneconomic to mine at the present time.

"Older rock formations, from which oil is produced in areas adjacent to the Stratified Primitive Area, extend beneath the Primitive Area as do structural features such as anticlines which favor the accumulation of oil and gas. However, intrusive magmas have penetrated these formations in all parts of the Primitive Area, and the intrusions have greatly reduced the possibility of the area ever becoming a source of oil and gas."

The U.S. Bureau of Mines reports (p. E55) : "The investigation of the Stratified Primitive Area by the Bureau of Mines did not disclose any evidence of significant mineral occurrences within the area."

Recreation and Scientific Resources.—Preserved in its natural state, the Stratified Primitive Area is well adapted to the needs of the hunter, camper, backpacker, hiker, photographer, rockhound, and the requirements of students of geology, petrification, plant ecology, botany, entomology, and mammalogy. Its natural beauty is of high quality. The impressive and frequently awesome cliffs and pinnacles emphasizes the wildness of the region. The easily climbed peaks offer fine views of the rough topography of the area as well as panoramas of the Wind River Range to the south and the Teton Range to the west. The rugged and wild crests of the Absaroka Range rise to the north. One day of strenuous hiking is enough to place one in the midst of wilderness, where he may find scores of wildflowers, an abundance of wild life, and an exciting panorama of peaks, snowfields, and meadows.

Trails.—Excellent trails exist within the area. They extend up Horse Creek, Frontier Creek, Wiggins Fork, Emerald Creek, Greybull River, Bear Creek, East Fork Wind River, and East and West Fork DuNoir Creeks. These are connected with east and west trails and other trails within the Shoshone National Forest so that extended circle pack trips are possible.

The study team felt that the standards of the existing rails adequate, and are most suitable for the area and to maintain its wilderness character. Principally, the trails should be kept clear of deadfall but no effort should be made to change the grade or increase the width and clearance.

Alternate to Calls 9 to 15: (Snow Lake) thence northwesterly to the northeast corner of the northwest quarter of section 13, T44N, R106W;

UNIT E—6,500 ACRES

thence northwesterly to the northeast corner of section 2, T44N, R106W;

thence west along the north line of section 2 and section 3, T44W, R106W, to point of juncture with the most easterly channel of Frontier Creek;

thence northerly along the east bank of Frontier Creek for approximately 0.6 mi. to a point opposite a side stream flowing into the creek from the west whose headwaters are near Point 10,568.

BOUNDARY ALONG THE SOUTH SIDE OF PROPOSED WASHAKIE WILDERNESS IN WYOMING (1966)—AS PROPOSED BY THE SIERRA CLUB

Description (from east to west) is based on latest USGS maps. Map name is in parenthesis.

UNIT D—8,240 ACRES

(Kirwin) Beginning at a point in T43N, R104W where the boundary of the Wind River Indian Reservation intersects the southeast corner of section 3;

thence southwest approximately ½ mile to a point of intersection with a side stream flowing west into the East Fork of the Wind River;

thence southwesterly along said stream to the East Fork of the Wind River;

thence northerly along said river approximately ¼ mile to the mouth of the side stream flowing in from the northwest;

thence northwesterly along said stream to a point of juncture with the south side of section 5, T43N, R104W;

thence west to the southwest corner of section 1, T43N, R105W;

thence northwesterly approximately 2 miles to Bear Creek;

thence southerly along the west bank of Bear Creek to the south side of section 5, T43N, R105W;

thence northwesterly along a hydrographic divide between side streams for approximately 2½ miles across into the drainage of the Wiggins Fork of the Wind River to a point of intersection with the east side of R106W;

* * * * * * *

(Snow Lake) thence northwesterly to the northeast corner of the northwest quarter of section 13, T44N, R106W;

UNIT E—6,560 ACRES

thence northwesterly to the northeast corner of section 2, T44N, R106W;
thence west along the north line of section 2 and section 3, T44N, R106W, to point of juncture with the mostly easterly channel of Frontier Creek;
thence northerly along the east bank of Frontier Creek for approximately 0.6 mile to a point opposite a side stream flowing into the creek from the west whose headwaters are near Point 10,568;

* * * * * * *

thence across the creek and up said stream to a point of intersection with the north boundary of T44N;
thence southeasterly toward the southwest corner of section 3, T44N, R106W, to a point ¼ mile removed from the west side of section 3;
thence south to the north side of the southern ¼ of unsurveyed section 21, T44N, R106W;
thence southwesterly to the southwest corner of the southeast ¼ of section 21, T44N, R106W;
thence west to the northwest corner of the northeast ¼ of the northeast ¼ of section 30, T44N, R106W;
thence south 1 mile (Indian Point);

UNIT F—2,800 ACRES

thence west 1 mile; (Ramshorn)
thence northwest 1 mile; (Five Pockets)
thence west across Horse Creek to point 9566;
thence northwesterly along the hydrographic divide between Horse Creek and Parque Creek to Point 10173;

UNIT G—3,000 ACRES

Added to Forest Service Unit B of 3,080 acres makes a total of 6,080 acres.
thence southwesterly to Point 9753;
(Ramshorn) thence southerly to Point 10081;
thence southerly to a point ¼ mile south of Point 9925;
thence westerly to Point 9369;
thence southwesterly to a point ¼ mile north of Point 9897;
thence northwesterly to Point 9918;
thence northwesterly to Point 9781;
(Esmond Park) thence northwesterly to the southeast corner of section 36, T44N, R108W;
thence west to the southwest corner of the east ½ of section 35, T44N, R108W;
thence north 3 miles;

UNIT H—30,240 ACRES

thence west to the northwest corner of section 21, T44N, R108W;
thence southwesterly to the southwest corner of section 20, T44N, R108W;
thence west 1 mile;
thence south 2 miles;
(Kisinger Lakes) thence southwesterly approximately 1¼ miles to VABM 9544 (Picketts);
thence westerly along the hydrographic divide immediately north of Long Creek through Points 10150 and 10109 to Point 10089;
thence west to Point 9224;
thence north to Point 9659;
thence approximately 1½ miles northwesterly to Point 9565;
(Dundee Meadows) thence again northwesterly approximately 1½ miles to a point of intersection with the west side of R109W at Point 9243;
thence west ¼ mile;
thence north to the Continental Divide;
thence easterly along said divide to a point of meeting with the boundary proposed by the Forest Service.

Senator HANSEN. Next we will hear from Louis S. Clapper, chief, division of conservation education, National Wildlife Federation.

Mr. Clapper, please be seated. We are delighted to have you.

STATEMENT OF LOUIS S. CLAPPER, CHIEF, DIVISION OF CONSERVATION EDUCATION, NATIONAL WILDLIFE FEDERATION

Mr. CLAPPER. I will try to make this as brief as I can.

I am Louis S. Clapper, chief of the division of conservation education, National Wildlife Federation. Our organization has its national headquarters here in Washington, D.C., at 1412 16th Street NW.

By way of identification, the National Wildlife Federation is a private organization which seeks to attain conservation objectives through educational means. The federation has affiliates in 49 States.

These affiliates, in turn, are composed of local groups and individuals who, when combined with associate members and other supporters of the National Wildlife Federation, number an estimated 2 million persons.

We are pleased to be invited to comment upon these bills which would add three significant areas to the national wilderness preservation system, in accordance with procedures set out in Public Law 88–577 of 1964.

A few explanatory remarks should be made here at this time before going briefly into details of the proposals.

The National Wildlife Federation endeavors to pursue a policy of reasonableness in the management of natural resources. Our organization was active among the original supporters of the wilderness concept, believing substantial amounts of this type of land must be set aside and preserved for a multitude of public benefits.

Complementing this position, we have recommended that suitable streams be set aside as wild or scenic rivers. Then, in a somewhat similar manner, we were among the initial proponents of multiple-use management, recognizing that other types of outdoor recreation, including fish and wildlife, livestock grazing, irrigation, lumbering, mining, and hydroelectric power production, as well as watershed protection, are legitimate and desirable activities or uses for certain types of public lands, including national forests.

Of course, some of these uses are compatible. Some are not. However, we recognize and appreciate the often difficult task that the Forest Service has in reviewing areas for possible addition to the wilderness system.

Many decisions must go into the development of recommendations for wildernesses. For the convenience of the public, and for ease of administration, there is a question about whether wilderness area boundaries should be located along easily identifiable physical features.

If so, should these be located along mountain crests, or at the base of escarpments, or located along slopes? Are elk disturbed and driven out of areas by vehicular traffic? Where should roads be located to help hunters gain reasonable access to game ranges, including those inside protected wildernesses? How much timber should be set aside for lumbering, an activity important to local economies? What about second-growth wilderness, and all-but-obliterated, one-time human developments? Should the same conditions apply equally to potential wildernesses in the Eastern United States as to those in the West?

The National Wildlife Federation, Mr. Chairman, still is in the process of developing criteria whereby some of these alternatives, and others, can be judged. We expect to complete this work at our national convention in March. We then will have a yardstick to use in measuring some of the areas of controversy.

Therefore, we will not have recommendations on all of the various proposals under consideration today, hoping to supplement this statement with added information at a later time.

Now, we should like to outline a few brief recommendations. At the outset, we should say that we believe all of the three areas under consideration today merit addition to the wilderness system. Therefore, as we see it, the questions are not so much on "if," but of "how much" and "where."

First, we wholeheartedly endorse S. 2531, establishing the San Gabriel area. As best we can determine, this proposal is virtually without opposition, and everyone is in accord with the Forest Service recommendation. This would be to enlarge the present Devil Canyon-Bear Canyon Primitive Area in the Angeles National Forest of California, to contain 33,647 acres.

Located so near the Metropolitan Los Angeles area, this wilderness can serve an exceptionally useful function. It offers a wide variety of plants and wildlife to appreciate and enjoy in a highly scenic, mountainous area. We hope the Congress can act speedily upon this proposal.

Second, we support the Forest Service's proposal for the Mount Jefferson Wilderness Area, as outlined in S. 2751, with one recommendation for change. We compliment the Forest Service for deciding to add areas 12 and 13—417 acres and 595 acres respectively—to the original proposal of 95,450 acres. In summary, the Forest Service recommends that 14,701 contiguous acres be added to the 81,761 acres presently included in the Mount Jefferson Primitive Area. It is our suggestion that the 1,596-acre Marion Lake Scenic Area also be included. This is a fine lake in a beautiful setting. While the lake has a fairly heavy usage by boaters, our people in Oregon concur with Forest Service plans to phase out the use of motors, and to close the trail to motorized vehicles. This 2½-mile trail is easy to negotiate, and vehicles are unnecessary.

At this time, we neither recommend nor oppose the proposals that area 3 also be added to the Mount Jefferson Wilderness Area. Spectacular mountains in the Cascade Range, coupled with beautiful subalpine meadows, handsome stands of trees, glistening snowfields, lakes, and wildlife, make this one of the most attractive wilderness areas in the Pacific Northwest, and we also urge its early approval.

Third, we recommend establishment of the Washakie Wilderness Area in Wyoming, combing parts of the Stratified Primitive Area with the existing South Absaroka Wilderness Area. It is our understanding that there is general agreement between the Forest Service and groups in Wyoming on the merit of several additions and deletions to the existing proposal, and we shall limit our comments to some of the points in controversy. Our field representative, Mr. H. R. Morgan, has been able to view portions of the Stratified Primitive Area and the regions near it, and we are making two principal recommendations at this time:

based upon field studies of the areas as they are proposed for wilderness designation by the agency plus first-hand investigation of any contiguous lands which qualify for wilderness protection under the criteria of the Wilderness Act.

We appreciate this opportunity to present testimony today on three outstanding wilderness proposals prepared by the Forest Service—proposals for the San Gabriel Wilderness in California, the Washakie Wilderness in Wyoming, and the Mount Jefferson Wilderness in Oregon.

SAN GABRIEL WILDERNESS AREA

The Wilderness Society urges favorable action without amendment on S. 2531, the measure to designate the San Gabriel Wilderness in California as a unit of the national wilderness preservation system.

We are pleased to be able to support without qualification the Forest Service's strong proposal, which encompasses all of the Devil Canyon-Bear Canyon Primitive Area, plus substantial acreage within Bobcat Canyon and another small drainage on the southwest.

The proposed San Gabriel Wilderness, part of the Angeles National Forest, is located in the San Gabriel mountain range in eastern Los Angeles County. Only 35 miles northeast of the city of Los Angeles, the area may be reached by means of secondary roads from U.S. Highway 66.

Elevations within the proposed wilderness range from 2,150 feet along the west fork of the San Gabriel River to 8,000 feet on Waterman Mountain. Rugged and relatively undisturbed, its rough terrain and heavy brush cover tend to limit most horse or foot travel to trails. It is apt to continue to offer its visitors the experience of solitude, even though it lies within 50 miles of approximately 6 million people.

1. That the north, or upper, part of area J be added to the current Forest Service proposal.

This generally would include the area north of a line running east from Brooks Lake to take in Bonneville Pass and DuNoir and Coffin Buttes, but excluding the roaded area along Bonneville Creek and the location for recent timber cutting.

2. That all but the southeastern one-fourth of proposed area D be included with, or added to, the current Forest Service proposal.

Our primary reason for recommending the addition of these areas, Mr. Chairman, other than for the acknowledged scenic and recreational assets, is to protect wildlife habitat. Just as we recognize and respect the Forest Service for its competency in forest management and protection, including fire control, we recognize and respect the Wyoming Game and Fish Commission for its competency in the management and protection of elk, moose, bear, and bighorn sheep; species which reside in this area. This State agency has concluded that road development is detrimental to wilderness types of wildlife, especially the highly valued elk, and recommend these additions to the wilderness area. On this we concur.

At this time, we neither recommend nor oppose the other additions which have been suggested by other conservation groups. Hopefully, these other recommendations can be developed within a relatively short time, and, if so, they shall be submitted to the committee, if it has not already acted on S. 2630.

Thank you again for the opportunity of making these observations.

Senator HANSEN. Thank you very much, Mr. Clapper.

Mr. CLAPPER. Thank you, sir.

Senator HANSEN. The next scheduled witness is Mr. Joseph Penfold. I have not seen him yet. I guess he isn't here. We will have to schedule him later on.

Concerning the history of the development of this proposal, The Wilderness Society has followed closely the development of the proposal for the establishment of the Mount Jefferson Wilderness Area for several years. We have cooperated since early in the 1960's with Oregon conservation groups and the Federation of Western Outdoor Clubs in working for its designation as a wilderness area.

Our members and cooperators, together with the Forest Service, early recognized that the Mount Jefferson area has many important wilderness values which are outstanding within both regional and national perspectives.

Mount Jefferson is the second highest peak in Oregon, while Three-Fingered Jack, another volcanic cone, rises to an elevation of 7,841 feet to dominate the landscape in the southern portion of the area.

Lava flows, elongated volcanic plateaus, glistening glaciers, and snowfields are among the outstanding scenic and geologic features of this wilderness country. Some 150 lakes dot the area, with their surrounding subalpine meadows, and beautiful parks and basins.

Leading from the lowlands to this picturesque Oregon high country are outstanding stands of true fir and mountain hemlock, Douglas-fir, lodgepole, ponderosa pine, and white fir forests.

High-quality fish and wildlife populations are important features of this wilderness, which lies only 60 miles southeast of Salem, Oreg., and 105 miles from Portland, and is within a 2- to 3-hour drive of over a million people.

A 52,000-acre Mount Jefferson Primitive Area was established in 1930. In 1933, it was enlarged to 85,033 acres. No boundary or acreage changes have been made since then.

In December of 1961, the Forest Service proposed administrative reclassification of this primitive area to wilderness area status. Citizen conservation groups recommended then that the Mount Jefferson Wilderness Area be increased in size to 117,000 acres, which included all of the 85,033 acres of the primitive area plus 32,000 acres of contiguous lands. The Forest Service wild area proposal, made in August, 1963, called for an acreage of 96,944.

At the request of citizen conservationists, the Forest Service conducted a public hearing on June 2, 1964, at which citizen groups recommended establishment of a 117,000-acre wilderness unit. No formal action was taken by the Forest Service or the Department of Agriculture to administratively designate this area as a wilderness area prior to September 3, 1964, when the wilderness act was passed, and the authority to designate wilderness areas was vested in the Congress.

Mr. Chairman, I would like to emphasize this point: Since 1961, when the first administrative reclassification proposals were advanced, and the citizen proposals for modest enlargements were submitted, some of the finest virgin forests within these additional areas proposed by conservationists have been logged, and a permanent road system has been built into part of this area, which only a few years ago qualified without question as wilderness.

This road construction and logging by the Forest Service has seriously impaired the heavily forested wilderness within some of the most important proposed additions along the west side of the Mount Jefferson Primitive Area, and appears to have been done in a conscious effort by the Forest Service to prevent the addition of these lands to

the wilderness area, a procedure not consonant with the intent of the Wilderness Act, which gives to Congress the prerogative to determine wilderness boundaries.

Because of its narrowness, and the proximity of road access to its entire northern section, it is important to include within the Mount Jefferson Wilderness Area's boundaries protective buffer zones, and all possible remaining unspoiled stands of timber along this boundary, as shown in area 14 of the Forest Service map which you see before you.

The Forest Service's management of some of these lands, which has permitted intensive road building and logging in this period when reclassification studies were under way, should not go unchallenged, and should not preclude needed extensions of the wilderness area boundaries that will permit full protection of remaining wilderness lands.

In review, then, the 28,000 acres proposed by the Wilderness Society for addition to the Mount Jefferson Wilderness as recommended by the Forest Service are within three main areas.

The Square Lake and Long Lake area in the southeastern corner, and adjacent to the Santiam Highway—U.S. 20:

Estimated to be 1,600 acres in size, it includes two subalpine lakes best suited for wilderness use, rather than intensive recreation development. They offer high quality wilderness experience within convenient walking distance for older people and family groups.

Intensive recreation facilities of the type proposed by the Forest Service for these lakes can be provided on other nearby national forest lands which do not qualify for wilderness status.

The Marion Lake area.—This 1,600 acre unit, which the Forest Service has proposed be designated as a scenic area, would become over time a serious intrusion, if not placed within the wilderness area.

This subalpine lake, over a mile in length, is one of the few remaining large bodies of water available in the Cascades for preservation within a wilderness. The approach to Marion Lake from the Big Meadows road also should be included in the wilderness area.

The west side buffer zone.—Extending south from the North Fork of Breitenbush River to the southwest corner of the wilderness, it includes portions of firecamp lakes, the north and south forks of Breitenbush River, the valley of Whitewater Creek, Woodpecker Ridge, Pamelia Creek, Minto Mountain, Bingham Ridge, and Big Meadows—some 26,000 acres in all.

This unit is a high value buffer zone, essential to this narrow wilderness. It includes the scenic approaches of low level Douglas fir forests, which the Forest Service has excluded because they are classed as high-value commercial forest land.

The Society believes that the Mount Jefferson Wilderness Area should include these areas of forest land, because of the importance of having beautiful, representative stands of timber that round out the total ecology of this wilderness environment.

It is within this unit of de facto wilderness, particularly in Whitewater Creek and the north fork of Breitenbush River, that the Forest Service has carried on, since 1961, intensive timber development and timber logging.

We recommend that this area be included as a part of the Mount Jefferson Wilderness Area. We realize that in order to place the remaining natural forest lands within the wilderness area, the Forest Service may find it necessary to include small connecting units that have been clear cut or roaded. These contiguous areas are, and should be, a part of this wilderness. These areas can revert back to a near-natural condition, and man's influence will not dominate the landscape for the next generation and those to come.

For example, Mr. Chairman, the Mission Mountains Primitive Area in Northwestern Montana was logged in the mid-1950's because of a severe spruce bark beetle infestation. This logging was done on both private and National Forest lands under the direction of the Secretary of Agriculture.

These lands are slowly reverting back to a natural state, and man's influence there is becoming less apparent.

Another example of lands which in the past have been severely cut, but which are now part of the National Wilderness Preservation System, is the area within the Shining Rock Wilderness Area of North Carolina, where recovery of the vegetation is occurring very rapidly.

If the decision is not made now to include these lands in the Mount Jefferson Wilderness Area, an intensive road system and clear-cutting pattern will develop over most of this 25,000-acre area within the next 10 years. Therefore, the decision should be made now as to whether these lands are to be included in the National Wilderness Preservation System. Determination of the exact acreage suitable for addition can be done by the Forest Service, at the request of this committee.

The west side buffer zone should include all of the as yet untouched contiguous lands, but would probably exclude most of the permanent roads and clear cuts except where needed to connect units of unspoiled forest.

This concludes our recommendations with regard to the Mount Jefferson Wilderness Area.

THE WASHAKIE WILDERNESS AREA

The Wilderness Society is vitally interested in the establishment of the new Washakie Wilderness, as provided for in S. 2630.

We agree, however, with local conservationists, citizens, and groups such as the Wyoming Outfitters Association, the Dubois Chamber of Commerce, and the Upper Wind River Cattlemen's Association, among others, that the preliminary proposal by the Forest Service does not afford enough protection for the prime elk range and scenic approaches to the wilderness against the encroachments of logging and roads associated with logging operations.

We are happy to join with these local groups, and with other national organizations who have worked with Forest Service personnel, to think through the questions raised by the differences in boundaries between the official agency proposal and the increased acreage advocated by the citizen groups as belonging in this unit of the national wilderness preservation system.

Our purpose here is to describe the activities and findings of wilderness conservationists in the area, to point out the national scope of the

conservation values involved in the Washakie Wilderness proposal, and to support the recommendations of citizen groups who are urging that the Congress exercise its prerogative of improving upon this proposal in order to assure that the public interest will be served.

During the month of August 1966, a study team supported and led by the Sierra Club, with cooperation and participation of the Wilderness Society, made a thorough reconnaissance of the Stratified Primitive Area and surrounding wilderness lands.

As a result of that study, the Wilderness Society heartily supports the proposal of the Forest Service to reclassify and to include within the national wilderness preservation system most of the acreage of the Stratified Primitive Area.

The society and its cooperators recommend the designation of additional wilderness lands not proposed for inclusion in the wilderness area under the Forest Service proposal.

Strong testimony was presented by Wyoming citizen groups—the Wyoming Wildlife Federation, the Wyoming division of the Izaak Walton League, the Wyoming Outfitters Association, the Dubois Chamber of Commerce, the Upper Wind River Cattlemen's Association, and others—and regional and national conservation organizations at the December 8, 1966, hearing in Riverton, Wyo., on the preliminary Washakie Wilderness proposal of the Forest Service.

These groups urged establishment of the wilderness area with extension of its boundaries to include West DuNoir Creek and East DuNoir Creek, the Bear Basin unit, and other contiguous areas.

Mr. Chairman, I would urge you to carefully study the proposal as submitted by the Forest Service to the President, and then transmitted by the President to the Congress.

We have found that in the effort to appraise public reaction, and we recognize that this at best a very difficult responsibility for any agency to carry out, that the Forest Service has erroneously listed the positions of some organizations.

I speak specifically of the Wildlife Management Institute's position, as listed in this summary, and the fact that the National Sierra Club headquartered in San Francisco, with an office here in Washington, was not listed at all, although it played a very important role at those hearings.

It is very difficult for an agency to go through the volume of testimony that was received in the course of that hearing, and subsequently in the form of written statements and correspondence, and I would urge you to carefully review this record, or ask that your staff review it, because there is much fine detailed information there that cannot possibly appear in the summary as has been presented by the agency.

These recommendations and the principal differences between proposals of conservation groups and those offered by the Forest Service are being discussed in detail by other witnesses.

Summarizing very briefly, and referring to the markings on a map to be presented to the committee by the Wyoming Outdoor Coordinating Council, the Wilderness Society advocates a Washakie Wilderness unit of approximately 730,000 acres, which includes the present Stratified Primitive Area, 189,024 acres; the present South Absaroka Wilderness, 483,130 acres; and additions contiguous to the Stratified Primitive Area along East and West Forks of Six Mile Creek, area B,

3,296 acres; Horse Creek, area F, 2,598 acres; and the South Fork of Wood River, area A, 1,472 acres.

We agree with the exclusion of the Lean-To Creek area, area 2.

These areas are included in the wilderness area provided for in S. 2630. Their addition to the wilderness area is supported by conservationists on the basis of the field studies and further reviews of the areas since the time of the administrative field hearing.

However, the same series of posthearing field reviews have brought out more strongly than ever the need for firm protection under the wilderness law for the following contiguous lands not included in the Forest Service proposal:

1. East and West DuNoir Creek, area J, 25,000 to 30,000 acres just west of the Primitive Area.

The visits of study teams and other conservationists to the upper East and West Forks of DuNoir Creek drainages have proved to their satisfaction that some of the most superb wilderness values of this region lie in this area, which includes Kisinger Lakes.

It is high country of truly unspoiled wilderness beauty, with simple but adequate trails. Another very significant reason for saving this wild unit is that it is the home of an important elk herd, and is used as a major migration route of elk as they travel to and from their winter feeding areas.

Mr. Chairman, before coming to Washington some 14 or 15 years ago, I was employed by the wildlife research unit of the University of Idaho, the Idaho Fish and Game Department, and the Montana Fish and Game Department, and the U.S. Forest Service, on a seasonal basis over 4 or 5 years on various big-game and range studies.

I am familiar with what happens to good elk range when we suffer an intrusion of a logging road network. Certainly there are, as a rule, elk that remain in the area, but the quantity of elk that are produced by such roaded and logged areas usually drops severely.

I think we can see this in evidence in many parts of northern Idaho, where in the depression years, with the support of the Civilian Conservation Corps, the Forest Service built hundreds of miles of roads.

We can contrast this country, which in the ecological sense is comparable to that of the unroaded sections of the Clearwater, and the production of elk does not compare in any shape or degree.

Yes, you do have elk hunting in the northern roaded areas, but it is not in the quantity nor in the fine quality that we find in the back country of the Clearwater, particularly in the Bitterroot area.

From our experience, and the people in our organization who are biologists concur fully with the Wyoming Fish and Game Department, we were shocked to learn that some of this area J unit has been roaded and logged since the December 8, 1966, field hearing, at which citizen conservationists asked that this area be included in the wilderness, thus practically eliminating the opportunity of the Congress to include some of this area when it decides on the area's boundaries.

We feel strongly that the economic benefits from such logging would in no way justify the destruction of this beautiful region, and the dislocation or elimination of a large number of elk and other wildlife.

Scientific studies and experience in Colorado and other areas support the belief that networks of logging roads—even more than logging itself—would cause a large part of the present elk herd to be driven out of this area, which is now prime elk habitat.

We would hope that close scrutiny of the economy of logging in this mountain region, together with a careful examination of its present and future wildlife and wilderness values, will show the necessity of preserving this comparatively small but superbly wild Upper DuNoir Valley as part of the proposed wilderness area.

Where recent logging and logging roads have penetrated this unit of 30,000 acres, it may be necessary to exclude some of these lands. Careful study of this 30,000-acre unit may reveal penetrations of recent logging and logging roads which preclude inclusion of 3,000 to 4,000 acres within the proposed wilderness area boundaries. As much as possible of this undisturbed back country should be included, however.

I would like to say that the early-day logging within area J consisted largely of tie hacking, that the logging was carried out during the winter period, and much of the material was taken out over the snow, with minimal damage to the landscape, to the native vegetation.

Thus, we see that after some 30 years, there is very little evidence of this activity in the area. Except for an occasional stump, it is hard to realize that this is not pristine, that it has ever been destroyed.

There are what are referred to as jeep roads. These are very limited in extent, and it is certain that they could be closed, or that they would very quickly revert to trail status.

2. Bear Basin, area D, 5,000 to 8,000 acres on the southern border of the primitive area.

Conservationists originally recommended the higher acreage figure for inclusion in the proposed wilderness. Later study has resulted in a somewhat reduced recommendation, because of some road penetration in the area.

We strongly urge, however, that the size of this addition not be reduced below the 5,000-acre level, because this acreage is needed to protect critical elk habitat and other wilderness values.

The other citizen-proposed additions along the southern fringes of the Stratified Primitive Area are recommended for inclusion, because they represent important approaches to the wilderness environment which are not only a part of the scenic resource, but have a bearing on the stability of the soil and the prospering of the elk herd.

These valuable fringe areas should not be trimmed away from the wilderness country of which they are an integral part:

3. Caldwell Creek-Wiggins Fork, areas 3, 4, E, and F–1.

Some 4,000 to 6,000 acres of additions are advisable here to protect critical elk habitat and important timbered fringe areas. We are aware that there has been some recent logging within area E, and these tracts would be excluded.

4. Parque Creek, Ramshorn, Fivemile, and Six Mile Creeks, areas 6, G, H, and I.

Some 7,000 acres of worthy additions to the Washakie wilderness are found here, including foreground for the magnificent Ramshorn, which is the dominant scenic feature along the southern boundary of the area. Important elk migration routes would also be protected from disturbance by these small additions.

The Stratified Primitive Area region is a wild country of broad, flat-topped mountains and plateaus cut by deep canyons formed of the eruptive material from the volcanic area of Mount Washburn in

Yellowstone National Park and Lava Mountain at the head of Wind River.

Many steep and narrow valleys, partially clothed with alpine-type forest growth, give this region—only 20 miles north of the town of Dubois and 80 miles southeast of Yellowstone National Park—the qualities of seclusion and unspoiled charm.

It abounds in wildlife, large and small, including not only important populations of elk, but also numbers of deer and moose. One outstanding feature of this area is the great amount of petrified forest remains that are to be found on the gravel bars of nearly all of its streams.

While practically all forest types common to the Rocky Mountain region are found in the stratified area, with the exception of Douglas-fir, the steep sidewalls of nearly all of the valleys do not encourage forest growth.

Because of the frequency of cloudbursts, the existing undisturbed timber cover is of great importance in retarding the torrential runoff, and in protecting the watershed.

Headwaters of the South Fork of Wood River, and the East Fork of Wind River—both tributaries of Yellowstone River—originate here, and this supply of clear, high quality water is in itself a great public value best protected in its natural condition for downstream uses.

Mr. Chairman, I want to offer a personal observation from what I have seen in areas of this high elevation type, where we have had logging of marginal timber, lodgepole, Douglas-fir, at elevations 7,000 to 10,000 feet.

Usually we find timber in these sites growing in unstable soil, such as we have here. We find that the small streams run black or brown with every heavy rain, and with the heavy melt of the winter snows.

I think we want to look very closely at what will result from logging in these marginal sites at high elevations to our priceless watersheds, and to our priceless native fisheries.

Our native fisheries bring many people into most of these mountain canyons, and I think we should not underestimate their importance to the economy of the State and the local communities.

I also want to comment, Mr. Chairman, on this reference that we see today to regional planning.

This involves the displacement of some of the users of Yellowstone National Park, which most of us love very dearly, to contiguous national forest lands.

Most of us, as we have appeared at various hearings over the country, and before the Congress, have urged such regional planning. We have advocated this as a means of relieving the great pressure on our national park wilderness lands, but it seems inconceivable to me that in the face of so much in the way of opportunity for locating alternate camping facilities, that so much will be dependent upon the 45 to 50 thousand acres that we might propose at this time for addition to the Washakie Wilderness Area.

It seems inconceivable, with the lovely drives that we have around the community of Dubois, that we are confined to area J for the placement of five of these camping areas.

The area south of the wilderness area, as we see it proposed by the citizens' groups, is ideally suited for such campgrounds, and other recreational facilities, the facilities that would accommodate the pub-

lic, the people that need a place to camp, and a lovely view of the wilderness.

In addition, from such locations, I think people would have an invaluable experience of walking into the wilderness, maybe back to the camp at night, but all of this would accrue to the advantage of the local economy, and we would urge that alternate sources for such mass recreation facilities be fully explored before it is decided to use any part of these locations that we propose to be parts of the wilderness area for such facilities.

With its rugged and spectacular scenery, its many steep and secluded valleys clothed in summer with gorgeous displays of plant life, its 16 lakes, and uncounted streams flowing through both alpine meadows and canyons, and its untamed wildlife to be viewed and studied, the Stratified Primitive Area is unquestionably worthy of preservation in its present natural condition.

When added to the South Absaroka Wilderness, and rounded out with the additions we have suggested, this unit will guarantee a great wilderness experience for all who seek it, as well as preserve scientific values, watersheds, and wildlife.

A good trail system already exists through much of the area. It is being used more each season for horse pack trips and by hikers. There is good access now to the boundaries of this area.

Mr. Chairman, in conclusion, we wish to emphasize our strong support for the establishment of the Washakie, San Gabriel, and Mount Jefferson Wilderness Areas. We commend you and the members of the committee for your prompt consideration of these measures, and urge your early, favorable action upon them. We appreciate very much the opportunity to present these views.

Senator HANSEN. Thank you very much, Mr. Brandborg.

We will next hear from Mr. Robert R. Marshall, of Pomona, Calif.

STATEMENT OF ROBERT R. MARSHALL, POMONA, CALIF.

Mr. MARSHALL. Thank you, Mr. Chairman.

I am Robert R. Marshall, and I live at 1986 North Orange Grove Avenue, Pomona, Calif. I would like to explain why I believe the San Gabriel Wilderness should be established as provided in S. 2531.

The proposed San Gabriel Wilderness would preserve an excellent sample of the south-facing slopes of the San Gabriel Mountains. I live near the base of these mountains, as do most people in the Greater Los Angeles area, and I have hiked and traveled in the San Gabriels a great deal. I have also traveled widely in the other mountains of southern California, as well as wildernesses throughout the Western States. I know of no other place quite like the San Gabriel Mountains, and, frankly, I love them.

Their lower, south-facing slopes are steep, crumbly, and generally covered with dense, dry chaparral. In fact, it isn't too far from the truth to say that the chaparral is the only thing which keeps these mountains from falling down.

There are narrow, steep, and often spectacular canyons, and in the bottom of each canyon is a little line of a kind of world totaly different from that of the slopes just above. Within this line it is cool—shaded by water-loving hardwood trees. The wild flowers grow here, and there are often trickles of water in the streambeds all year.

Above 4,000 feet, the big cone Douglas-fir becomes common. This tree is found in other ranges, too, but in the San Gabriels its droopy branches take on the character of a trademark.

Still higher, above 6,000 feet or so, the chaparral gives way to open stands of coulter, jeffrey, and sugar pine, and other conifers. These slopes are usually gentle, probably because there is little chaparrel to help them stay steep. The ground is carpeted with a layer of dead needles, and, except for some foot-high manzanita, there isn't much in your way when you want to go from here to there.

It is pleasant and free to walk around in this upper forest, and if you do, you are likely to encounter a bighorn sheep doing the same thing.

Everything I have described is found in the proposed San Gabriel Wilderness, but this is not all of the unique character of the San Gabriel Mountains. These are extreme mountains. If the wind blows, it is apt to be a gale. If it rains, it is apt to be a deluge. And if there is a fire, it is probably going to be a massive conflagration.

All of these things are natural for the San Gabriel Mountains. They are a part of what makes them unique. It is almost as if this mountain range is dedicated to the proposition that anything worth doing is worth overdoing.

There is another important uniqueness. Several million people live right at the base of these extreme slopes. Understandably, they get very unhappy when a fire toasts their back yards and floods move their homes to lower ground.

There is plenty of motive for taming these mountains, and at first it may seem like an expensive luxury to leave a part of them undisturbed. But it isn't. In this case, preservation under the admittedly restrictive Wilderness Act is inexpensive.

The geography of the proposed San Gabriel Wilderness is very fortunate. Nobody lives at the base of it. There are at least two major flood control reservoirs between the proposed wilderness and populated area. There is fast access by good road all around the area, and the boundary is located at places where it is practical to try to stop fires.

Undeniably, wilderness classification implies some greater risk of uncontrolled fire, but this is the one place in this area where fire would do the least damage. Even so, the Forest Service has cleared small helicopter landing spots in the area for quick access to kill fires while they are small.

This control technique is in use throughout the Angeles National Forest, and, if these small heliports are not overdone, they are a tolerable intrusion in the wilderness.

Generally, the proposed wilderness boundaries include as much land as possible, while being administratively defensible. Perhaps the one exception to this is along the southern edge, where the West Fork of the San Gabriel River has existing flood control developments, and a dirt road alongside it.

Here, the proposed boundary is drawn at a fixed vertical elevation above the river. This excludes a substantial length of the bottoms of the larger side canyons, which have gentle gradients.

Before supporting the Forest Service's proposal, local conservationists looked at this southern boundary in detail. We were satisfied that this setback, which is actually more extensive than necessary,

would not result in inappropriate developments in these portions of the side canyons, which more properly belong within the boundaries. We are willing to go along with the easy-to-define boundary along this southern edge.

In general, we are very pleased that the Forest Service has shown good faith and good judgment in making its proposal for the San Gabriel Wilderness. It is appropriate that the proposal should enjoy the widespread support it has received. In fact, to the best of my knowledge, there has been no local opposition to it at all. This is the proposal incorporated in S. 2531. I hope this bill will become law as soon as possible.

Commenting a little more on the lack of opposition, the hearing in 1966 held in Altadena by the Forest Service was presided over by a hearing officer of some years of experience at this, and he said that in all of his 20 years of conducting such hearings, he had never seen one such as this. There just wasn't any disagreement with the Forest Service proposal. This should not be taken to mean that there is no controversy whatever attached to this area, or likely to be attached to it. What it really should mean is that we feel that any difficulties or disagreements which may arise in the future will be basically administrative, and we will be able to resolve differences through the normal administrative channels, and the fine cooperation we enjoy with the Forest Service in this area.

There was one little note of controversy, oddly enough. A certain gentleman, Mr. Alex Deutsch by name, tried to argue for the withdrawal of certain parts.

It does bring up a point which is worth making with respect to the San Gabriel Wilderness. Almost as close to the Los Angeles area are several units of the national wilderness preservation system.

The San Gabriel does not really overlap these in the kind of terrain which it preserves. All of these other areas I have just mentioned lie above 7,000 feet elevation. Almost entirely, the San Gabriel Wilderness is below 7,000 feet elevation, and the kind of terrain and area preserved is quite different. We need them all to have representative samples of all of the southern California mountain areas.

Thank you.

Senator HANSEN. Thank you very much, Mr. Marshall.

Next to be heard is Dan Reece, of Portland, Oreg.

Let me say, if I may, before you begin, Mr. Reece, that if you would like to emphasize any points that you think have particular significance, or in controversy, I think that might be indicated.

I would just say that, without having seen your testimony at all, I think these three areas have been rather adequately described. I just suggest that if you would like to take advantage of this opportunity to emphasize points that you think may be of particular concern, we would be happy to have that, but certainly you may, if you like, read your statement in its entirety.

STATEMENT OF DAN R. REECE, PORTLAND, OREG.

Mr. REECE. Thank you, Mr. Chairman. I have a very short statement.

My name is Dan R. Reece. I came from Oregon to testify before this committee on my own volition, and at my own expense. Although

I am not sponsored by a specific group, I represent a growing voice among other businessmen of the Northwest who share my conviction that there is too little wilderness for too many people within my State.

My conviction is substantiated by direct observation that wilderness, much of it de facto, is shrinking rapidly, while forecasted population of Oregon is destined to expand at a rate considerably in excess of the national average.

In contrast to the rapidly expanding horizons of research, in which my company takes part, wilderness remains historical evidence of the past and can never be expanded beyond the protection given to it by public authority.

I have intimate knowledge of the focal points for wilderness experience inside and outside the proposed Forest Service boundaries of the Mount Jefferson Wilderness. More than 20 years have elapsed since my first visits to Jefferson Park, Hunts Cove, above Pamelia Lake, the lakes basin west of Three Fingered Jack, and Square and Long Lakes to the south.

I have seen camping sites on these small lakes, such as Santiam Lake, 4 miles within the wilderness boundary, reduced to dust bowls where grass once grew to the lakeshore, as short as 10 years ago.

Where one campsite existed 10 years ago, you can now count 10. The same applies to Hunts Cove, where one must travel more than 7 miles from the roadhead below Pamelia Lake and climb several thousand feet in elevation.

To an even greater extent, the quality of Jefferson Park has been eroded, due to the extremely heavy visitor density to this alpine garden of exquisite beauty.

Until the Forest Service roaded the White Water Creek west of Jefferson, access to Jefferson Park was from Brietenbush Lake, over a 7,000-foot pass, a 7-mile hike. Now, from the White Water Creek roadhead, it is a short hike to the Sentinal Hill Ridge, and an easy 3-mile grade to Jefferson Park.

This new access permits greater pressure on the park, and promotes faster erosion of wilderness quality.

In the vicinity of this area, to the north, are Fire Camp Lakes. One lake lies within the proposed boundary, the other outside. Inclusion of both lakes would add to the wilderness experience and relieve pressure on Jefferson Park.

On the North Santiam River, the trail from Big Meadows follows a 6-mile easy grade to Duffy Lake. The proposed wilderness boundary bisects a stream junction containing a fine meadow, with lakes close by. The area is of high wilderness quality, and should be protected by extension of the boundary to Big Meadow road.

Square and Long Lakes, No. 15 on map B, was one of my first wilderness experiences in de facto wilderness. Although access is now by high clearance vehicles and four-wheel drives, this could be an area of quality wilderness experience for people who wish a short 1-mile hike to an area of solitude.

I now come to the major considerations in my testimony, which are as follows:

There are so few focal points within the Forest Service proposal; there are several on the outside.

The fragile character of these focal points is being seriously eroded from high visitor density. Future visitor density will inevitably increase.

The narrow boundaries, 3 miles at the upper end, provide something short of wilderness experience, because of the easy access. I recommend that the shaded portions on map B of the Forest Service proposal, areas 14, 15, and 16, be included in S. 2751.

Thank you.

Senator HANSEN. Thank you very much, Mr. Reece.

Mr. Lawrence Williams, vice president of the Federation of Western Outdoor Clubs, Milwaukie, Oreg.

STATEMENT OF LAWRENCE WILLIAMS, VICE PRESIDENT, FEDERATION OF WESTERN OUTDOOR CLUBS, MILWAUKIE, OREG.

Mr. WILLIAMS. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, I feel very fortunate to have the opportunity to appear and testify before you today on the very important subject of establishing the boundaries for the Mount Jefferson Wilderness area.

My name is Lawrence Williams, 1465 Southeast 27th Street-206, Milwaukie, Oreg. 97222. I am the Oregon vice president of the Federation of Western Outdoor Clubs, in whose behalf I am here today. I am also the chairman of a new committee called the Committee for the Volcanic Cascades Study, a bill Senator Morse introduced for a study of the Oregon Cascades.

I am a hiker, backpacker, and skier. I know the Oregon Cascades, and have covered over 400 miles of the Pacific Crest Trail System with a pack on my back.

For those members of the committee who are not familiar with the Federation of Western Outdoor Clubs, I would like to explain that the federation, founded in 1932, is an association of conservation and outdoor recreation oriented organizations. Among its purposes is the aim of preservation of the forests, wildlife, and natural features of this country, and the aim of assistance to public and private groups in the conservation of our natural resources. The federation is composed of 46 outdoor clubs in the 11 Western States, and has a membership of over 70,000 people.

If the Federal Government did not already recognize the value of wilderness lands, we would not have seen the Wilderness Act of 1964 come into law, and you would not be holding this hearing today.

The establishment of the Mount Jefferson Wilderness Area is indeed worthy of our utmost consideration.

The Oregon Cascades contain some of the most superlative scenery in the United States: Nine great volcanoes over 9,000 feet in elevation, 33 peaks over 7,000 feet, and 28 named glaciers.

This beauty is rapidly being encroached upon by men who have other ideas than preservation of the natural beauty of the Cascades. For this reason, the establishment of suitable and proper boundaries for the Mount Jefferson Wilderness Area is exceedingly important. We have learned from past experience that what is not firmly protected by Congress will eventually be roaded and logged.

The selection of the boundaries for the area rests primarily on four factors:

1. The need to establish an area suitable for preservation in perpetuity as wilderness;
2. The need for a sufficient buffer within the wilderness to afford natural protection of the wilderness focal points from overuse and from outside influences;
3. The need to protect numerous alpine lakes, which are located along the boundaries of the proposed wilderness area; and
4. The needs of industry for raw materials.

For the most part, the boundaries proposed by the Forest Service fail to establish an area suitable for preservation in perpetuity as wilderness, fail to provide an adequate buffer, fail to protect the alpine lakes, and fail to confine timber harvesting to suitable areas for meeting legitimate needs.

There exists a consensus among conservation leaders in Oregon's outdoor clubs—the Mazamas, the Chemeketans, the Obsidians, the Trails Club, the Oregon Cascades Conservation Council, the Committee for the Volcanic Cascades Study, and the Pacific Northwest Chapter of the Sierra Club—that several additions must be made to the area proposed for wilderness classification by the Forest Service, if a meaningful and lasting unit of wilderness is to be added to the wilderness system.

For the most part, the boundaries of the additions follow natural features, more so than those proposed by the Forest Service. Where natural features are not practicably available, the boundaries follow contour or section lines or physical boundaries, such as existing roads.

The Federation of Western Outdoor Clubs still supports its original boundary recommendations proposed at the Forest Service hearings. The areas which we requested are indicated as shaded areas on page 14 of the Forest Service proposal, which have already been pointed out.

We are pleased to see that the Forest Service chose to include a part of the Fire Camp Lakes area, and the Pamelia Lake Corridor. Out of a total of 30,000 additional acres recommended for inclusion, the Forest Service increased their original proposal by just over 1,000 acres.

I will not take the time here to describe the individual merits of each of the areas which we have recommended for inclusion, but I would like to name the areas which we think deserve further consideration by this committee.

We recommend the further expansion of the Fire Camp Lakes area to protect it from overuse; the expansion of the boundary along the Valley of the White Water to protect Jefferson Park, which is already very scarred from the very heavy use it is receiving; the inclusion of Marion Lake, which is the only remaining alpine lake of substantial size which is available for inclusion in wilderness in the entire Pacific Northwest region; and the addition of Square and Round Lakes, to exclude motorbikes and to offer a wilderness experience within a trail miles of the Santiam Highway for older people and families.

Finally, I would like to point out that since 1950 the Forest Service has declassified six former limited areas in the Oregon Cascades, which has resulted in the loss of some 250,000 acres of former wilderness-type lands. Loggings roads and logging into formerly roadless areas in the last decade has taken another estimated 100,000 acres, for

a total loss of about 350,000 acres of wilderness-type lands under Forest Service Management. Not much unspoiled country is left in Oregon's Cascades. Of a total of 273 stream valleys over 5 miles in length in the national forests of the cascades, only seven remain unroaded or unlogged. For a State whose forests are often thought to be relatively untouched, this is a very surprising fact.

Finally, I would like to say that of these, there are only three over 10 miles in length remaining in Oregon which are not roaded or logged, and of these three, one is due for logging this next summer. So that we have not an overabundance of wilderness, and I think anything we can do to preserve a larger portion of the Mount Jefferson area is well worth doing.

Senator HANSEN. Thank you very much, Mr. Williams.

Mr. WILLIAMS. Thank you.

Senator HANSEN. I have a statement here by Arthur A. Rich, California vice president, Federation of Western Outdoor Clubs. I think this would be a good place in the record to include it.

(The statement referred to follows:)

STATEMENT OF ARTHUR A. RICH, CALIFORNIA VICE PRESIDENT, FEDERATION OF WESTERN OUTDOOR CLUBS

The Forest Service proposal for inclusion of the Devil Canyon-Bear Canyon Primitive Area and an additional 1,330 acres in Bobcat Canyon in the San Gabriel Wilderness Area is very commendable. It represents the largest possible area which avoids existing developments. Located at the doorstep of the huge sprawling Los Angeles Metropolitan Area, it would provide a valuable addition to our wilderness system accessible to urban dwellers who can visit this area on as little as a one day outing. The area is quite diverse, containing higher elevation conifer forests, the unique lower elevation chaparral plant community and the beautiful stream bottom alder and maple groves. I would like to urge that early action be taken by Congress in considering and approving this proposal.

Senator HANSEN. W. D. Hagenstein, executive vice president of Industrial Forestry Association, has sent a letter and a statement by the association. Without objection, they will be included in the hearing record at this point.

(The letter and statement referred to follow:)

INDUSTRIAL FORESTRY ASSOCIATION,
Portland, Oreg., February 13, 1968.

Re S. 2751.

Hon. FRANK CHURCH,
Chairman, Subcommittee on Public Lands, Senate Committee on Interior and Insular Affairs, Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: I had hoped to be able to appear before your Subcommittee on February 19, 1968, when you have scheduled hearings on the above captioned bill relating to the Mt. Jefferson Wilderness, Oregon. However, I am scheduled to be in Japan as an adviser to our U.S. negotiators on the log export problem on that date.

Therefore, I'd appreciate very much if you would include this letter and the attached Statement in behalf of this Association in the record of your hearings on S. 2751.

Thanking you in advance and with kindest personal regards, I am,
Sincerely yours,

W. D. HAGENSTEIN,
Executive Vice President.

STATEMENT OF INDUSTRIAL FORESTRY ASSOCIATION

Industrial Forestry Association consists of 104 companies and individuals in the business of growing and harvesting timber and manufacturing lumber, pulp

and paper, plywood and veneer, shingle and shakes, hard and soft boards, poles and piling, doors, furniture and other forest products throughout Western Oregon and Western Washington. Our members operate more than 400 wood-using plants, conduct more than 200 different logging operations and employ more than 80,000 people. The annual payroll of their employees exceeds $500 million.

Our members own 7.5 million acres of forestland in our region. They produce annually about 7 billion board feet of logs, buy the equivalent of 1.75 billion feet of logs in the form of chips annually for their pulp and board mills, and buy another 1.5 billion feet of logs annually on the open log market. They are steadily operating companies which continue in good markets and bad and are the backbone of communities in almost every one of the 38 counties in our region.

An important part of our industry's timber supply comes from public lands, including the national forests. Therefore, Industrial Forestry Association follows a policy of examining every proposal made for the withdrawal of public lands from productive forestry. The Association also has a policy of supporting the withdrawal of suitable areas of the national forests for addition to the National Wilderness Preservation System, created by Public Law 88–577, 88th Congress, 1964, where its studies demonstrate that such withdrawal will not adversely affect the economy of surrounding communities.

On June 2, 1964 the Association endorsed the Forest Service proposal for the Mt. Jefferson Wild Area. Now the Administration has proposed adding the Mt. Jefferson Wilderness to the National Wilderness Preservation System. We have studied the new proposal independently, as well as having sought the view of timber operators and others in the communities directly affected.

The Association believes that the proposal embodied in S. 2751 contains the maximum acreage which can be withdrawn as permanent wilderness without adversely affecting the opportunities for local jobs and payrolls which are dependent on raw materials from the national forests. Of the 96,462 acres proposed for inclusion in the Mt. Jefferson Wilderness 58,700 acres or 61 percent of the total are lands capable of growing commercial crops of timber through the practice of forestry. These productive forest lands contain a present inventory of 1 billion, 350 million board feet of mercantile timber. We believe this is a most generous contribution to wilderness preservation. Therefore, the Association endorses without change the Department of Agriculture proposal for adding the Mt. Jefferson Wilderness to the National Wilderness Preservation System as provided in S. 2751.

Senator HANSEN. We have a number of witnesses yet to be heard from.

Is there anyone here this afternoon who would find it difficult to be here tomorrow? We could take a little more time this evening.

The next witness, according to the list, is Mr. Prince Helfrich.

What is your pleasure, Mr. Helfrich?

Mr. HELFRICH. Yes; I can wait until the morning if you like.

Senator HANSEN. Let me ask one more time, is there anyone here who would find it inconvenient to be here tomorrow?

Is Mrs. Evelyn Lester here?

Mrs. LESTER. I will have someone else read my statement, or else leave it as is on the program here.

Senator HANSEN. We would be happy to hear from you. I understand that you do have a short statement, and if you would like we would be happy to hear from you.

Mrs. Lester, I understand you are a member of the Wanderbird Hiking Club here in Washington. Is that right?

Mrs. LESTER. Thank you, but I am representing myself rather than the Wanderbirds in the statement.

Senator HANSEN. You may proceed.

STATEMENT OF EVELYN LESTER, TAKOMA PARK, MD.

Mrs. LESTER. I am Mrs. Evelyn Lester of Takoma Park, Md. I would like to present this statement on behalf of myself. Before com-

ing to Washington, D.C., I lived for the past 3 years in Seattle, Wash., and had opportunities to visit the Mount Jefferson area. As proposed by the Forest Service, it is indeed an area worthy of inclusion in the National Wilderness Preservation System.

This area along with Three Sisters and Mount Washington Wilderness areas in the heart of the Oregon Cascades needs permanent protection because these beautiful mountain peaks are impressive only from the perspective looking down upon or up from a valley well covered with Douglas-fir and other conifers.

I have hiked near the area where the Santiam River meets the Whitewater Creek and have seen the clear cuts scars there and it strikes me that leaving Mount Jefferson there without the trees surrounding it is like taking a fish out of water.

East of the junction of the Whitewater Creek and the Santiam River, about 6 miles, the Mount Jefferson Primitive Area is only 3 miles wide. It is quite a small area and I would favor extending the borders to the west by approximately 3 miles, as suggested by the conservation groups today, and to include Marion Lake within this area; that is, extend the entire length of the Mount Jefferson Wilderness Area by approximately 3 miles.

Our contention against including Marion Lake in the wilderness area is that it is overused. It will get a great deal of use either in or out of a wilderness area because of its proximity to a paved road. If, as the Forest Service suggested in its proposal, motorboats will be phased out at Marion Lake, this can be accomplished administratively but not legally if Marion Lake is a scenic area.

The issue of including Marion Lake versus not including it in the wilderness area isn't weighting heavily on two vastly different types of use as for example a tram versus a 15-mile steeply graded trail. We have two different groups of people using it. I think the same people would be using this lake either way, wilderness area or scenic area. The difference is the degree of protection for the lake; administrative protection subject to change as a scenic area or legal protection which is permanent as a wilderness area.

Wilderness preservation system is a great act yet to be institutionalized. Let's have substantial wilderness areas without vulnerable buffer zone outside of the areas. With a major mountaineering, hiking, and general outdoor equipment store in the Northwest expanding from 5,600 members in 1956 to 65,000 members in 1967, I assure you that these areas will be used and the many of us who go to these areas will be thankful that this diversion, or, rather this choice of diversion, exists still.

Senator HANSEN. Thank you very much, Mrs. Lester.

Mrs. LESTER. Thank you.

Senator HANSEN. Before we conclude, may I call Mr. Helfrich to come forward and present his testimony.

STATEMENT OF PRINCE HELFRICH, BLUE RIVER, OREG.

Mr. HELFRICH. Thank you very much, Mr. Chairman. I have already prepared a statement and sent it in.

Senator HANSEN. It will be included in full at the end of your remarks.

Mr. HELFRICH. My name is Prince Helfrich from the McKenzie River in Oregon. I am here representing 200 professional guides in the State of Oregon. They are guides and packers.

I might say that in the recreational industry I have spent over 40 years guiding in the different western rivers and at present our association guides in Oregon, Washington, Idaho, and British Columbia. So I think I have quite a good picture of the recreational industry.

I would like to point out that in Oregon recreation is our third largest industry, and it is fast gaining on the other two industries of timber and agriculture.

Not long ago Senator Morse made the statement that it is possible that in 10 years recreation will surpass any of the other industries. For that reason I would like to talk for the guides and for the recreation people of Oregon.

Recreation is increasing 20 percent every year by Forest Service figures. In fact, the recreational use of a given area increases 100 percent every 5 years. That is due a great deal to transportation. You could leave here in the morning after breakfast, and fly across the United States, take a car up into the Jefferson area and have your dinner there that evening. So we are not saving this area just for the Oregonians or Californians that come up, we are saving it for the people of the entire United States. We want to see this area increased. We feel that it is far too small for real recreation to last very long.

As you look at that area you see a long, narrow strip the length of the Cascade Mountains and if you were camped there in one place that is 3 miles wide you could hear power saws running on the eastern side and logging equipment on the western side. That is not true wilderness. People who go there wanting the true experience of wilderness won't find that. We would like to see the area enlarged along the lines suggested by the western outdoor clubs, which includes those blue areas on the map there.

Speaking of timber, it has been mentioned quite a number of times this afternoon as to the desirability of timbering in that area. If you will realize that there are almost 900 million feet of timber taken out of Oregon this year and logs shipped to foreign markets, you will see that there is not a great shortage of logs. The second thing is that, in this area we are speaking of, a great deal of the timber is low-quality timber, what we call the high-mountain species. There is not a great deal of Douglas-fir or ponderosa pine.

In summing up, let me urge you to set this area aside now before it is too late, becaues in the future you have the power here in Congress to enlarge it. You also have the power to cut it down. So if you will set it aside it is like putting something in the bank. It is there and growing and can be used later if there is a necessity for it.

Thank you very much.

Senator HANSEN. Thank you, Mr. Helfrich.

(The statement referred to follows:)

STATEMENT OF PRINCE E. HELFRICH

I am Prince E. Helfrich of McKenzie River, Oregon, and I am representing the Oregon Guides and Packers, a group of over two hundred professional guides. I have been actively engaged in guiding for over forty years. I direct a boys' wilderness camp during the summer in the Cascade Mountains and manage my own tree farm in the winter months.

Gentlemen: We are asking that you give careful and favorable consideration to the enlarging of the Mt. Jefferson Wilderness Area. We suggest that you follow the general guide lines as stipulated by the Federation of Western Outdoor Clubs at a recent hearing on the proposed wilderness area, and add at least the 29,000 acres.

As the area now stands and as suggested by the United States Forest Service, the wilderness will be too small. Extending north and south along the crest of the Cascades, it is very narrow for a complete wilderness area. Logging activities can be heard both to the east and west of the slim corridor of spectacular natural beauty.

In my time, I have seen a tremendous explosion in the field of recreation. Mountain climbers, skiers, hunters, fisherman, hikers and campers are all demanding wilderness areas in which to vacation. Leisure time, better transportation, better equipment, and extensive outdoor publicity have all joined in putting thousands of recreation-seeking people into the Cascade Mountain regions. Limited and desirable areas are already being overused. Much of our high mountain country is fragile and overuse can destroy its beauty. Overcrowded conditions detract from a happy outing in natural surroundings.

Oregon is a state that is rich in recreational potential. At present recreation is our third largest industry. Facts indicate that recreation use is increasing 100% every five years; so in ten years it can well be the leading industry.

In the western states we have a continuing controversy between industry wanting to utilize commercially the resources of the wilderness, and those far-seeing individuals wanting to preserve some of our great outdoors. A balance must be obtained between use and exploitation of the natural resources and saving some of them for the future. Why not save some areas now and let later generations decide their best use?

As guides making a living from the recreation industry but not by exploiting or destroying natural resources, we ask you to enlarge these areas. Save them before it is too late. This must be done if the recreational needs of our people twenty years from now are to be met.

Senator HANSEN. The committee has received statements from Carwin A. Woolley, executive vice president, Pacific Logging Congress, and Douglas W. Scott, of Ann Arbor, Mich., for inclusion in the record. Also a letter from Gene D. Knudson of Willamette Industries, Inc., of Portland, Oreg. These all concern the Mount Jefferson Wilderness proposal and I think it would be well to print them at this point.

(The data referred to follow:)

STATEMENT OF CARWIN A. WOOLLEY, EXECUTIVE VICE PRESIDENT, PACIFIC LOGGING CONGRESS, PORTLAND, OREG.

The Pacific Logging Congress is an Association of individuals engaged in, or interested in the harvesting and tree growing phase of the forest industry. Its membership includes representatives of the majority of logging firms from Alaska to the Mexican border and east to the Rocky Mountains. It is vitally concerned with the broad aspects of forest land management, to the end that the greatest possible benefits of all forest resources may be realized.

Our Association has long supported, and worked for, the application of the multiple use principle of land management, and it recognizes the difficulties inherent in meeting seemingly unlimited demands for specific uses from a very limited and continually shrinking acreage of forest land.

We have very carefully studied the proposal for the Mount Jefferson Wilderness Area.

We believe that it represents an excellent example of enlightened and comprehensive resource management planning for maximum benefit to all segments of society, with minimum adverse affect on any one specific use of our forest resource. We believe the U.S. Forest Service is to be commended for an excellent job of planning and presenting this proposal.

We therefore strongly urge approval of S. 2751 as presently written.

We also wish to record strong opposition to any proposal to further extend the proposed boundaries of the Mount Jefferson Wilderness Area to include Square Lakes, Marion Lakes, or any additional areas of high quality timberlands.

The proposed wilderness area already contains almost 1.5 billion board feet of merchantable timber, which if made available for commerce would provide an annual sustained yield production, based on 100 years rotation, which is conservative, of more than 13 million board feet per year, forever.

This represents, from now to infinity, an annual loss to the economy of Oregon of approximately $2,000,000.00 a year in manufactured product value. In terms of payroll it represents an annual sacrifice of more than $550,000.00 and jobs for 100 breadwinners.

In these days of wars against unemployment and poverty, such a sacrifice is not to be lightly passed over. Still greater reduction of the states economic base, merely to add acres to a wilderness area cannot be justified.

Further enlargement of the proposed wilderness area boundaries would also result in an unconscionable loss of vitally needed recreational resources. The basic attributes for which wilderness areas are set aside will inevitably be lost if adequate recreational facilities are not provided for the great majority of people who seek only a secluded and natural forest environment for picnics and family camping trips.

In summary, the Pacific Logging Congress commends the Forest Service for its comprehensive and workmanlike plan for the Mount Jefferson area. We urge enactment of S. 2751 as presently drafted. We most strongly oppose any proposals that may be submitted for enlargement of the boundaries of the wilderness area as set forth in S. 2751.

STATEMENT OF DOUGLAS W. SCOTT, ANN ARBOR, MICH.

My name is Douglas W. Scott. I am a graduate student in the Department of Forestry of the School of Natural Resources of The University of Michigan. I hold a degree from this university in the field of outdoor recreation planning and am presently pursuing advanced studies in resource policy, with emphasis on outdoor recreation policy.

This statement is offered solely on my own behalf as an individual citizen concerned with the protection and perpetuation of suitable areas as part of our National Wilderness Preservation System. My views on this Mount Jefferson Wilderness proposal are based upon a careful reading of the Forest Service proposal documents, the Geological Survey report and additional literature relevant to the matter. For the convenience of the subcommittee I have given full citations for all references mentioned. My views are also based upon my personal familiarity with the area in question, as I grew up in Oregon, have hiked through much of this immediate area, and have climbed both Mount Jefferson and Three Fingered Jack.

It is necessary, in analyzing the present Mount Jefferson Wilderness Area proposal, to consider the total perspective of its regional setting. The immediate conclusion that one draws from such consideration is that this is the ultimate time of decision for wilderness resources in the Mount Jefferson area, as in all of the Cascade region.

As members of this subcommittee know, the basic premise of the Wilderness Act is that all of our lands are destined soon to be put to some use. Only such lands as are specifically designated and given strong protection will remain in a wild, roadless and remote natural state.

This is certainly the case in the wild Cascades of Oregon. That point is amply demonstrated by reference to an extensive study of "Timber Trends in Western Oregon and Western Washington," which was prepared in 1963 by the Pacific Northwest Forest and Range Experiment Station of the United States Forest Service:

"Northwestern forests today are at the center of new and sharp changes. Along the western slope of the Cascade Mountains, one may drive to timbering operations on ground that only 'the day before yesterday' was untouched and unseen, a part of the timeless virgin wilderness."[1]

The study goes on to point out that since World War II the Douglas fir subregion has entered a new era. This new era is characterized by three closely related features:

"One feature is the rapid receding and prospective disappearance of the timber frontier in the Douglas fir subregion * * * industry is pushing into the subregion's

[1] Timber Trends in Western Oregon and Western Washington, U.S. Forest Service Research Paper PNW 5, October, 1963. Pacific Northwest Forest and Range Experiment Station, Portland, Oreg., P. 1.

last unexploited block of counties, those of southwest Oregon * * *. The industry is pushing also eastward onto long-inaccessible Cascade slopes and locally into other spots which until recently were remote. * * * All these developments have been attended by rapid extension of forest road networks * * *." [2]

This new era and this receding "timber frontier" demonstrate that we now face a final opportunity to make sound choices about the land-use patterns of Oregon's high Cascades. We will, of course, be able to make additional decisions in the future, but never again on the basis of as wide an array of open options as now exists before this subcommittee. With our rapidly expanding technology and research in the various resource-using fields, it is clear that the once great wilderness resource of the Cascades is indeed destined to disappear as the land is put to other uses. This is a certainty unless we make firm decisions now. The point is attested to by the same Forest Service study:

"Public forest owners hold most of today's highly inaccessible forest lands. Some of these lands present excessive difficulties for administration and protection in light of current technology. However, even at present prices and costs, such is the public interest in forest values besides timber and in developing the public forests as examples of conservative management that most of the difficult areas are due for intensive development as soon as appropriations or cutting programs or solving of right-of-way problems permit. And in the long run, it seems fair to assume that all areas will be thus developed, even in the absence of further price-cost incentive." [3]

The question before us, then, is to make lasting land-use decisions for this area. While some of the options have been seriously endangered by prior administrative decisions favoring timber operations and road-building, in the Mount Jefferson region the option does still exist to create a complete wilderness unit. The Wilderness Act of 1964 provides us the necessary tool to make this choice—and to make it stick!

As a matter of philosophy to support this decision, it is essential that we recognize that wilderness itself is a natural resource. Like other physical resources, wilderness is available in a limited supply. And it is, for all practical purposes, a non-renewable resource.

It has often been suggested that when we dedicate wilderness areas we are "locking up" resources. It is equally true, however, that the only way to perpetuate wilderness resources is to lock them up in a firm and binding decision. Opening existing areas of wilderness to the exploitation of other resources does far more than just "lock up" the wilderness resource—that wilderness resource is destroyed as such. In this perspective the decisions now must concern the proper mixture of different sorts of resource uses, recognizing that each is legitimate and that all cannot be undertaken on the same piece of property.

In this statement I will suggest that some additional acreage of commercial timberland, not now protected in the existing primitive area, be added to the present proposed wilderness area. I do so for two reasons. First is the belief that in adding this land we will redress a balance in resource allocation which, up to now, has been lop-sided. Second is the conviction that in establishing a wilderness unit we ought to make it complete and self-sufficient in the sense that it is large enough and of such a configuration as to have potential for maintaining its integrity as wilderness.

The fact that the resource allocation balance in the Cascades has been lop-sided in favor of timber utilization is understandable. Timber has been recognized as a valuable resource for a long time. Only comparatively recently have we come to realize that wilderness, too, is a resource of considerable value.

Obviously, adding acreage of "commercial timberland" to the wilderness area will slightly reduce the amount of "commercial timberland" to the wilderness area lowable cut of these national forests and thus available to the local sawmills. But I would ask this subcommittee to consider what is implied by the technical term "commercial timberland."

The Forest Service proposal documents suggest that inclusion of commercial timberland in the wilderness will work a hardship on the local communities. But what, it must be asked, gives either the Forest Service or the local timber interests reason to assume that all "commercial timberland" on the public forests will necessarily be available for commercial use? It should be recognized that the classification of "commercial timberland" is determined in a detached, purely mechanical manner according solely to economic criteria based upon only

[2] *Ibid.*, pg. 5.
[3] *Ibid.*, pg.38.

one resource evaluation—whether the standing timber is of a sufficient economic worth relative to present market conditions and costs of harvest. The designation "commercial timberland" is not based on any consideration of other resource values or social criteria, but is simply a technical determination of present values of one particular resource totally abstracted from these other considerations. On the basis of the kind of professional training and outlook on which this determination of "commercial timberland" is made, our maps are divided into areas classified according to timber value standards. It is essential to keep in mind that the values on which ultimate land-use decisions must be considered should include all potential resources and resource uses, not just timber evaluations.

This is not at all an indictment of timber management procedures. This technology for timber evaluation is highly developed and absolutely necessary for modern forest management. But decisions on land-use patterns cannot be made on the basis of timber evaluations or any other single resource dimension—they should involve all resource values.

It is convenient, of course, that commercial timberland can be readily evaluated in dollar and cents terms. We have no such means for putting that kind of monetary value on what might otherwise be called "commercial wilderness." This surely does not mean, however, that such value does not exist. The use statistics which are available and the subjective testimony of wilderness users and others should be sufficient to indicate that wilderness has very real, if less tangible and less commercial, values.

And so, the decisions which must now be made concern the mixture of resource uses which will be permitted on the lands of this region. That decision, in each case, must be made with recognition that, just as these lands have value for "commercial timber," they also have values of another (and certainly not lesser) sort as wilderness. The question in establishing boundaries between these non-compatible uses must be to give each sufficient area to maintain their own integrity and self-sufficiency—the one as commercial timberland and the other as wilderness. Only thus can we hope to maintain a sustained yield from which we can guarantee the perpetual harvest of each sort of value.

On the basis of these considerations and this regional perspective, I will procede to present my views on the specific details of the Mount Jefferson Wilderness Area proposal. In doing so I would like to emphasize that, while we have a good start on an inventory of timber and mineral values in the Oregon Cascades, we do not have anything approaching a comparable inventory and evaluation of the values of these lands for recreation and wilderness purposes. To the degree that such information is lacking, we still face a seriously lop-sided balance in analytical information upon which to determine ultimate land-use policy. Legislation has been introduced to bridge this "information gap" by authorizing an inventory of park potential in the Oregon Cascades. I would urge this Subcommittee, in the interests of promoting balanced land-use analysis and decisions which must be made in the area, to expedite the consideration and passage of S. 2555.

The principal weakness of the proposed Mount Jefferson Wilderness Area in its present form is the narrow width—three miles—in the intermediate area of Mount Jefferson itself. For perspective, this is only slightly longer than the distance which separates the United States Capitol from the Lincoln Memorial down the Mall. Given the sloping terrain of the west side of the Cascades and given the needs of a well-integrated wilderness area, it is quite evident that a three mile width does not and indeed cannot possibly give adequate protection and self-sufficiency to a wilderness area.

Furthermore, this narrow neck of the wilderness is located in the vicinity of Jefferson Park, a superb wild parkland which is a major focal point of wilderness use (See photograph, page 21 of the Forest Service proposal document). The fact that "Jeff Park" receives heavy use makes it imperative that it be given adequate protection and that the wilderness area be widened in this region to allow for some dispersal of future users. For the ecological and psychological integrity of the wilderness at its logical center-point, it is essential that this narrow area be considerably widened by the addition of more suitable land. Only in this way will these values be given ample protection. Such action will also give wilderness protection to additional lower-elevation forest types and to important existing and potential approach routes entering the area.

What is required is the expansion of the present proposed boundary to the west in the valley of the North Fork of the Breitenbush River, the Firecamp Lakes Basin, the valley of the South Fork of the Breitenbush River, the White-

water Creek drainage, Woodpecker Ridge, the Pamilia Creek drainage, the Valley of Minto Creek, Minto Mountain, Bingham Ridge, Big Meadows and the Marion Lake-Lake Ann area.

These west side additions will quite obviously involve lower-elevation lands which are forested with "commercial timber." But, as I have pointed out, this needs to be considered in the context of the total resource condition of the region and in a wider social perspective.

There has been a long-standing tendency in this country—and in the Forest Service—to define as wilderness only those areas which are more or less useless for anything else.[4] To a certain degree we have developed a stereotype of wilderness as high, bare mountain country, well above timberline (at least the "commercial timberline") and barren of any of the "traditional" resource values. Fortunately, this traditional wilderness stereotype is changing as we increase our sophistication in evaluating such matters. It is changing because we are coming to see, and our policies are coming to reflect, the fact that resource problems need to be evaluated in environmental terms. Thus, if a wilderness area is to be self-sufficient and to have any real integrity, it must be formed in such a way as to be a whole—as a natural environment and as an environment in which recreational wilderness experiences are sought by increasing numbers of people. The Wilderness Act represents a long step in this direction. And, by establishing a national system of wilderness, it helps us to recognize that such a system ought to contain representative samples of a wide variety of environmental types—not just resource-bare mountain summits.

To bring this present proposal up to such environmental standards, it must be assured that the final boundaries do in fact contain an environment of reasonable integrity. And, as has been implied above, the environmental integrity needed is composed both of ecological considerations and of the needs of wilderness recreation. A three mile wide area at the very point where use is concentrated (both by climbers on Mount Jefferson itself and by those sojourning in the superb wild setting of Jeff Park) cannot be called complete in this sense. I cannot offer a specific boundary revision proposal, but I believe that the recommendations which have been put forward by local conservationists and by The Wilderness Society have a far better balance than those offered by the Forest Service. It would appear that approximately 26,000 acres of addition west side lands should be added, and precise boundary determinations can be developed by the Forest Service.

Several specific areas are of special importance and I will digress briefly to discuss these.

Firecamp Lakes Basin.—The Forest Service has excluded a major portion of this area on the grounds that it has a "planned roadhead" designated for this area. There is no necessity for such a roadhead to be located within this basin and on the shores of these lakes. Indeed, there is a considerable advantage to be gained by keeping road and roadhead development entirely out of this basin. The user then approaches his wilderness camp within the basin through an entry of wilderness. An excellent example of this principle may be observed in the case of the Pamilia Lake approach to the Mount Jefferson Wilderness. There one leaves his automobile and other mechanized accoutrements behind with the road and travels through a delightful forest corridor leading into the wilderness and to Pamilia Lake (see photograph, page 17 of the Forest Service proposal document). Thus enclosed well within the wilderness, and approached by a superb trail, Pamilia Lake itself becomes far more than just a pleasant recreation roadhead. It becomes, instead, a highly significant part of the wilderness in its own right. The same opportunity is available in the Firecamp Lakes basin, but the road must be kept out and the basin fully protected by extending the wilderness boundary to include it in its entirety.

Marion Lake and Lake Ann.—A glance at the proposal map will show that the Forest Service proposes to exclude this area from the wilderness, thus creating a non-wilderness intrusion cutting deep into the heart of the wilderness. On what basis is this severe dissection of the wilderness justified?

No compelling reason is offered in the Forest Service documents for this destructive exclusion. It is noted by the Forest Service that the area has many values and that its semi-solitude is of merit. The proposal, however, does not include the area in the legally defined wilderness. Rather, as of October 11, 1967 a "Marion Lake Scenic Area management plan" was approved for this area.[5]

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[4] The Development of Policy and Administration of Forest Service Primitive and Wilderness Areas in the Western United States, an unpublished doctoral dissertation, The University of Michigan, by James P. Gilligan, 1953.

[5] Personal communication, Philip L. Heaton, Assistant Regional Forester, Pacific Northwest Region, to Douglas Scott, November 8, 1967.

I find it unfortunate that the Forest Service goes about finalizing administrative management plans for non-wilderness use of areas which are under simultaneous consideration by the Congress for wilderness designation. I believe the Subcommittee should clarify this matter by directing the Forest Service to refrain from undertaking separate management planning which in any way prejudices consideration of wilderness proposals which have been specifically called for under provisions of the Wilderness Act of 1964.

I see no reason for excluding this area from wilderness status. The point might be made that the area may, as a scenic area, eventually become so heavily developed that it would not then be appropriate for wilderness. In view of its obvious location within the wilderness area (it is, after all, surrounded on three sides) the overdevelopment of this area would be totally out-of-place. This is obviously a point of focused use, but that does not mean that it cannot or should not be wilderness. Rather, it means that its wilderness values are especially great and in need of especially careful wilderness protection. Overdevelopment, with tables, grills, water systems, sanitation installations and boat storage facilities would not only ruin the wilderness character of this one lake—but would have a traumatic impact on a considerable surrounding area, seriously reducing its wilderness qualities as well!

Why, one may ask, is boat use to be continued on Marion Lake at all—even to the extent of rowboats requiring boat storage facilities as planned by the Forest Service? Are we so short of lake area in the Pacific Northwest that even one of the most superb high mountain lakes, set in a delightful wilderness basin, needs to be set up with elaborate boating facilities and provision for storage of boats? (Whose boats, one might also ask?) This is a wilderness lake—a rare one at that—and set in a delightful alpine setting (see photograph, p. 11 of Forest Service proposal document). It should be included in the wilderness of which it is a logical part and should be protected, by law, from overdevelopment.

It is simply exercising a poor sense of priority to suggest that a gem of the wilderness such as this lake should be excluded from fullest protection in order to be "a base of operation for many who just wish to hike a short distance into the wilderness."[6] Wilderness users can let their automobiles, parked at the end of a road, serve as the base for their short hikes. What they are after is wilderness beyond the last development—not development in the last wilderness. A base of operations is a patently synthetic sort of functional place—it can be anywhere, but there is only one Marion Lake which we can still choose to leave in its own wild integrity.

Marion Lake, Lake Ann, and the area surrounding them are so logical a part of the wilderness that I am surprised to find the Forest Service seriously suggesting their exclusion. More surprising still are the empty reasons offered in justification of the proposal.

The Wilderness Act contained sufficient specific provision to allow the maintenance of sanitary facilities and minimal fire grills (for fire safety, not for the convenience of users—this is wilderness) at points of special use concentration. If the use becomes greater than can be handled by facilities which are permissible in wilderness, do we then dilute the "semi-solitude" of Marion Lake, or do we control the use? (With our growing population we cannot seriously expect anything but increased use. At what point will it become so great that the Forest Service is forced to bow to demands for more and more tables, more and more grills, more and more boats—and motors. Will it be ten years—or five—before the pressure for a road to the lakeshore becomes too great for local administrators to bear?) The only answer for an area with as great a value as wilderness as this is to give it the full legal security available. That, as the Forest Service ought to realize, is just what the Wilderness Act is all about.

In disputing the proposal to extend the wilderness into these west side areas and others, the Forest Service has noted that "Some of the lands of the Whitewater Creek valley have been logged in recent years and are penetrated by Forest Development Roads. These intrusions are inconsistent with wilderness uses as set forth in the Wilderness Act."[7] While this is true, it does not preclude congressional recognition that these roads and timber sales were indeed "intrusions" and allowed by an administrative error. They were allowed on the basis of an incomplete judgement of the relative values of these lands as timber resources and as wilderness, (note that to the east of the proposed boundary the wilderness is but three miles wide, while to the west lie twenty miles of Forest Service land much of which is available for timber production). While the lands

[6] A Proposal, Mt. Jefferson Wilderness, U.S. Forest Service, p. 20.
[7] *Ibid.*, p. 20.

which I have suggested be added to the wilderness may well be classified as "commercial timberland," they are also highly qualified to be classed as "commercial wilderness" in the sense I have suggested. Road building and timber cutting operations undertaken on the erroneous assumption that all "commercial timberlands" should be harvested must not be allowed to bind the Congress as it now undertakes to make this wilderness area self-sufficient. The roads and the timbered areas will revert—if slowly—to natural vegetation. Over the long-run they will be reclaimed by the surrounding wilderness. They should not be permitted to prejudice the superior value of these lands as wilderness and their absolute necessity as wilderness to buffer the higher lands to the east. To simply assume uncritically that previous timber operations preclude any wilderness designation would bar the Congress from perfecting this wilderness designation and would, instead, give a seal of approval to past timber management decisions which have not been based on an adequate analysis of all resource values.

Nor, taken in a regional perspective, will the placement of this additional land in the wilderness area be a significant detriment to the output of lumber. If local mills have mistakenly assumed that "commercial timberland" will all automatically be available for harvest, they have done so on a serious misjudgement of the purpose of public lands held in national ownership as a resource of all of the people.

In this vein the Forest Service proposal document states that the timber potential of these lands "* * * * is needed by the economy of the adjacent communities. Present demands exceeds the supply available in the North Santiam River drainage." [8] The "demand" term used here surely does not refer to the requirements of local communities for lumber products, but rather to the capacity of the sawmills within economical hauling distance of this area. Here, surely, is a classic example of machines riding society, rather than society riding machines. Again, if the local mills have over-gauged their production capacity on the mistaken assumption that they, more than the rest of the nation's people, are entitled to the resources of these public lands, they have misjudged. Their allocations—and apparently those of the Forest Service as well—have been based on a lopsided balance of various resource values, and this is the opportunity for the Congress to correct the situation.

But the situation is really not so "either/or." For, in fact, it is doubtful that the reduction of the allowable cut which would result from adding these lands to the wilderness would have any serious impact. In the regional perspective of the entire Douglas-fir region, the inclusion of this additional commercial timberland in wilderness will have no significant long-term impact. But, destruction of the area which remains *de facto* wilderness would indeed have an impact. It is demonstrable that in the case of wilderness, too, "Present demand exceeds the supply available in the North Santiam drainage," to use the Forest Service's terms.

The Forest Service, in its exhaustive timber trends study already referred to, concludes, on the basis of a thorough economic analysis, that the reservation of an additional million acres of timberland in the Douglas-fir subregion would "* * * in the long run amount to about 270 million board feet of output per year [less than otherwise], or 2 percent of the total." [9] This, the report concludes, "* * * *would not alter significantly* the estimate of long-range timber output in the region." [10]

Now, according to the Forest Service proposal document, the addition of some 26,000 acres in the west side areas I have listed would reduce the annual allowable cut on the Willamette National Forest by 10.9 million board feet. Compared with the 270 million board foot reduction which the Forest Service has termed insignificant, it is evident that this 10.9 million board feet of reduced timber output would be infinitissimal. Using the same perspective as the timber trends study cited, and the Forest Service data, this reduction would amount to approximately eight one-hundredths of one percent (0.08%) reduction in annual output.[11]

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[8] *Ibid.*, p. 20.
[9] Timber Trends, *op. cit.*, p. 78.
[10] *Ibd.*, p. v (emphasis added).
[11] The Timber Trends study cited indicates that "loss of a million acres * * * would in the long run amount to about 270 million board feet of output per year, or 2 percent of the total.
The total annual output in the long run for the Douglas-fir subregion is thus put at approximately 13.1 billion board feet. (13,000 MM b.f. where .02x=270 MM b.f.).
If this is taken as the total regional annual output and if it is assumed that the 10.9 MM b.f. figure given in the Mt. Jefferson proposal as the "loss" in allowable cut on the Willamette National Forest is a reasonably comparable figure, then it is seen that the 10.9

Such a "loss" is insignificant indeed. Even in terms of the local impact, this difference could well be recovered simply in inventory error or by slightly intensified timber management on other lands already more accessible to the mills in question (and thus without any additional road construction or hauling costs.)

One is reminded, in this regard, of a point made by Robert Marshall, an early advocate of wilderness protection and a Chief of the Recreation and Lands Division of the Forest Service. He noted that:

"It is time we appreciated that the real economic problem is to see how little land need be employed for timber production, so that the remainder of the forest may be devoted to those other vital uses incompatible with industrial exploitation.

* * * * * * *

"What small financial loss ultimately results from the establishment of wilderness areas must be accepted as a fair price to pay for their unassessable preciousness." [12]

His point is certainly well taken, and it applies in our day of increasing resource use conflicts even more directly than when Marshall wrote it. It applies directly to this Mt. Jefferson situation.

As a further argument that the westward extension of the wilderness boundary not be made, the Forest Service documents state that this area in contention "* * * is less attractive as Wilderness than is the rest of the area covered by this proposal * * * ." [13] That kind of statement must be challenged on the grounds that neither the Forest Service, nor anyone else for that matter, is in a position at this time to make any such categorical statement about what is or is not "attractive as Wilderness."

Furthermore, there is absolutely no provision of the Wilderness Act which requires or even suggests that wilderness areas must be "attractive" or scenic. This is, again, an out-of-date stereotype which cannot stand the test of environmental reasoning. It flies in the face of a growing ecological maturity evidenced as we come to recognize that the attractiveness of wilderness involves considerably more than the matter of scenery. The point is suggested by a passage from Arctic Wild, a brilliant, evocative book by Lois Crisler which documents the experiences she and her husband shared in a year spent in the arctic Brooks Range. After describing a vibrant wilderness scene—one alive with a natural variety of plants and animals in a totally unspoiled environment—Mrs. Crisler analyzes why this was a superb tableau of wilderness:

"It was not 'scenery,' whatever that queer, perverted abstraction may mean, but a great living whole, with its proper inhabitants going about their business.

"I felt 'inside.' The land and its animals gave a feeling more pleasing than beauty could give."

Anyone who has ever been really immersed in a wild environment can immediately recognize that kind of feeling—one of the superb, wholly intangible values of wilderness—even if they cannot put it so perfectly into words:

"'PROMISE' IS THE WORD FOR WILDERNESS

"It was not just this moment. History was here too. Millenniums of plants finding their place under the arctic sky, of animals spreading against each other until all were corrected and moved in a living dynamism.

"The great 'surround' was marked by tranquility. It was poised changing. We were in it, part of it. Every creature pursued its own destiny intently—caribou on the Tundra, Dall sheep under the crag, moose in the willows along the river, birds choosing their nesting places under the Big Light." [14]

The point is, then, that attractive scenery—however that may be defined—may be part of some wilderness areas, but it is not necessary and it is certainly not a valid criterion for excluding areas during the all-important work of setting lasting wilderness boundaries.

MM b.f. amounts to an approximate .0008 (or 10.9/13,000 MM b.f.) reduction in total annual regional output.

These data, from two different Forest Service sources, may not be precisely comparable because of differing yield per acre assumptions and differing management periods. Nevertheless, the order of magnitudes of these results is sufficient to make the point that this reduction in allowable cut will have a negligible impact on the regional timber economy.

[12] "The Problem of the Wilderness," in: The Scientific Monthly, February, 1930, by Robert Marshall. P. 146.

[13] A Proposal, Mt. Jefferson Wilderness, U.S. Forest Service, p. 20.

[14] Arctic Wild, by Lois Crisler, Harper and Row "Perennial Library" paperbound edition, New York, 1964. Pp. 178–179.

In addition to the growing awareness of the ecological, environmental dimension of wilderness—which so thoroughly contradicts reliance on so-called "scenic attractiveness" as a standard of wilderness—I would also want to know whose standards of "attractiveness" the Forest Service is purporting to apply when they conclude that this area "* * * is less attractive as wilderness * * * ." There is good research evidence accumulating to support the fact that different people perceive wilderness in very different subjective ways.[15] Managers of wilderness lands—such as the personnel of the Forest Service—have one set of standards of "attractiveness." But they cannot claim any "professional" standards on this subject, nor can anyone else. Such a judgment is strictly subjective and my testimony that I happen to find lowland forest areas (such as those in the Whitewater Creek area) exceptionally attractive as a wilderness environment is as worthy of credence as is the Forest Service denial. As a student of forestry and as a student of wilderness policy I may state that the training of a forester in no way provides him with an especial gift for deciding what is or what is not attractive as wilderness. He has the same subjective "hang-up" as everyone else and his opinion is equally colored by his other value judgments (including those concerning the desirability of timber harvest). In sum, "attractiveness" is totally irrelevant to the determination of wilderness values precisely because there is no way to be objective about attractiveness. The Forest Service may say that this area is not attractive, I may say that it is especially so—but neither of us can demonstrate the point.

That being the case, what can we fall back to as a criterion for wilderness designation? What can this subcommittee use as a basis for its decisions? While we are a long way from achieving a systematic set of factors for such judgments, we do know enough to be relatively certain of some sound, objective guiding principles.

The principles I would emphasize are two: (1) that the area have self-contained ecological and environmental integrity, and (2) that it offer a variety of opportunities for wilderness experiences for the user and be of sufficient size and such a configuration as to protect such opportunities.

The first of the points is supported by the recent Darling-Eichhorn report on "Man and Nature in the National Parks." That report states that "* * * the only absolute administrative principle can be to consider first the ecological health of a park so that it shall endure for posterity." [16] The same point is equally applicable to the wilderness areas of the National Forests.

The need to assure "ecological health" is also closely related to the growing recognition that our National Wilderness Preservation System ought to contain a viable sample of habitats. In the state of Oregon this objective has yet to be met with regard to wilderness reserves in the Cascade Range. While several major areas of bare mountain tops have been set aside, there is a very small acreage in the great Douglas fir forests and the true-fir-mountain hemlock forest type which is now legally assured of protection in a natural state. There was at one time, a relatively large wild area of these forest types included in the Three Sisters Primitive Area to the south of Mt. Jefferson. But in the mid-fifties, in connection with the administrative review of the primitive areas of the national forests, 53,000 acres of this area were amputated, removing most of the lower-elevation forests from what was subsequently named the Three Sisters Wilderness Area. Though now a part of the National Wilderness Preservation System, the Three Sisters Wilderness Area has little forested lowland.

It was to preclude this sort of administrative re-definition that the Wilderness Act provided for Congressional action on each wilderness designation. The 53,000 acre area removed from the Three Sisters area has been put under timber management and is, for the most part, no longer of value as wilderness—its value as a wilderness resource has been destroyed.

While some initial roads and timber sales have been made in the west side portion of the Mt. Jefferson area, the option still exists for the Congress to redress the balance in resource use, giving these areas wilderness status by extending the boundary.

The second point, (2), that a wilderness should offer a variety of opportunities for wilderness experiences and be of sufficient size and configuration to protect

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[15] See, for example: "Wilderness Perception and Use: the Example of the Boundary Waters Canoe Area," by Robert C. Lucas, in: Natural Resources Journal, January, 1964, pp. 394–411.

[16] Man and Nature in the National Parks, by F. Fraser Darling and Noel D. Eichhorn, The Conservation Foundation, Inc., Washington, D.C., 1967, p. 31.

such opportunities, suggests that there are minimum standards for wilderness areas based on the use they receive for recreational purposes. If the visitor is to find "a wilderness experience," the environment should offer him a high contrast from his usual surroundings, it should offer him a variety of activities and types of wild settings, and it should impress him with his dependence upon himself and his own skills are opposed to his usual dependence on the appliances of civilization. To accomplish this the area must be sufficiently remote—physically and psychologically—to separate the visitor from civilization and thus to provide him the "environment of solitude." A three or four mile wide wilderness area simply cannot attain that standard.

The Forest Service proposal document, in assessing this area, states:

"The proposed Mt. Jefferson Wilderness is one of the outstanding areas in this general region of superb mountain scenery. The broad expanse of natural forests and lakes topped by the towering bulk of Mt. Jefferson forms a setting to inspire any visitor." [17]

That kind of potential certainly remains—but the present proposal does not match this eloquent rhetoric. In this admittedly "outstanding area" can three miles really be termed a "broad expanse"? It seems confusion of terms.

The present proposal is clearly deficient, providing neither a self-sufficient wilderness unit nor a reasonable balance of resource allocation. It is essential that the Forest Service proposal be perfected by extending the west side boundary to include approximately 27,000 additional acres in the areas I have mentioned. I urge the Subcommittee to amend the present legislation to that effect.

The Forest Service proposal omits a 1,500 acre area at the southeast corner of the Mt. Jefferson area—the Square Lake-Long Lake region. According to the Forest Service proposal document road access will be developed here to provide a recreation facility in close proximity to the North Santiam Highway. In view of the regional setting, I do not believe this exclusion of suitable wilderness lands is necessary. As the map indicates, this area is quite close to the Metolius River, along which is located a considerable amount of recreational development, from simple campgrounds to fishing resorts. Jack Lake, located on the proposed wilderness boundary (but not labeled on the map), is accessible by road at the present time. From any point on the North Santiam Highway the wilderness will be close at hand by an easy walk.

The Forest Service agrues that this area must be developed with sanitation facilities and to provide a base camp for day use of the Wilderness. Again, provision is made in the Wilderness Act for necessary sanitary facilities, and readily accessible "base camps" are presently available at Olallie Lake, Jack Lake—and as proposed by the Forest Service—at the roadhead below Pamilia Lake.

On the other hand, a glance at the map will show that these lakes lie close to Three Fingered Jack and that the proposed wilderness boundary has to make a deviating course to avoid including this area. It is a logical part of the wilderness. As such, these lakes can sustain only a certain amount of use before a deteriorating influence is made on the surrounding wilderness. Given the legal protection for which these lands are fully suited such overuse can be avoided. But a road and non-wilderness development will directly promote overuse.

Why, it needs to be asked, must the "base camp" be located at a most significant part of the wilderness? Why deliberately concentrate and focus use—artificially—on an area which has special wilderness values and which is easily destroyed by overuse? If this is "day-use" it can be based at a simple parking lot along the road—easily accessible in a few minutes driving time from one of the many nearby motor campgrounds. What is being sought by the user is not necessarily an "attractive" wilderness setting for his car—but a protected wilderness environment into which he can walk and within which he can find a wilderness experience precisely because he has left his automobile behind. It doesn't seem a wise priority to use the most fragile and wild lakeshores for parking lots when they have such outstanding potential for wilderness with only minimal development of sanitary facilities. One needs an elaborate base camp for a Himalayan expediton. In the Cascades, one can still walk away from his automobile and find wilderness.

The proposal before this subcommittee is a worthy one—the Mount Jefferson area is highly suitable for wilderness designation. In bringing this unit into the National Wilderness Preservation System I urge the Congress to improve and perfect the proposal by adding an additional 27,000 acres to give adequate

[17] A Proposal, Mt. Jefferson Wilderness, U.S. Forest Service, p. 6.

width and to add lowland forest habitat, and the 1,500 acre Square Lake-Long Lake area. The result will be a 125,000 acre wilderness area fully measuring up to the mandate of the Wilderness Act of 1964.

Thank you.

WILLAMETTE INDUSTRIES, INC.,
Portland, Oreg., February 19, 1968.

Hon. FRANK CHURCH,
Chairman, Subcommittee on Public Lands, Senate Committee on Interior and Insular Affairs, Washington, D.C.

DEAR SENATOR CHURCH: My letter of February 16, 1968 supported S. 2751 as introduced with boundaries as recommended by the U.S. Forest Service. The following supporting data is submitted and I would appreciate very much if you would include this statement in the record of your hearings on S. 2751.

Our company supports the proposal to make the Mount Jefferson Wilderness a part of the National Wilderness Preservation System. The U.S. Forest Service thoroughly studied the proposed area and several suggested alternate boundaries and conducted hearings in Salem on October 26, 1966. All classes of use were considered, including industrial and all types of recreation, before recommending the boundaries as proposed. Our reason for opposing additional areas to that in the bill are discussed below.

The drive in, mass recreation facilities for families and others without the time or economic resources to use the wilderness are the most crowded and more development in this classification is needed. Inclusion of additional areas close to population and road developments in the wilderness classification only makes the problem more acute for the greatest number of outdoor recreationists. There is no social season for wilderness devotees to enjoy a larger area and less restrictive opportunity than others.

General camping, picnicking, and drive in recreationists can be serviced without placing economic hardship on the timber using communities, industrial operators and their employees since these uses are compatible with timber management.

There has been a timber cutting moratorium on a 26,000 acre area adjacent to the proposed boundaries which has reduced the annual available timber by 10,900,000 board feet. Based on Pacific Northwest Experiment Station studies, this volume represents an annual loss of $3,832,440.00 to the gross national product. If this area is added to the withdrawal, this would be an annual loss to perpetuity.

Very truly yours,

GENE D. KNUDSON.

Senator HANSEN. The hearing will now be recessed until 10 o'clock tomorrow morning.

(Whereupon, at 5:05 p.m. the committee was recessed, to be reconvened at 10 a.m., Tuesday, February 20, 1968.)

SAN GABRIEL, WASHAKIE, AND MOUNT JEFFERSON WILDERNESS AREAS

TUESDAY, FEBRUARY 20, 1968

U.S. SENATE,
PUBLIC LANDS SUBCOMMITTEE OF THE
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington D.C.

The subcommittee met, pursuant to call, at 10 a.m., in room 3110, New Senate Office Building, Senator Frank Church (chairman of the subcommittee) presiding.

Present: Senators Frank Church (Idaho), Clinton P. Anderson (New Mexico), and Clifford P. Hansen (Wyoming).

Staff members present: Jerry T. Verkler, staff director; Porter Ward, professional staff member; and Darryl Hart, assistant minority counsel.

Senator CHURCH. The hearing will come to order. Our first witness this morning is Miss Helen McGinnis, Hyattsville.

STATEMENT OF MISS HELEN McGINNIS, HYATTSVILLE, MD.

Miss MCGINNIS. My name is Helen McGinnis, and I now live in Hyattsville, but I spent most of my lifetime in the West, and when I lived in the West, I visited as many wilderness areas as my time would allow me to, and one of my favorite places was the Mount Jefferson Wilderness Area.

I have read the proposal that the Forest Service has put out concerning this area, and I am very impressed by the amount of research that has gone, and I am also impressed by their obvious attempts to be fair to everyone who has an interest in the area, but there is one aspect of the proposal which disturbs me very deeply, and that is the idea that cars are always necessary for mass development of recreation areas.

The trouble with most of today's campgrounds—anyone who has gone to a campground, I think, can testify to this—is that campgrounds are built as much or more for the cars as they are for the people who visit them. The cars take up at least half the space allotted in the campground. Roads must be built, they must be graded, and in order to keep down the dust and mud, it is absolutely necessary in heavily used campgrounds that they be graded, gravelled, or paved, and then after you have gone to all this expense of building the roads, you have to construct an elaborate system of posts and guardrails to keep the cars on these roads. Otherwise, they will be all over the campground. I think, in certain cases, it would be interesting to try to build a campground completely for people. Instead of devoting all

this space and money to roads and parking lots, it might be better to construct many wood shelters instead. These are used very successfully in the East, and such a campground would be a true wilderness threshold.

I think that in the case of the Square and Long Lakes, adequate parking lots, and in many places there are not adequate parking lots for cars, could be built along Santiam Highway, and these small wooden shelters could be constructed at the lakes. These areas would be intermediate between car campground and true wilderness areas where you have to carry your tents or shelters on your back.

I think these would be very much used by people who lack the equipment, or the ability, or the self-confidence to completely entrust themselves to the wilderness, especially families with small children, and elderly people.

I think Marion Lake could be developed in the same way. This area is already heavily used. The National Forest Service indicates that it does not intend to build any roads around the lakes, and that it intended to eventually ban the use of motorboats. If this is true, I see no reason why the lake should not be given wilderness status.

These small wooden shelters around the lake would make them accessible to many more. The quiet waters of Marion Lake are ideally suited for canoes and inflatable rafts and other types that could be carried in, and I think that this lake should be reserved for such use.

I know that some people object that these beautiful areas should be made available to all. But anyone who has visited our more popular national parks can easily believe that within a few years it will be necessary to have reservations in order to enter these parks, perhaps years in advance.

I believe that making people walk a mile or two is, at the present time, the only democratic way of protecting some of these areas. It screens out the people who really care from those who have only a very casual interest. I think that this is fairer than screening out people by means of how much money they can afford, or even making them wait on waiting lists.

I would also like to see part of the area west of Mount Jefferson, which is not now included in the proposal, added to the wilderness area. One reason why you don't hear much or see many pictures of this kind of country is because very little country of commercial value is included in wilderness areas. I have had the pleasure of walking through such forests, and I believe that, in its own way, it is as inspiring an experience as climbing up Mount Jefferson, or walking above timberline.

Actually, in certain ways, Mount Jefferson Wilderness Area is narrower than its actual mileage indicates. This is because the Mount Jefferson Wilderness Area is relatively gentle terrain, almost rolling in parts, except for these high peaks sticking up above.

As a person who has hiked in many wilderness areas, I can state that it is much easier to get around in Mount Jefferson Wilderness Area than in the High Sierras or the Rockies. Most of the lakes are accessible by level trails, or trails on which there is very little change of altitude, and you get there to your destination considerably less winded.

I think the most important reason for expanding the wilderness, however, is the tremendous population expansion which is going on in

northwestern Oregon, and I think people of Oregon, more than most States, are inclined to enjoy their wildernesses. Every year, the number of backpackers in the Mount Jefferson Wilderness Area is increasing 20 percent. Of course, the number of people seeking car campgrounds is increasing, also, but I think that the number of backpackers is increasing even faster.

Every year, more and better lightweight backpacking equipment, and lightweight food is available. More and more people are taking their friends and relatives out camping, and there are large Scout camps and church groups. They learn, as I did, and they start taking their friends out, and I think that more and more people are becoming disgusted with the conditions in car campgrounds, and they are still attempting to find the solitude and primeval beauty, and more and more of them are going to be taking to the trails.

I have a statement for the record, Mr. Chairman.

Senator CHURCH. Miss McGinnis, let me say that you have made a very fine statement, one of the very best that has been made, I think, in the course of the hearings so far.

When you make a plea for building campgrounds for people instead of automobiles, you really strike to the heart of the American problem.

Miss MCGINNIS. I think that the whole trouble of America is that we are educated today to think—obviously, there is a great deal of money involved in motor vehicles—we are trained to think in terms of motor vehicles.

Senator CHURCH. I was just going to say that the problem extends beyond campgrounds. Our problem is, Are we going to build the country for people instead of automobiles?

So far, I think, the automobiles have clearly won.

Miss MCGINNIS. I just bought a car, and I suddenly realized, countries and cities are built for automobiles. If you don't have an automobile, you are out of it.

Senator CHURCH. The country is increasingly built for the automobile. We are its servant.

But I do think that, in this particular plan for the Mount Jefferson Wilderness, if I understand the testimony that the Forest Service made yesterday, that they do contemplate the kind of development for Lake Marion that you have advocated.

Miss MCGINNIS. Yes.

Senator CHURCH. In other words, they are not going to build automobile roads and macadam roads to the lake, and they are not going to occupy the shoreline with parking lots.

Miss MCGINNIS. Yes.

Senator CHURCH. But they are going to do the very thing you have in mind, as I understand the testimony. It will be necessary to hike up to the lake.

Miss MCGINNIS. Yes; I would like to see the road set far enough back that you have to carry a canoe in, and if you don't want to, I think that is tough, you know.

Senator CHURCH. That, as I understand it, is the plan the Forest Service has for Lake Marion.

Miss MCGINNIS. What about Square and Long Lake, and part of the Fire Camp Lakes?

Senator CHURCH. I think that the other lake you mentioned which is down in the southern part, as I remember or recall the testimony yesterday, has access to it by road, and there will be the sort of conventional campground development.

Miss MCGINNIS. I know the area just south of Santiam Pass is extensively developed now. It is really turning into a little suburb there, which I don't like to see.

Senator CHURCH. I think the issue you raise is one we have to be increasingly concerned about.

Miss MCGINNIS. The Government has Smokey Bear campaigns and they have physical fitness campaigns. Why not have a campaign to convince people that they can walk, and an automobile and a motorboat is not necessary to enjoy oneself.

Senator CHURCH. Well, that is a very important campaign. I think perhaps it would be a campaign of 5 percent of the people against 95 percent who have long since given up walking.

Miss MCGINNIS. They have all been told this all their lives. They have never known anything different.

Senator CHURCH. Thank you very much.

(The statement referred to follows:)

STATEMENT OF HELEN MCGINNIS, HYATTSVILLE, MD.

My name is Helen McGinnis. I am speaking as a private citizen in favor of the conservationists' additions to the proposed Mt. Jefferson Wilderness Area. While I lived in the West, I was able to take two backpacking trips through this unforgetable region.

I am impressed with the amount of careful research that has been conducted by the Forest Service and by its attempt to be fair to all. However, I disagree with the implication that the automobile must always be included in plans for development of natural areas for the masses. Apparently this is the main reason that part of the Firecamp Lakes area and Square and Long Lakes have been excluded from the proposed wilderness area. I do not believe that converting these lakeshores into still more dusty, noisy car campgrounds is the best interests of the people who will come to enjoy them. A basic problem with practically all campgrounds developed for intensive use is that too much of the available space is used not for people, but for their cars. Roadways must be cleared and graded and must be paved or gravelled to keep down the dust and the mud. Then an elavorate system of sturdy posts and guard rails has to be constructed to keep the cars where they belong. The final result is a campground as much for automobiles as for their passengers. Perhaps some campgrounds should be built exclusively for people. Adequate parking lots could be located alongside Santiam Highway adjacent to Square and Long Lakes, and a mile or more from the Firecamp Lakes. The money and effort that would have gone into building roads and guard rails in a conventional campground could be used instead to construct many simple, open-fronted wooded shelters provided with tables, fireplaces and sanitary facilities. These campgrounds would be true wilderness threasholds, accessible to anyone interested enough and capable of walking a mile or so to them. The protection that the shelters would provide would attract many people who lack the strength, equipment or self-confidence to carry tents or other rain shelters with them—particularly families with small children.

I see no reason why Marion Lake shouldn't be similarly developed to better accomodate the large number of visitors it already receives. If the Forest Service eventually plans to ban motor boats from it and will build no roads around it, why shouldn't the lake be given the wilderness status it deserves? Its quiet waters are suitable for canoes and inflatable rafts, which can be carried in without cars.

Within the foreseeable future, we may have to reserve campsites years in advance in our more popular national parks. If the population explosion continues, the same may eventually be necessary for wilderness areas. Until that time comes, the best way to protect these relatively undisturbed lakes from excessive use is to require that people negotiate part of the distance by trail.

This is the most democratic method of screening out those who care from people whose interest is casual.

Some of the lower forest country west of the proposed wilderness should also be included. Walking a narrow path through the mature Douglas Fir forests there can be as uplifting in its own way as climbing above timberline on Mt. Jefferson. In a sense, the present Jefferson Wilderness Area is even narrower than it appears on a map. With the exceptions of the high peaks, the terrain is less rugged than in most mountain wilderness regions. Many lakes here can be reached by almost level or only gently sloping trails, while similar distances in the High Sierra or the Rockies generally require considerably more time and exertion.

Most important of all, we must never forget how rapidly the population of Oregon is expanding. The number of people utilizing wilderness areas is increasing even more rapidly. Certainly the trend will continue in the future, as more and better light weight camping equipment and foods become available, as experienced back country travelers take their friends, children, and other relatives on that first memorable trip in the wilderness, and as more and more people leave their automobiles in search of solitude and undisturbed natural country.

Senator CHURCH. We now turn to consideration of the Washakie Wilderness. We have a number of citizen witnesses here from the State of Wyoming, Senator Hansen, in deference to you and the number of Wyoming witnesses that are here, I would like to suggest that you just take over and chair this portion of the hearing, while your Wyoming witnesses are present, because I know of your very central interest in this Washakie matter.

Senator HANSEN (presiding). Well, thank you very much, Mr. Chairman. Let me assure you, however, that the Wyoming friends that I have here today, and I hope all of them are, have a very high regard for you.

They have watched your performance in the Congress for a number of years, and I am certain that while they may disagree as to the specifics of what might be done with all of the area under discussion before us here today, they do share my great respect for you and for the things you are trying to do for our country. Having expressed my appreciation to you for your very fine gesture, I would like to suggest that you carry right on.

Senator CHURCH. Thank you. I am going to be here as much as possible for this hearing. I have a conflict with the Foreign Relations Committee. I have to attend to that for a few minutes, and then I will be back.

Senator HANSEN. I will be happy to chair.

Senator CHURCH. I would appreciate your chairing the hearing while I attend to the other business.

Our first witness is Leslie E. Shoemaker of the Wyoming Outfitters Association.

Senator HANSEN. Mr. Chairman, if I could interrupt just at this moment, I would like to submit for the record, if I may, a statement from the Governor of Wyoming who is not able to be here today. He forwarded me his testimony, and asked that I see that it is inserted in the record. So without objection may I ask that it be included in the record at this point?

Senator CHURCH. It will be included at this point in the record.

(The document referred to follows:)

STATEMENT OF HON. STANLEY K. HATHAWAY, GOVERNOR, STATE OF WYOMING

First of all, let me say that I recognize the importance of the Wilderness concept to the people of the entire United States. Those of us who are fortunate

enough to live in Wyoming are proud and grateful that we have vast areas available in our State where others may come and enjoy "Wilderness, where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

Last July the Public Land Law Review Commission, a body created by the Congress, held hearings in Billings, Montana. My testimony regarding Wilderness at that time is apropos now, when the creation of a Wilderness area is directly under discussion. At that time I said.

"As Governor, I am acutely aware that, if our state is to progress, all available uses of our lands must be encouraged. Some areas are more adapted to a particular use than to another. This I recognize. But I also recognize that uses, not now even contemplated, may arise for lands within our borders at some future date. In this regard I cannot help but think of our uranium industry in central Wyoming and the trona industry in southwest Wyoming. Just a few short years ago these mineral deposits were unknown. Now they are rapidly growing and prospering, and afford a beneficial and long-lasting base for our economy. Had these lands, which are largely on the public domain, been prevented from exploration and development, not only our state, but the entire nation would have been deprived of great resources.

"Let me state here and now that I am not opposed to sound conservation practices. In order that our recreation and conservation needs in Wyoming might be developed and protected, I advocated, in my message to the Legislature, the creation of a Wyoming Recreation Commission. Our Legislature, in its sessions last January and February pursuant to this recommendation, enacted Chapter 187 of the Session Laws of Wyoming, 1967, and set up such a Commission for the acquisition and development of outdoor recreation facilities in Wyoming. It is with no thought whatsoever, therefore, of hindering recreational or preservation interests that I have opposed the enlargement of Wilderness Areas in our state.

"As Governor, I feel that the lands within the borders of Wyoming must be used in such a way that the greatest benefit to Wyoming and Wyoming's people will result. With the tremendous land area now controlled by the federal government in Wyoming, further restrictions on the use of the lands within our borders are of vital consequence to all our people.

"The State of Wyoming now contains over 1,700,000 acres of land classified as Wilderness. This land, then, is already set aside and development precluded in it. *I think this is enough.*"

Now, let me be more specific as to the proposed Washakie Wilderness. This is the first of the areas in Wyoming to be re-classified under the Wilderness Act of 1964 and merits careful study. In government, as in law, precedent is often extremely important.

The proposal advanced by the Forest Service and before your Committee actually adds a total of 196,390 acres to the existing Wilderness system. Since a major portion of this addition was already classified as "Primitive," I agreed, last October, to abide by that proposal, even though I had previously objected to additional lands in our State being set aside permanently for a single use.

It is interesting to note that, as of January 1, 1966, Wyoming contained more Wilderness area than any other state—more than six times as much as Colorado, and almost twice as much as Idaho. Utah contained no Wilderness.

If the present proposal is adopted, there will be 679,520 acres of Wilderness in this one block alone. That is almost as large as the State of Rhode Island.

This Committee will, I understand, hear proposals to add still further to the Washakie Wilderness—this acreage being in addition to that proposed by the Forest Service and agreed to by myself.

Much of this present acreage is seldom, if ever, visited by man. No boundary extensions are needed.

The addition of the DuNoir area to the Wilderness would be damaging to our state for the following reasons:

1. The DuNoir is a large and productive water drainage. The development of our water resources, when it does come, will be largely in the headwaters of our various streams—if Wilderness is created here, such development will be forever precluded.

2. Public access to the area will be sharply restricted. Our state must look more and more to the tourist business to sustain our economy. The creation of Wilderness does not bring tourist or recreational development. In fact, it *precludes* this, as only a very limited percentage of the tourist population ever enters

a Wilderness area. The average traveler is not equipped physically or financially, to enter such areas on foot or by horseback.

3. One of the few and one of the most important industries in Wyoming is timbering. By co-operative arrangement with the Forest Service, whereby various areas are harvested every thirty, forty or fifty years (depending on rate of growth of the forest) a method stabilizing the use of forest products has been evolved. The DuNoir is an integral and important part of this cycle—without it timber operators will be unable to invest in the area in reliance on a sustained yield.

In addition to these economic factors the Committee should also consider the fact that the DuNoir does not conform to the Wilderness concept. The area was once logged over. There are several roads traversing it. As the Wilderness Act states, "undeveloped Federal land retaining its primeval character and influence;" this area would not qualify.

It has been stated by some, that DuNoir should be placed in Wilderness to protect the elk calving grounds. This does not seem logical, in view of the fact the area has been managed by the Forest Service since the Forest Reserves were created. If the area were not included in Wilderness, the Forest Service would still control and manage as in the past. As the Forest Service has stated:

"It is not necessary to give Wilderness classification to a piece of country to protect elk calving grounds."

In conclusion may I ask your Committee to set aside the emotionalism that a discussion of Wilderness always evokes. I ask you to consider the needs of the great majority of our people. I ask you to give our State a chance to develop wheat resources it has while at the same time preserving vast acreage for future generations.

Senator HANSEN. The views of the Wyoming Recreation Commission have been made known to me through a letter from Lyle W. Bentzen, president of the commission. I ask that they be included in the hearing record at this point.

Senator CHURCH. Without objection, that may be done.

(The statement referred to follows:)

STATEMENT BY LYLE W. BENTZEN, PRESIDENT OF THE WYOMING RECREATION COMMISSION

In analyzing the question of the inclusion of the DuNoir and Bear Creek Valleys in the proposed Washakie Wilderness Area, we must first determine what a true wilderness area should be.

There are areas in Wyoming that can be classified as Wilderness by virtue of their geographic features alone, with no official designation needed. These are our mountain tops, the high peaks above timberline that are by nature inaccessible to any type of motorized travel and have no potential for commercial development or exploitation. For a few months each summer these areas serve as a home for the big horn sheep and hunters occassionally visit here in search of them. Cattle and sheep interests trail their animals over the area on the way to new range on the other side. Photographers, hikers, horsemen and fishermen visit the fringe of the areas to pursue their particular interests. From time to time a climbing party will attack one of the many peaks. Such is the extent of the use of Wyoming's natural "wilderness" areas. There is no timber to cut and nothing commercially valuable to dig from the barren ground.

Surrounding each of these areas is another type of wilderness. Here lies the timber country, the start of the many river valleys the state claims, the watersheds that support them and the spring, summer and fall home of the several wildlife species Wyoming takes great pride in. Here also are found the bulk of the hunters and the fishermen, the campers and the horseback riders, the photographers and the bird watchers, the hikers and the conservationists, the cattle, sheep and horses grazing on the rich summer grasses. Here, at the fringe of the alpine peaks, is the wilderness that those seeking peace and solitude hope to find and the wilderness that we feel certain Congress intended to preserve.

Here are located the DuNoir and Bear Creek valleys. Here, also, is a stand of 10,000,000 board feet of "merchantable" timber of at least some commercial value.

The problem then is to determine the relative value of this fringe land and decide if it should be preserved in its natural state under the Wilderness Act or if it should be left open for industrial timber harvest.

The question is basic. Will a large-scale, short-term logging operation in the DuNoir and Bear Creek areas provide sufficient economical returns to the state and nation over and above those returns that would be made by recreation enterprises over a long period of time?

There can be no workable compromise because the two uses are completely incompatable. In the first place, the timber in the area is, at best, low grade and must be harvested in quantity in order for the harvest to be economically feasible. Without the virgin stands of timber the recreational value of the land drops to zero and the land, due to its thin volcanic soil, over 8,500 feet elevation, and dry climate, grows new timber very slowly. It would take longer than a human lifetime to replace a fence-post sized lodgepole pine in the upper DuNoir valley.

The timber industry can, and no doubt has, placed a dollar and cents value on the timber in the DuNoir and Bear Creek areas. Recreation is not so fortunate. Recreation deals primarily in human values other than money. It can only point to the numbers of people seeking outdoor enjoyment in the state, eight million in 1966, and project this figure on the basis of the current 5% annual growth trend to 16-million by 1986. Economic figures associated with these visitors are a bit vague, ranging from $11.00 spent per visitor per stay which averaged 1.5 days quoted in the 1961 University of Wyoming Lund survey to the $20.00 per visitor day figure recently discovered by Howard Baker, Associate Director of the National Park Service.

Whichever figure is chosen, the amount spent by recreation-seeking visitors to Wyoming each year is considerable—at least 88-million dollars now and, based on the low estimate of 5% annual increase, at least 176-million dollars annually in 20 years. And that is assuming each visitor only spends 1.5 days in the state.

Recreation, then, is beyond any question one of Wyoming's vital, growing industries, currently ranked in the top three and growing all the time. Timber, on the other hand, is not. It is a relatively minor industry in Wyoming, has always been and, unless ways are found to grow trees where they will not presently grow, will continue to be. Wyoming can never hope to match timber production with the major producing states of the northwest and south where timber currently stands in quality and quantity that can be harvested without aid of government subsidy, and where trees will grow back in a reasonable length of time.

But what about Wilderness and recreation? Are these interests compatible? Doesn't, in fact, Wilderness designation tend to hinder recreation and recreational development?

The answer to this question can be, and in many cases is, an emphatic yes! The Wyoming Recreation Commission is on record pledged to examine each Wyoming Wilderness proposal in the light of its potential for other public recreational development. The Commission is interested in and responsible for a wide range of recreational interests covering the total population.

So we must ask: Is there a potential here for ski area development? How about snowmobile trails? Can and should recreational roads be built to give public access? What is the potential for campsite development? For tourist courts and resorts? Will Wilderness designation preclude public use?

The Commission has applied these questions and many more to the DuNoir and Bear Creek areas and come up with negative answers. The entire area is located in a region of extremely low annual precipitation and will not support ski area development. The country in question is too steep and rugged for over-snow travel and there are much better locations for both in the surrounding region. Recreational roads would serve little purpose as the closer one gets to the stratified area, the less one can actually see of it and good recreational roads already exist in abundance at such places as Brooks Lake (where over 200 campers have been counted in a single day), Wiggins Fork, Trail Lake, Union Pass and East Fork.

And these roads will serve another purpose, allowing public access to the DuNoir and Bear Creek areas, making these Wilderness areas available to the average citizens, the individuals or families looking for a wilderness experience for a day or a week-end, but who lack the means or desire to hire pack outfits or climb mountain peaks. The Recreation Commission does not yet know how many people are looking for this type of outdoor enjoyment, but we do know that the neighboring and more inaccessible Bridger area logged over 88,000 visitor days use last year.

The potential for commercial recreational development is also limited to this area. The 8,500 to 10,000 foot altitude is the chief deterrent to this type of industry, but, according to the Forest Service report to the President, any disturbance

of the soil or cover here can lead to "damage from torrential rain storms . . ." The truth of this statement has been graphically illustrated at nearby Brooks Lake where the road was blocked by mud and rock slides triggered by a cloudburst over an up-slope timber operation in 1966. The road below surrounding uncut areas was untouched.

The people most directly affected by any decision made on the inclusion or exclusion of these two fringe areas in the Wilderness system are the people of the Upper Wind River Valley and the town of Dubois. These people are now experiencing the benefits of both a growing recreation and timber industry and have had ample opportunity to examine each. Yet every civic organization in Dubois and the great majority of the residents of the upper valley have strongly endorsed Recreation as the ultimate economic destiny of the area and feel that every acre of timber cut detracts from this value.

The reasons for this stand are not hard to find. Dubois has experienced the boom of the arrival of industry and is now beginning to feel the depressive effect that follows. The town is surrounded by another temporary city of tar paper shacks and trailer houses. Uncontrolled waste burnage daily pollutes the air. There is increased, non-tax paying pressure on the schools and the resulting bond issues will remain to be paid by the permanent stock-raising and recreational businesses long after the migratory workers associated with the industry have made their cuts, left their slashes and departed.

The residents of this area are historically oriented toward ranching, livestock, guiding and outfitting interests—interests naturally compatable with recreation in general and incompatable with such "once over and get out" industries as timber and mining. These people realize that wild animals, such as the elk, are wilderness animals and need wild areas to survive. They know this from years of experience and are only pleased when their knowledge is confirmed by recognized biological experts of the Wyoming and Colorado Game and Fish Departments. They have seen timber operations on Wiggins Fork and Horse Creek and saw the established resident elk herds in these areas vanish.

The upper Wind River Valley Stockmen's Association and the Wyoming Outfitters Association are two specific organizations on record supporting the inclusion of the DuNoir and Bear Creek areas in the Wilderness system. On December 8, 1966, Outfitter's spokesman Ned Frost wrote: "That these proposed additions are of greater intrinsic value to the single use of recreation than they are to the total combination of all other phases of the multiple use theory; that one multiple use facet, livestock grazing, not being incompatable with recreational use, could and should be continued in any event; that another multiple use facet, lumbering, conducted as has been the practice in the Wind River Valley, and particularly as exemplified on the Wiggins Fork, would physically maul the terrain, open it to increased ravages by natural erosion and largely ruin it for the prime use of recreation."

But the people of Dubois can speak well for themselves, as can the Outfitters, the Stockgrowers, the Game and Fish Department, and all the rest of the interested industries and agencies. The Recreation Commission can and will speak only for the Recreation interests.

The Wyoming Recreation Commission wholeheartedly endorses and supports the proposed Washakie Wilderness designation for the present Stratified Primitive Area. Further, we join in endorsing the inclusion of the DuNoir and Bear Creek areas in the Washakie Wilderness and ask that you consider our above listed points and the long-range economic development of Wyoming as an outdoor recreational oasis in making your decision.

Senator HANSEN. Also I have a copy of the letter sent to the chairman by A. E. King, the commissioner of public lands for Wyoming. I ask that the original of this letter be placed in the hearing record at this point.

(The letter referred to follows:)

STATE OF WYOMING,
Cheyenne, Wyo., February 14, 1968.

HON. HENRY M. JACKSON,
Chairman, Senate Interior Committee,
Washington, D.C.

DEAR SENATOR JACKSON: Being unable to appear before your Committee to present testimony in person on S. 2630, pertaining to the Washakie Wilderness

Proposal, will you please accept the following comments in the hearing before your Senate Interior Committee scheduled for February 19th, 1968?

I am the Commissioner of Public Lands and Secretary to the Wyoming State Land Board for the State of Wyoming. Through this office over four million acres of State lands, both surface and minerals, are administered. Our experience is similar to those of the Federal Land Managers in attempting to balance the heavy demand for various uses upon the lands.

The proposed legislation was written, with most recommendations made by the United States Forest Service. The Forest Service held extensive hearings, prior to reaching the conclusions which were written into S. 2630. We know from closely following the Forest Service hearings, that all interests were provided ample opportunity to present their views and recommendations.

The information received has been carefully weighed by competent, professionally trained and experienced land managers. The same people who are entrusted with managing lands under "the greatest good for the greatest number" concept. They are skilled in the balancing of the uses of the natural resources. They have detailed and intimate knowledge of the area in question.

In Wyoming at the testimony of the Forest Service hearings, there were some who advocated enlarging the boundaries of this remarkable wilderness area. Some of this testimony revealed a substantial lack of knowledge of the area. We recognize the sincerity and concern, that these preservationist groups have for the protection of our wilderness areas. We share this same concern and appreciation of nature's gifts. However, we cannot, in all good faith, recommend or agree that a "belt" or protection area be established around the wilderness areas. Nor can we agree that present multiple use areas be placed in a single use status. This is basically what will happen should be boundaries be changed to other than those proposed in S. 2630.

In conclusion, it would appear that your Committee should strongly consider the recommendations of this branch of the Federal Government, that first conceived the idea of setting areas aside in order to preserve their natural state. These are the recommendations in S. 2630. Your extreme caution is urged in making changes that if added, would detract from the true wilderness concept.

Please accept my sincere thanks for your consideration of these comments by the Senate Interior Committee.

Yours very truly,

A. E. KING, *Commissioner of Public Lands.*

Senator CHURCH. Is Mr. Shoemaker here?

Mr. SHOEMAKER. Would it be out of place to ask the nature of the testimony of the Governor of the State of Wyoming, Senator?

Senator HANSEN. Not at all. I can read it, if you would like to have it read. The testimony of the Governor goes along generally with his testimony before the hearings in Riverton. It will be made a part of the record. I don't happen to have a copy of it right in front of me at the moment, but I am sure Mr. Dominick will get it.

STATEMENT OF LESLIE E. SHOEMAKER, ON BEHALF OF THE WYOMING OUTFITTERS ASSOCIATION, DUBOIS, WYO.

Mr. SHOEMAKER. May I call your attention to this relief map that shows pretty graphically the things that the citizens' group is proposing in regard to the Washakie Wilderness Area, and the fact that it is in bas relief, I think, gives the perspective between the elevations proposed by the Forest Service line and those for the citizens groups.

I want to leave this here for observation, because I am going to refer to it, possibly.

Senator HANSEN. If I may, let me observe at this point, without reading the Governor's testimony, which will be submitted and made part of the record, that it does support, and I suppose this is a point

that was of prime concern to you, Mr. Shoemaker, the proposal as made by the Forest Service.

Is this enough detail for you?

Mr. SHOEMAKER. Good; that is plenty.

Senator HANSEN. All right. You may proceed, Mr. Shoemaker.

Mr. SHOEMAKER. I appreciate the privilege of appearing here before you at this hearing. My intention in preparing testimony has been to discuss items that are relevant, but not often repeated by others. I prepared this, of course, before I had heard the others, so mine is also in line with what has been said before.

Senator HANSEN. Mr. Shoemaker, let me interrupt just a moment. Would you move the mike a little closer to you? I think those in the back may have trouble hearing you.

Mr. SHOEMAKER. My name is Leslie Shoemaker. I am speaking in behalf of the Wyoming Outfitters Association, which has paid the major part of my expenses to come here.

I am also speaking for myself and my family, associated with me in our business, and I would like to tell you and the group the reasons I feel qualified to appear before you.

I was the son of a forest ranger, and my boyhood was spent mostly on horseback in the high mountain ranges of western Colorado. My decision to emulate his career was made at an early age, and I pursued my professional training at the Forestry School of Colorado State University, studying not only forestry, but range management and plant ecology as well.

I served with and was dedicated to the aims and ideals of the U.S. Forest Service, for a satisfactory career of 21 years, the last 9 of which were spent as a ranger in the Wind River district of the Shoshone National Forest, stationed at Dubois. During my tenure in this position I developed such an affection for the Wind River Basin that when the Forest Service transferred me to Colorado in 1952 I decided not to leave.

I resigned and bought the CM dude ranch. This changed me overnight from a forest administrator to a forest permittee and user. Since that time I have enjoyed the privileges of a grazing permit for horses and cattle, a back-country cabin resort in the Wind River Mountains and, since 1954, hunting camps in Bear Basin and the East Fork of the Wind River.

My professional hunting time has been mostly spent with mountain sheep in the Wind River, and I have never spent a full hunting season in the Bear Creek or East Fork areas. Supervision has been done by my ranch foreman, my wife, and more recently by my son-in-law. However, I have personally guided many hunters in the Bear Basin area and am well acquainted with it. A substantial part of the CM ranch income has been derived from our hunting camps the last 14 years.

When I became established in the hunting business and learned of its various problems, it seemed desirable to upgrade the industry and try to eliminate or discourage the occasional deviation from acceptable practice that occurred from persons who were unscrupulous or unqualified.

I helped organize the Wyoming Outfitters Association, was a coauthor of its constitution and bylaws, and served as the first president in 1959 and have served a second term. This organization has exerted

a continuing influence to insure proper ethical practices by its members, has been a major factor in soliciting nonresident participants in Wyoming hunting and fishing, and has made a continuing effort to maintain and improve quality hunting opportunities within the State. By quality hunting I refer to the opportunity of a person to exercise his reason to find, stalk, and take an animal in such a way as to compete with the keen senses and instincts of the animal. This is in contrast to the much too common method now existing, where the hunter drives a vehicle over considerable area to locate game, and then approaches as fast as possible to get a shot as the animal flees.

At the time I left the security of civil service and embarked on personal enterprise, quality hunting existed in nearly every part of the Wind River Valley, and was one of the major factors in my decision.

Roads were nominal, forest cover existed through all the altitudinal range of pine and spruce. Jeeps had penetrated many areas, but were used mostly for access to the perimeters of hunting areas.

Three factors have completely changed this situation.

The first is a policy of the Forest Service to extend roads and timber sales to every area of the Wind River Basin. The second is the development of timber industry embodied in the Teton Division of U.S. Plywood Corp. that is so large as to be out of proportion for the resources available.

The third is the continuing pressures of recreation seekers in improved, four-wheel-drive vehicles who use powersaws to extend the possible routes, which, when once established, remain indefinitely.

The results of these factors are a virtual rape of the recreational potential of the whole basin. With the exception of those areas now designated as recommended additions to the Washakie Wilderness Area, within map units D, J, 3, 4, F–1, H, and I by citizen groups, there is no timbered type left intact within the entire area outside the established primitive areas.

The basins of West and East DnNoir are as beautiful and wild as any place in the mountains. The old Wyoming Tie & Timber Co. that first cut at the site of the Triangle C Ranch on the Wind River in 1913, moved into West DuNoir in 1920 and worked there until 1927.

Timber strands were selected for cutting wherever the trees approximated tie size.. They were cut by hand and hewed into ties with broad axes. Cutting was limited in all stands to not more than 40 percent of the volume. Logs were skidded by horses and the finished product was moved by wagons and sleds.

Portable mills were introduced at the last of this period and there were a few low-volume mills that accumulated some sawdust and slabs that were burned in place.

The evidence was mostly destroyed. Roadways were mostly natural openings and not constructed. Those roads were used some by four-wheel-drive vehicles, but not enough to establish them as roads.

These facts are used consistently to represent the area as low quality for wilderness. Overlooked is the fact that most of this activity occurred outside the boundaries recommended for inclusion. After 40 years, traces of stumps, chips, slash, sawdust, and cutting activity are nearly gone; are just at the stage of complete deterioration and will be completely gone in another few years.

Many other factors make it suitable for wilderness. Most of the timber is young and healthy and has not been infected with mistletoe nor attacked by Dendroctonus beetles.

The area is unexcelled for natural beauty.

Two experiences occurred here that remain outstanding in my memory. In one, my wife and I stopped at Kissinger Lake, had lunch, and swam our horses into the middle of the lake. In the other, we joined several hundred elk in the dusk of an early summer evening and went with them for several miles, enjoying the young calves and the sounds from the barking cows and immature bulls.

Difficult access has been the major factor that has kept this area suitable for inclusion in the wilderness and it has been prohibitive enough to make it difficult for use even as wilderness. The Forest Service road through the Long Creeks, now almost to the boundary of the area, has made access to that so that everybody has an opportunity to enjoy it.

Bear Basin, designed as area D, is also suitable for wilderness status because of its protection from vehicular intrusion by difficult access. Steep slopes at Bear Pass and an impassable canyon below the basin make the only feasible route into the basin down the steep slope from the ridge of Castle Rock. To call this a road is an exaggeration. It is just a track down a steep hillside. We use it with four-wheel-drive vehicles to move our camp and hunters into the basin.

When you cross the creek into the area we want to include in the wilderness, our camp is a short half mile across the nearly level sagebrush flat at a spring at the edge of the timber. From this point vehicles can be driven on up the creek another half mile and also up the steep ridge along the old Indian Point trail into the first parks. These tracks would disappear in 2 or 3 years if unused.

This minor intrusion does not justify the Forest Service statement on page 24 of their proposal that the area has been penetrated by a road. I also disagree to a large extent with the continuing statement that big game values within the area are not dependent on wilderness designation. Having hunted this area for 14 years, I feel well qualified to say construction of a road, or even extended use by vehicles, would destroy the possibility of any quality elk hunting in the area.

Boundaries for wilderness status here can be easily and clearly designated. May I add that in his testimony, Dr. Cliff, for the Forest Service, said that their concern there was not so great that, if reasonable boundaries were designated, it should not be included in the boundaries of the proposed wilderness. By following the draw west from Castle Rock down to Bear Creek as mutually agreed, then following Bear Creek down to Cave Creek and up Cave Creek to Bear Pass you have a perfect boundary.

A slight deviation in the line in the bottom of the basin to move it from the creek to the edge of the timber would eliminate the sage flat, with its faint trace of tracks. It would also make available the bottom land for recreational development for future public needs.

Much of the Forest Service concern over areas seems centered on boundaries, and they have consequently made their line on high points along the escarpments. We want to include some of the timbered slopes, and we don't think that designation and enforcement of boundaries is an unsurmountable obstacle.

We have, year after year, seen that a simple sign on East Fork has been an effective deterrent to trespass travel into the primitive area. A similar sign in the big meadow at the head of Wiggins Fork also has served its purpose. The simple truth is that people believe in the principles involved and want to cooperate. All they need is the indication that that is where the line is.

There seems to be little question that the area of approximately 40,000 acres which we are recommending for addition will be cut over for timber if it does not have the protection of wilderness status. If this happens, there will be no possibility to perpetuate the game herd, and quality hunting and recreation on the Wind River will be gone.

Addition of the area will enhance the entire wilderness area by giving it a representative timber type. It will enable the American public to see a great treasure, and for the many people who have the energy, and the initiative, and the appreciation, and the guts to make the effort to see it, it will be greatly rewarding.

I would like for your children and grandchildren, as well as mine, to be able to visit this area and share in experiences there such as I have had. I recommend it for your favorable consideration.

Senator HANSEN. Thank you very much, Mr. Shoemaker. Having known you for a long time and watched you operate, I am certain that what you say will be of real interest to the members of the committee. I appreciate your testimony.

Mr. SHOEMAKER. Thank you.

Senator HANSEN. Next to be heard is Mrs. Alice Shoemaker of Dubois. Mrs. Shoemaker, glad to have you.

STATEMENT OF MRS. ALICE SHOEMAKER, DUBOIS, WYO.

Mrs. SHOEMAKER. Thank you, Senator. I am Mrs. Alice Shoemaker from Dubois, Wyo. I am testifying as a citizen of Dubois, Wyo.

To most persons, the word "wilderness" has finally achieved membership in that illustrious group which stands for all good things—like mother and the American flag. Now at this particular time, you people in the Congress of the United States have the obligation to make the right decision concerning a few thousand acreas of scenic beauty in Wyoming. Some of us have traveled thousands of miles to present our views in the hope that we can be helpful with our knowledge of the country and our awareness of the local economics, geography, situations, and opinions.

Since the passage of the wilderness bill, almost all of the best of our high beautiful mountain country in the West has come, or will come under scrutiny as to whether or not it should be included in the wilderness system.

One under consideration at this hearing is the proposed Washakie Wilderness Area in the Shoshone National Forests and there is very definitely a unique situation in connection with this one. In most cases, wilderness areas are within national forests, and the land will be carefully administered to conserve the basic resources, whether or not it is included in the wilderness bill.

This is not true in this case because, through several progressive changes in ownership, U.S. Plywood Corp. has ended up with a timber operation in the little town of Dubois which represents an extremely

large investment by the company and has tremendous mill capacity.

It is only right and fair that the Forest Service should try to provide sufficient timber to maintain the operation of the mill; and it has always been the policy of the Forest Service to recognize investments connected with forest use, from a fence or cow camp built by a stockman to a cabin on a special use permit.

In the case of the U.S. Plywood timber operation, I suspect that the Forest Service has a tiger by the tail through the fault of no one person or organization. Both timber consumption and the capacity to consume have increased far beyond what anyone would have believed 20 or even 10 years ago.

With the extremely slow and difficult growth of timber in the high, cold, and arid Wind River Mountains, it is inevitable that sooner or later the timber will be gone, and U.S. Plywood or any other operator will find it necessary to seek trees somewhere else.

The comparatively small amount of timber which we would like to see included within the wilderness would maintain the Dubois sawmill only a very short time and is relatively unimportant.

The Forest Service estimates there are 30 million board feet in the east and west Dubois area under consideration, and this will last the mill less than a year.

Everyone who has watched the clear cutting going on in the Wind River Mountains is convinced that if these timbered areas are not included in the Washakie Wilderness Area they will be logged in a very short time, with the consequent loss of so much that can never be replaced once it is gone.

I want to repeat that—which can never be replaced, once it is gone.

The Forest Service is all set to start construction of a timber access road just as soon as the wilderness boundaries are legally established, and in spite of local assurances that no roadbuilding or logging would be done until that time, a block has recently been cut on Wolf Creek, which is within the area in question, an act which dramatically removes the decision from the Congress of the United States. Why have hearings, debate, public participation, if the areas in question are logged without waiting for the wilderness boundaries to be established by law?

This certainly effectively removes them from future consideration. The reason the Forest Service needs recreation areas on east and west Dubois, within the area we want included in the wilderness, is that they have devastated the country below that boundary. They have logged all along the creeks. If they want public recreation for people on the park that should be, just go to the ridge on the highway on Long Creek, but that is completely devastated, logged, and turned up. It is no place for public recreation.

This is the situation which has brought us to Washington and makes the Dubois community so unanimous in its desire to have these additions made to the Forest Service proposal for the wilderness area. Other people are here to explain the boundaries and areas in question in detail and tell you what roadbuilding and logging will do to the matchless scenic excellence, the game habitat, the watershed. The elk herd in question is not a migratory herd. I am not even sure that migration routes enter into it too much. They live in the country, and Senator Hansen and Mr. Bonney had a discussion of how the elk go into

the Jackson Refuge in the wintertime across highways and through ranches. They will do that. When an elk gets snowed in, he will go down country, all right, to where he can get something to eat, and they will invade a rancher's meadows, and eat his hay stacks; but the elk have historically been pushed back from the plains, farther and farther back into mountains, as the pressure of the civilization increases. The elk are pushed back clear above timberline and that is the reason there are elk to migrate to the Jackson feeding ground, because they enjoy the wilderness area within Yellowstone Park where they can summer undisturbed.

We have the same situation here. We have elk who can summer undisturbed, within a primitive area, which we hope will be included in the wilderness, and they will migrate out in the winter, all right, but they seem to have to have that back country habitat to survive.

Some Wyoming people complain that about 52 percent of the land in our State is federally controlled; and other people, including our Governor, maintain that we have enough wilderness, as though it were a commodity like coal or potatoes. Both groups have valid viewpoints, except that Wyoming, and parts of other Western States, are the last small areas left in the world today where space, beauty, clean air, pure water, game in abundance, and uninhabited vistas remain to be saved.

If you want to mine diamonds, you go to Africa; if you want to raise wheat, you go to Kansas; and if you want to preserve high mountain country, in its original state, you must do it where the mountains are.

The University of Wyoming did a research project in 1965 and produced figures which can be verified indicating that hunting and fishing brought almost $100 million into Wyoming that year. The Wyoming Game and Fish Commission estimates this was between $125 and $130 million in 1967 and the 11-percent tax on guns, ammunition, and fishing tackle returned over $700,000 to the State of Wyoming. These figures do not include any of the money summer tourists bring into the State and leave with us without taking any unrenewable resources away with them.

The economic future of Wyoming is deeply involved in tourists and recreation. Even with all our Federal land and wilderness areas, we are fortunate in still having great expanses of unhabited space in other parts of the State eminently suitable for any industrial development which may occur in the future, and the propinquity of wilderness areas and values is extremely good bait for industrialists who want contented employees. It is much easier to hire good people to work in an area where they can enjoy the kind of recreation provided by wilderness areas. They like to raise their children in that kind of an environment.

If we yield these small areas now, they will be gone forever. People talk about locking up resources in a wilderness but this is a matter of law passed by the Congress, and it can always be changed by the Congress, should the need arise. Your decision in this matter is not final if you include the 45,000 acres in question now; but if you do not protect this area when this bill is passed, no one will ever have another chance to make such a decision.

Senator HANSEN. Thank you very much, Mrs. Shoemaker.

Let me ask you, are you personally familiar with this area?

Mrs. SHOEMAKER. Which area?

Senator HANSEN. The Washakie, the proposed Washakie Wilderness Area?

Mrs. SHOEMAKER. I am very familiar with it.

Senator HANSEN. Have you actually been out in hunting camps?

Mrs. SHOEMAKER. Oh, yes. I have had a Wyoming guide license for a number of years and I spend months out horsepacking in this country under discussion.

Senator HANSEN. You have actually guided hunting parties, too, haven't you, Mrs. Shoemaker?

Mrs. SHOEMAKER. Yes, I have.

Senator HANSEN. I thank you for a very excellent statement. It certainly helps fill in holes that otherwise might be left in the record and I appreciate your appearing here today.

Mrs. SHOEMANER. Thank you very much.

Senator HANSEN. We will next hear from Tom Bell, representing the Wyoming Coordinating Council and Wyoming Wildlife Federation of Lander, Wyo.

STATEMENT OF TOM BELL, ON BEHALF OF THE WYOMING COORDINATING COUNCIL AND WYOMING WILDLIFE FEDERATION, LANDER, WYO.

Mr. BELL. Senator Hansen, members of the staff of the committee, while they are moving this map, may I ask, Mr. Chairman, to have certain letters inserted into the record?

Senator HANSEN. Without objection, they may be received and entered into the record.

Mr. BELL. First, Senator Hansen, is a letter from the president of the State Gem and Mineral Society, in which he opposes any minimal agreement and favors the entire area as recommended by the city of Dubois, Wyo.

A letter from the Diamond G Ranch, Mr. P. E. Yarborough and a letter from Erroll M. Petersen of the CM Ranch. He is a guide and an outfitter in the area of the Bear Basin. In his letter he makes certain remarks about the roads in that particular area.

Senator HANSEN. They will be received and incorporated in the record, Mr. Bell.

Mr. BELL. Thank you, Senator Hansen.

(The documents referred to follow:)

LANDER, WYO., *February 17, 1968.*

Senator FRANK CHURCH,
Washington, D.C.

DEAR SIR: There are over one thousand dues-paying members of the various rock clubs in the state of Wyoming. In addition to these there are at least another ten thousand who are interested in this hobby but are not members of any recognized club. In behalf of these many thousands of outdoor enthusiasts I would like to express a desire that the maximum acreage be included in the Washakie Wilderness area. While many of us would like to explore such areas via the wheeled vehicles, yet we realize that to do so would be to invite ruin for this vast and colorful territory. Therefore we would like to go on record as opposing any minimal agreement and in favor of the entire area as recommended by the City of Dubois, Wyoming, the Wyoming Wilderness Association, the Outfitters Association, the Sierra Club and others.

We respectfully request that this letter be entered into the records of the hearing on the Washakie Wilderness near Dubois, Wyoming.

Sincerely,

OLIN D. ATWOOD,
President, Wyoming State Gem and Mineral Societies.

DIAMOND G RANCH,
Dubois, Wyo., February 10, 1968.

Mr. TOM BELL,
Wyoming State Journal,
Lander, Wyo.

DEAR TOM: Regarding the so-called roads that are shown on your Forest Service map of the Shoshone Forest in the East and West Dunoir and Six-Mile areas, I do not know how they can be called roads or jeep trails, they are more horse, cattle and big game trails. It is possible that a jeep with winch could be put over them with a great deal of effort and trouble, however, they have been traveled very few times by a jeep, but in no way would they leave any future indication of ever being roads should this area ever be classified as a Wilderness Area.

Since I live in this area and run cattle in this area every summer I am in there horseback more than anyone else including the Forest Service and certainly feel I am well qualified to make this statement.

Sincerely,

P. E. YARBOROUGH.

CM RANCH,
Dubois, Wyo., February 15, 1968.

Mr. TOM BELL,
Wyoming Outdoor Coordinating Council,
Lander, Wyo.

DEAR TOM: I feel that you are well justified in your support of the additions of several areas to the Forest Service Proposal in the Stratified Primitive Area.

I have guided in the Bear Basin area for a number of years and can assure anyone that it possesses the many qualities for Wilderness inclusion.

There is a jeep trail which goes into Bear Basin from the Wayne's Creek divide and crosses Bear Creek a short distance after reaching the Basin, but the trail ends approximately one half mile after crossing the creek. This trail, which I don't believe could legitimately be called a road would be overgrown and unnoticeable in a very short time, leaving the Bear Basin area a prime Wilderness value.

Sincerely,

ERROLL M. PETERSEN.

Mr. BELL. I am Tom Bell of Lander, Wyo. I am executive director of the Wyoming Outdoor Coordinating Council and represent that organization here today. I also represent the Wyoming Division of the Izaak Walton League of America, the Wyoming Wildlife Federation, the Wyoming Audubon Society and numerous individuals who are rockhounds, elk hunters, wilderness enthusiasts, and so on. In addition, I speak for myself, a native of Wyoming and lifelong resident and my family.

I wish to express our deep appreciation for this great American system of government which allows me to have the privilege of appearing before you today. I also wish to thank this committee.

As a sidelight, I would like to point out I am familiar with this area. I have lived in this area all my life. As a 14-year-old boy I was in this area when it was truly wilderness. I was a fireguard at Dalton Point, which I will show you in my slide later.

Wyoming has been blessed in many ways. Not the least of these is a system of high, rugged mountains. Herein are found the subjects of our discussion here today. Lying mostly at high elevations, composed mostly of bare rock, open tundra, scattered timber, and what are otherwise considered low value lands, these wilderness areas nevertheless are of inestimable value for their recreational, esthetic, and scenic qualities. They also happen to be an important and integral part of our valuable watersheds.

I share with the Governor of the great State of Wyoming a concern of its economic well-being and its future. I concur heartily with the

statement he made in his inaugural address in which he said, "We should avoid trying to make Wyoming something it is not."

By reason of our geography and topography, we cannot ever become a great agricultural State. For all practical purposes, we have reached the limit of economically feasible irrigation projects. Lands even now being proposed for reclamation projects are situated at high elevations or upon soils so poor, or both, that the prudence of pursuing them further should be severely questioned. Our grazing lands have nearly reached a limit, with the possible exception of intensive management on available irrigated lands.

I cannot foresee Wyoming becoming a great producer of heavy industry or manufactured goods, at least in the foreseeable future. We do not have adequate water or population centers to support any kind of large industrial complex.

What is left then but the extractive industries and the recreational industry?

Wyoming does have those natural assets and qualities to foster a great recreational industry. The poor lands at high elevations can be turned to our advantage. We are stuck with them. We cannot change their geology, topography, or geography so we should accept them as they are.

The wide open spaces, the serenity of solitude, the beauty and magnificence of austere desert or pristine, alpine lake—all these and more are attributes which we should not demean. Neither should we, for lack of wisdom, fail to protect them and manage them wisely.

Wilderness areas are an integral part of our great recreational resource. In spite of the fact that we already have tremendous areas dedicated to the wilderness system in Wyoming, we need not slight ourselves or our posterity in adding areas into this which round out and complement those we already have.

We could rightly ask: For what significant, higher purposes would you dedicate the hundreds of thousands of acres of bare rock we now embrace in the wilderness system? Is it wrong to embellish outstanding areas with equally outstanding minor additions, if we can show that possible losses to our economic system and to the society are balanced or outweighed by possible gains?

I would like to digress for just a moment to point out that of the 196,390 acres of the Washakie or of the original Stratified Primitive Area, approximately 142,049 acres are barren or grassland. Maybe I should also point out that in this particular area, in reference to the map which was shown yesterday, in reference to Yellowstone and Grand Teton National Parks and the great primitive areas in Wyoming, that there are States around us which have forests which do not have wilderness areas in them.

I might name a few: The Fish Lake and Dixie Forest in Utah, the Caribou, the Targhee, and the St. Joe in Idaho, the Medicine Bow and the Black Hills in South Dakota.

The proposed Washakie Wilderness Area would comprise some 679,520 acres to be made up of 484,130 acres of the South Absaroka Wilderness Area and 196,390 acres of the original Stratified Primitive Area. To this we ask you to add approximately 42,000 acres in various locations along the southern boundary.

If I may refer to maps I would like to document each area we wish to add. I will refer to them as they are designated by letter or number on the map appearing as pages 17–18 in the U.S. Forest Service report entitled, "A Proposal, Washakie Wilderness, Shoshone National Forest, Wyoming."

To my right, Senator, I have a map which is made up of topographic maps. I am sorry that it does not show Bear Basin. It was brought out that surveys have not been made, and in this area, evidently not enough to make topographic maps possible. Our proposal in the Bear Basin has been outlined by Mr. Shoemaker, in which Castle Rock would be a pivot point from which to take off on the Forest Service line along Bear Creek, follow down to the mouth of Cave Creek, then up to Bear Cub Pass, up a hydrographic divide, nearly to the top of Mount Kent, and then down another watershed to approximately the point that the Forest Service has outlined themselves at near Caldwell Creek.

Area D, Bear Basin, our proposal is to include all or parts of sections 21, 22, 23, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, T44N, R105W, and sections 1, 2, 4, 5, 6, Tr3N, R105W, in all comprising approximately 6,670 acres.

Even though there are true wilderness values found in other areas which were originally recommended for inclusion, we are willing to accede on them. Thus area C, Dundee Creek and the Middle Fork of Wood River has small, thriving elk herd. But it also has mineralization which could be developed even if it were placed in the wilderness. Development would therefore negate its wilderness value. This is an area of 8,602 acres.

Area D, the Bear Basin, was originally recommended to include 8,130 acres. Because of some road penetration and because the area we now ask for inclusion is most critical for elk habitat and other wilderness values, the recommendation is some 1,500 acres less.

Mr. Shoemaker again has pointed out that where the roads have penetrated the farthest, and in the areas which could possibly be used for recreational development, we have excluded.

Areas 3, E, and F–1 were originally recommended to contain 6,857 acres. The present recommendation is 4,040 acres, a reduction of some 2,800 acres. Here again a critical elk habitat and the important timbered fringes are requested for inclusion.

Areas 6, G, H, and I were recommended to include some 3,451 acres. This has now been increased by some 3,400 acres to include more of the lower slopes and basins on Five Mile Creek and Six Mile Creek.

The Ramshorn, which towers over this area, is one of the most outstanding features along the southern escarpment. The fringes beneath it, which set it off, are most worthy additions to the wilderness area. It is in these areas the elk pass on migration.

Local people feel that if the elk have a passageway at least this far south and eat toward the winter range they will continue in spite of man's activities farther on. These areas on upper Five Mile and Six Mile Creeks would constitute a corridor approximately 1½ to 2 miles wide.

The areas lie mostly on steep slopes at elevation of 8,500 feet and above. There is good access to these areas from nearby ranches and roads.

Area J, the East and West Forks of DuNoir are large, timbered basins with numerous small streams and lakes, open meadows and bogs, and with every quality which fulfills wilderness definition. Elk and cattle graze its grasslands.

Bighorn sheep descend the promontories, cross the basins and climb to another vantage point. The DuNoir Glacier nestles on the east side of Coffin Butte.

It is through these basins that a large number of elk move on migration through several passes which takes them to the Buffalo, Shoshone, and Thorofare Plateaus.

We originally recommended the inclusion of 30,240 acres in area J. Because of some timbering which has already occurred within the area and for other reasons, we are now recommending the inclusion of only 24,820 acres.

If I may go back for just a moment to areas 6, G, H, I, I would like to emphasize, as I think Mr. Cliff did yesterday, that a mistake was made in the Forest Service proposal as to area H and area I, in which they say there are over 10 million board feet of operable sawtimber. I challenge the Forest Service on this, and Mr. John Lavin, the supervisor for the Forest Service in Wyoming, called me last week to verify that it was a mistake, and said that their timber maps did not show this amount of board feet in this area. The reason for that, if you will look on the map, is that it lies at such high elevations and such steep slopes, and involves only 2,000 acres, that there could not possibly be that many board feet of operable sawtimber.

We believe that Stratified Primitive Area has unique and distinctive qualities which should be recognized. The high escarpment, eroded into buttes, pinnacles, and promontories, is set off by the green, forested fringe around the base. We believe this fringe is an integral part of the bare, rocky cliffs and the high, barren plateaus beyond. They are significant for human ecology as well as elk and bighorn sheep.

The Forest Service indicates it will want large areas of the DuNoir Basin for future recreational development. We believe the areas under consideration would serve a higher recreational purpose by being included in wilderness.

As we have observed it, timbering and recreational development are almost mutually exclusive. These areas are readily accessible by already-existing timber roads. The proposed wilderness boundary comes within 2 miles of Highway 287 at one point.

We believe there is adequate recreational areas available for development of forest lands to serve on all future needs in the overall area. Timbering has already opened up the Wiggins Fork area, the Horse Creek and Parque Creek areas, the Long Creek and Brooks Lake area, and will open up more of the lower reaches of the DuNoir Basin.

South of Highway 287 are more forest lands and a world of opportunity for recreational development.

As a sidelight on recreational development, we believe the prerogatives of private enterpirse should obtain first. Accomodations, service areas, and facilities should not be developed on public lands at public expense until all private initiative has been expended. Public campgrounds throughout the area should be established only as need develops. And even this is an area in which private enterprise should

enter if suitable concessionaire leases could be obtained on the public lands.

All of these areas show the imprint of man in varying degrees. There are some faint Jeep trails, there are areas showing grayed stumps from selective cutting of the tie hacks some 40 years ago, there are campsites around some lakes where you may find beer bottles and tomato cans, and there are rusted Spam cans sitting on the highest peaks. But we sincerely believe the areas we have asked for inclusion fulfill that part of the congressional definition which says "* * * generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable."

We have diligently and conscientiously attempted to draw boundaries which we believe are every bit as defensible and definable as many that are found throughout the wilderness system. If we can be shown areas which are absolutely untenable from an administrative standpoint, I am sure we will cooperate in establishing better boundaries.

Admittedly, what we have done has been done on maps. But the boundaries are drawn by a committee of local residents who know the areas and can attest to their integrity.

Timbering is important in the Dubois area. However, local residents have seen what timbering does to the countryside and they have a distinct feeling that they are being euchered. The size and capacity of the Teton Stud—U.S. Plywood—mill does not reassure them. Neither do various figures which have been bandied about.

Mr. Emery Tomlinson, manager of the mill, states that its capacity was 160,000 board feet a day, 40 million board feet per year. He has also stated that the addition of the DuNoir Basin and Bear Basin areas would result in a 20-percent reduction in the mill output. Then he has said that if the two areas are included in the wilderness area, U.S. Plywood may accelerate cutting and terminate operations in 5 years.

Mr. Jack Lavin, supervisor of the Shoshone National Forest, addressed the Dubois Chamber of Commerce on Thursday, February 8. The figures he gave were interesting in relation to thoe of Mr. Tomlinson. He said there was approximately 100 million board feet of timber in the DuNoir Basin, area J. Of this amount, only about 30 million board feet would be available for cutting.

Information which Mr. Lavin furnished to me personally indicates that in the Dubois block of the Wind River working circle there are 94 million board feet of merchantable timber available for the next 10-year period. I can only assume that this will be cut on a sustained-yield basis of 10 percent a year.

In answer to a direct question, What percent of the Dubois working circle area timber is in areas J and D? Mr. Lavin answered: "It would be about 8 percent of the total in the Dubois block."

Using these figures, I can only conclude that annual harvest from the DuNoir and Bear Basin areas would be approximately 752,000 board feet. Referring to Mr. Tomlinson's figures of the capacity of the mill as being 160,000 board feet per day, the annual cut from these two areas would approximate 5 days' run through the mill.

In terms of payroll in the Dubois area, it would amount to approximately $30,000 annually.

We have tried to be as reasonable and as factual as possible in our considerations of the impact of timbering, hunting, recreation, watershed protection, and other aspects.

Most of the inclusions we desire are at elevations of 8,500 feet and above. It is a scientific fact that ecologically speaking a rise vertically in elevation is similar in every respect to a movement latitudinally northward. Thus the tops of our Rocky Mountains are similar climatically to northern Canada and Alaska. This may not be quite true for the Dubois area because of the timing of precipitation.

The Forest Service report said it as clearly as it can be stated. Under the heading "Climate and Soils," page 6, the report says:

> Maximum summer temperatures rarely exceed 80 degrees with winter minimums from 30 to 40 degrees below zero Fahrenheit. Summers are short, with an average growing season of less than sixty days, but frost can occur on any day of the year.
>
> Average annual precipitation is between 20 and 30 inches, chiefly in the form of snow; however, heavy rains of cloudburst intensity occur frequently on small areas during the summer.
>
> Soils are shallow and derive mostly from volcanic ash and scoriae. The rocks break down unevenly because of the varying hardness of the conglomerates.
>
> Due to the steepness of the country and the high percentage of barren land, the area is susceptible to damage from torrential rain storms. These storms create flash floods which flow rapidly and violently down the canyons, carrying the lighter material and depositing it as wide gravel bars. Erosion conditions in the area are largely the result of natural causes.

In reply to a question, how much timber within the working circle is at 8,500 feet elevation or above? Mr. Lavin replies about 85 percent of the timber in the Dubois block lays at 8,500 feet and above.

I am not a forester, nor a forest ecologist, but I would suggest from what I do know that we are deluding ourselves concerning the quality and the economic value of timber stands at 8,500 feet elevation and above.

Senator, at this point I would like to refer to some photographs which I have of area J, which is on the west side of the Pinnacle area near Brooks Lake, and I believe that we can show that timbering practices are actually in complete contradiction to what Mr. Cliff said yesterday about watching the erosion conditions. I will present them to you directly, in just a moment here, in which it is shown, at the mouth of the canyon, timbering practices which would certainly lead to erosion, we think.

Compared to timber growing at lower elevations, such as in Idaho or Montana, and especially where summer moisture conditions are more suitable, the Dubois area is a unique situation which should be carefully considered and skillfully managed.

So too, the economically valuable wildlife resource must be carefully considered and skillfully managed. It has been established by the University of Wyoming College of Commerce & Industry that the Dubois elk herd is worth approximately $478,000 annually to the State of Wyoming, in terms of money spent to hunt and harvest elk from the herd.

Of this amount some $382,000 accrues to that part of the elk herd which uses and migrates through the areas we wish to have included.

Obviously much of this money is spent in Fremont County and particularly the Dubois community.

The Wyoming Fish and Game Department has established the East Fork Elk Winter Range at a total cost of some $260,000. It has one man employed full time to manage this range and another further south. The range was acquired and developed to facilitate the management of the northern segment of the Upper Wind River elk herd.

And at this point I would like to point out, again in refutation of some of the statements which were made yesterday, that not all of the Western States are in agreement with the statement of the Forest Service that elk are not bothered or disturbed by timbering operations.

I would like to read to you from a personal letter from Mr. John McCone, who is chief of game operations for the State of Oregon, dated February 5, 1968, in which he says:

> Rocky Mountain elk have a low tolerance for human disturbances. We share Wyoming's concern for the impact of access roads, snowmobiles, and other sources of disturbances that affect the distribution of the animals.

I believe I can say without reservation that a large majority of the local residents are in favor of including the additions we recommend. I can come to no other conclusion after talking to a number of them, after having some of them actually discuss and delineate boundaries, and after carrying their own statements here to ask that they be entered into the hearing record.

They represent every walk of life and every business interest except the timbering industry, and we are certain there are sympathizers even there. I know also there are a great number of Wyoming citizens who disagree with our Governor in his adamant stand against wilderness.

We believe every wilderness area should be considered on its own merits. There are features of each that must be carefully weighed. We are asking you to do this in the hope that at some future time our children's children will not question our foresight.

Senator HANSEN. Thank you very much, Mr. Bell.

Let me ask you, I refer to page 2 of your testimony wherein you say:

> Lands even now being proposed for reclamation projects are so situated at high elevations or upon soil so poor, or both, that the prudence of pursuing them further should be severely questioned.

Mr. BELL. Yes, sir.

Senator HANSEN. Then you say a little further down, "I cannot foresee Wyoming becoming a great producer of heavy industrial or manufactured goods, at least in the foreseeable future. We do not have adequate water or population centers to support any kind of large industrial complex."

It was my understanding that Wyoming does have surplus water at the present time. Is that not your understanding?

Mr. BELL. Yes, sir, it is, but what I am referring to is this heavy industrial or manufactured goods, in which I can think of a complex such as you would find along the Ohio River or the Mississippi River.

Down below I refer to the extractive industries, and then I refer to it a little more. I think what you have reference to in this case is the surplus water in the Green River Basin, which I believe probably will someday be used in both the gas and the shale oil industry.

Senator HANSEN. How much water, in your judgment, would be required to support an industrial complex?

Mr. BELL. I am not certain that I am qualified to answer that, except that I can point out that it takes about, I think, if I can remember

the correct figure, something in the order of 20,000—I am not sure whether that is gallons or tons—of water to produce 1 ton of steel. We do not have this kind of water in Wyoming, to produce tons of steel, let's say, or tons of glass, or other of the large industrial goods that we normally think of.

When I say that this cannot support a heavy industry, I mean that type of heavy industry which produces automobiles and others. I am referring, of course, to the Ohio River, the Mississippi River, and those parts of our eastern part of the country which are so heavily industrialized, which have tremendous amounts of water to use.

Senator HANSEN. Do you know how much water they consumptively use, the kind of industry you speak of?

Mr. BELL. No, sir, I cannot recall exactly the figures. I used to. I used to teach conservation. I used to point this out, how much water was used, in producing, let's say, a certain amount of manufactured cotton goods, in the dyeing and the imprinting of this, and the production of steel, but those figures I cannot recall correctly.

But it takes tremendous amounts, Senator, the kind that Wyoming does not have, except possibly at Torrington, in the Platte River or possibly available out of the reservoirs, and that water is already committed to agriculture and to the other things, unless, possibly, the uses for industry would become so much an overriding factor that the value of the water would be bought. For example, the oil companies, right now, are trying to buy water out of basin reservoirs and out of the Yellow Tail Reservoir for use in the coalfields, but again, this is for an extractive industry in the Powder River Basin.

Senator HANSEN. Do you know how much water we have surplus just on the Green River?

Mr. BELL. It is 14 million acre-feet, I understand.

Senator HANSEN. In Wyoming?

Mr. BELL. I am sorry. Maybe I am pointing out 14 million acre-feet is what Wyoming has available. What is your surplus; again I can't recall the figure.

Senator HANSEN. Do you know how much we are using of our present allotment or allocation under the terms of the Colorado River compact?

Mr. BELL. Again, I can't refer to the exact figure, sir. All I know is that the State engineer has said that instead of asking for 2½ million acre-feet to be transported into the Colorado River Basin, that he thought the river was overcommitted to the point where they should ask for 4 million acre-feet to be transported into the basin.

Evidently, then, it is the belief of our State engineer that the Colorado River Basin is already overcommitted to that amount of water.

Senator HANSEN. When you say, then, that we, in your judgment, do not have sufficient water for industry, you are speaking particularly of industry such as the manufacture of automobiles?

Mr. BELL. Yes, sir.

Senator HANSEN. And I think you said steel.

Mr. BELL. Yes, sir.

Senator HANSEN. But you would not preclude other industries?

Mr. BELL. No, sir.

Senator HANSEN. There are a variety of industries——

Mr. BELL. Yes, some types. I can only assume from what I read that the shale oil industry will consume tremendous amounts of water,

possibly far more than Wyoming will ever have in the Green River Basin, if the industry develops to the point that the experts tell us it will.

Senator HANSEN. When you speak about the unlikelihood that further irrigation projects will be feasible in Wyoming, are you speaking about the present pressure being put upon food by populations as we now have them, or are you thinking about what the populations may be, say, within another 32 years?

Mr. BELL. Sir, what I am talking about is the use of water in Wyoming on an area which has a 75-day growing season and on soil so poor that even the Bureau of Reclamation is very hesitant. I am talking now about the project on the Green River, when I can look down river to Arizona and see a growing season that is so much longer in which nine or 10 crops can be produced. It is completely unrealistic to me, if we are talking in terms of producing food for starving population, that we would use the water where only short-growing season crops can be produced, such as oats and wild native hay in Wyoming, when they can produce crops of so much more value in the areas in which they do have a long growing season, and probably better soils.

Senator HANSEN. Are you familiar with the evaporation problem that occurs in storing water in reservoirs, and the pollution that occurs at the present time as it leaves Wyoming, where it is high quality, and goes further south?

Mr. BELL. Yes, sir, I am.

Senator HANSEN. And you still feel that it can be demonstrated that it is good to use, that we would better serve population pressures, to send our water down to Arizona. Is that what you are saying?

Mr. BELL. Yes, sir; I am, because I am also familiar with the evaporation rates from the Big Candy Reservoir, which are quite high, and also from Fontanel Reservoir, which are quite high. Because of our high elevation, and because of the winds we have, our evaporation rate is almost as high, if not as high, as down in the lower reaches at lower elevations, but with higher temporatures.

Senator HANSEN. Thank you very much, Mr. Bell. We appreciate your being here.

Mr. BELL. Senator, may I intercede just a moment? I had almost forgotten, I have a series of slides I would like to show for just a few moments, if I could take your time.

Senator HANSEN. Yes, you may.

Mr. BELL. I think this will help in all of the testimony of all of our witnesses, because it refers to a number of things that have been said by the witnesses.

I will move so I can stand over here. This is Castle Rock, which we are talking about as the pivot point for the area to begin from the Forest Service line. The Forest Service line takes down the drainage over in here.

We are asking that the boundary come down this drainage, and into Bear Basin and around this are. This is about a 40-acre spot at the bottom of Bear Basin, which could be used as a recreation area developed by the Forest Service.

Next, this is looking into the Bear Basin. This gives you an idea the topography and the geography of the country here, what the timber is like. Most of the timber, you will notice, is in the bottom

lands and up the side canyons, again pointing out that most of this area in the wilderness is bare mountaintop.

Next, this is going down into Bear Basin, and this is the road which does penetrate the area. Road, so-called, I say, in that it is again two tracks, mainly passable only by four-wheel drive vehicles.

Next, I would like to point out that this is Mount Kent, which is another one of the pivot points here in our boundary. Our boundary would come from back at Bear Cub Pass up to about here, then follow down the drainage, which would come in, as I will show the next photograph, near Caldwell Creek. This is Mount Kent, then, which is one of the pivot points.

This is up in the sagebrush flat, looking down to the Double Cabin area. These are the open parks which the Forest Service, I assume, would like to develop for the recreation area. We have no quarrel with them on this. We think it should be developed so that individuals, who come close to wilderness area, can take a short walk and be inside of a wilderness. They put their boundary up here underneath the peak, but up in this high area. We would like to put the boundary down in this timbered fringe, to come across on good definable points to the same point that they use here, and then go up into the timber. They go up into the higher area.

Next, this photograph was taken in 1963 to show you part of the area in area E, which was asked to be included in wilderness, which actually has been logged, and this is what the logging looks like, again under Norton Point, looking up Frontier Creek.

This area is on the other side of Wiggins Fork. This is still Norton Point here, but I am now at another vantage point and looking up Wiggins Fork. We asked that the boundary come down across the stream here to this reference point here, and across to those that I showed you a minute ago.

Again, this is logging along the road.

Next, this is down in Caldwell Creek Basin, and again, the Forest Service boundary comes down through this area. Off of this, again, is a height from which they carry their point. They come down this drainage, and follow down the stream itself, this way. We would like to ask that this area up in here be included, because again, it is in this tremendous basin that much of the elk activity lies, where we do have resident elk populations, not only where migration goes.

Next, this indicates part of our concern, and it is not a real critical concern, because we know that elk will calve wherever they happen to be. In this particular area, they prefer these open sagebrush flats.

Next is looking across from within the wilderness boundary to areas on the steep mountain slope in which timbering has occurred. Here and here. These are areas that have already been cut. The Forest Service proposal is to put the boundary up on these high pinnacles. This happens to be Lincoln Point, in the Lincoln Point area.

We asked that the boundary go right along here. We go from definable points again, such as this one, and another point down below here, and then around the point at Lincoln Point to another. In other words, we feel that there are definable and defensible points on this boundary which can be sene, and which we think are defensible.

I don't know how you would penetrate these steep slopes, except possibly with Sherman tanks.

Next. Here again, we would like to point out this green timbered fringe area. This is in the meadow at Double Cabin, the area which would be developed for recreation, and we agree with this, that this is a tremendously valuable area for this, and we think this is necessary. We feel, or at least I do, personally, that many people get quite a feeling for being able to come back home to New York City or New Jersey and say, "I was in the Washakie Wilderness," if they had only walked in 100 feet, up in this timber.

Next. This again shows the steep slopes of pinnacles areas, and what we would like to include. Our line would run something like this.

Next. This shows elk in the Caldwell Creek area, and this shows a banded elk, in this particular case, by which the game and fish department knows how these elk move, where they go, and so on.

Next. This is an area looking up underneath the Rams Horn. In this case, we have come clear around the point now. The Forest Service boundary would follow these high pinnacles here. Again, our desire is to come down underneath these areas, and follow through the timbered fringe out in here. Again, as you can see, there are points that can be defined, that do strike up.

The topography is such that they can be defined as defensible points for a boundary.

Next is shown the way this country looks now. From Highway 287, this is the view the tourist gets, or would, at this time of year. This is the Rams Horn again here. This is the point which is very commanding, and a very beautiful spot. We again ask that the boundary not be up here on the very tip of the Rams Horn, but down underneath. It is hidden by this hill, but would include the green timbered fringe.

This shows part of our reason for asking for this, again. Besides being a very delightful area for its beauty, of course, much hunting goes on here, and it is at this point, right underneath the Rams Horn—and this is a point further out—from which our boundary would then draw back close to the mountains. Up to this point, we would like to have the boundary come out into this area to include it, to allow that corridor for elk to move through to this point.

Next, of course, is another one of the objects we are talking about, the tremendous wilderness value of being able to see elk and other wildlife in these areas, besides its solitude and its scenic value. This, by the way, is outside of any of the area for which we are asking, or the Forest Service either.

This is up in the area. I am not sure whether this would be just inside what we are asking for, or outside, but indicating the beauty of the area, and its fishing quality.

This illustrates the area that we would like to have included. This happens to be Coffin Butte. This would be the west fork of DuNoir over here and the east fork here. The Forest Service boundary comes up to this point, and then goes back into the mountains.

We ask that this area now be included, and our boundary would come to one of these points in here, and then come down across the valley to another defensible point, and on up to the pinnacles.

This is Dundee meadows, up underneath the pinnacles. This is on the north end of the west fork of DuNoir, again showing the beauty of the area, and showing the type of timbered fringe at the bottom.

Just through this in to show the beauty, again. Flower garden at the head of the east fork of the DuNoir on Shoshone, or on the west pass. Thank you, Senator.

Senator HANSEN. Thank you very much, Mr. Bell. May I ask two things: No. 1, would you be able to supply the committee black and white reproductions of these slides, and to indicate as you have done here for us today the location in order to help the members of the committee gain a better visualization of what you are talking about?

Mr. BELL. Yes, sir; we could.

Senator HANSEN. One other thing. Referring to the Forest Service map which was presented yesterday, just behind your screen, let me ask, do the boundary lines indicated on that map reflect as nearly as you can tell the additions and the deletions as you have discussed them here in your testimony?

Mr. BELL. Yes, sir. If it would be permissible, and if you would like, I could leave this map, which I can point out to you, where we have tried to use various reference points which we have indicated by a black cross, and then, of course, on these, I have taken a ruler and scaled them. We actually have definitions of a boundary, at least for part of it, and I could continue on through this, to indicate what we would like to have included. And I think that you can see from this map that we are including only those from the steep elevation, as you can see from the topographic lines on the map, here in this area, of course, we follow Forest Service boundary. In some areas, we are not too far off from it. We use some of the same points that they use here and here, and around here, and I would like to point out to you, on this side, over here, that the area in the dotted line here was what was originally asked for.

Our line now is this line up here, and I pointed out the one feature on the slide, this one right here underneath Coffin Butte. It could come across, just underneath the Kissinger Lakes, and I would like to point out here how much of the map is brown, which is bare rock, and how much of it is green, showing both Forest Service and our own proposal, and how much of the area right outside of this that could be developed for recreation.

We are specifically talking, of course, about private enterprise, down along these streams and under the DuNoir Valley, up into this.

We also would like to point out that this area is the area which has been logged since the December 6, 1966, hearing, including an area in Jules Bowl which lies at an elevation of 10,000 feet, and I have one photograph there which will point that out.

Senator HANSEN. Let me ask you, Mr. Bell, does your map, or the drawings on your topographic map, reflect the line that is indicated by the southern border of area J, as identified on the Forest Service map?

Mr. BELL. No, sir; it does not. We have gone farther north. We have excluded a range here which the Forest Service has included. As I understand it—I have not been on the ground, I can't testify to this fact—there has been some lumbering already just within this boundary here. We know it has occurred here.

But that is beside the point. Again, we wanted to follow topographic points, if we could defend it as a boundary, and this being the case, we left this out, and all of this here, but we did include an area here,

and while I am here, I would like to point out that areas H and I, the two that I referred to as having 10 million board feet of operable timber, are within these dotted lines. An examination of this map shows obviously that there can't be that much timber there.

Senator HANSEN. I think it would be helpful if you would add to your map any descriptive information that would help make comparisons between yourself and the Forest Service map more intelligible.

Mr. BELL. Yes, sir. That is indicated in red, here.

Senator HANSEN. Then, one further question. Does that area J, as indicated on the Forest Service map, reflect your proposals or the thinking of the groups you represent, as of the date of the Riverton hearing?

Mr. BELL. If I can follow your question correctly, I would say that the boundary which I am proposing now is that boundary which is proposed by people in the Dubois community, not my thinking.

Senator HANSEN. I see.

Mr. BELL. The people in the Dubois community. I go to them, and I say, "All right, we have to go to the people in Washington and justify a boundary to them. What can we justify?"

Senator HANSEN. I asked the question because it was my understanding from the testimony presented by Dr. Cliff yesterday that area J on the Forest Service map reflected additions recommended by others. Now, I don't know that it was gone into in detail, but I assume that at the time of the Riverton hearing, and perhaps subsequent to that, the area J, as indicated by the Forest Service map, reflected what a substantial number of people and organizations thought should be included in the wilderness system.

Mr. BELL. Yes, sir.

Senator HANSEN. Am I to understand from your testimony that that area has been modified?

Mr. BELL. Yes, sir.

Senator HANSEN. And you now say that alining was not as far south as would be indicated by the forest map?

Mr. BELL. Yes, sir.

Senator HANSEN. But should be hooked into more prominent topographic landmarks?

Mr. BELL. Yes, sir. That is correct. About 5,000 acres less.

Senator HANSEN. And you mentioned also, I believe, that you had found that some of the area which is in the southern extremity of area J has been logged. Is that right?

Mr. BELL. Yes, sir.

Senator HANSEN. And it has been logged, did I understand you to say, since the Riverton hearing?

Mr. BELL. Yes, sir.

Senator HANSEN. And is it because of that that you recommend putting the line farther north?

Mr. BELL. Yes, sir.

Senator HANSEN. Is that the only reason not to hook it into topographic points?

Mr. BELL. No. Again, it could be down underneath on this side of the pinnacles, but for all practical purposes, if it has been logged right up to the pinnacles, what purpose is there in keeping it in? And it also,

since it has been logged, offers the Forest Service the opportunity to go in and develop recreational sites other than at Brooks Lake.

Senator HANSEN. Is there merit in that proposal of the Forest Service, in your judgment?

Mr. BELL. To do what, sir?

Senator HANSEN. To develop recreational sites?

Mr. BELL. Yes, sir; there is. I am in full agreement here. What I am saying, though, is that recreational sites can be developed in all of this area, also over in the Wiggins Fork, the Horse Creek, and the Parque Creek. This is a deep valley here where the river goes through on this side—with no primitive or wilderness area for some miles—which would offer tremendous values for this recreational development. My thought is that Trail Lake would make a very excellent recreational site, and we deliberately left it outside the boundary for that reason, thinking if they want a developed recreational site, this is a beautiful area.

From here, people can then walk over into this area of the map, or back into this area, or if there are recreational sites, you will see a number of lakes here, recreational sites can be built around these, and they can walk in from here, over Bonneville Pass. There is excellent access.

I might point out that on this map, in the Bridger wilderness area, last year there were 88,000 visitor days, and Bridger is more remote, actually, the points of interest that are visited, than this would be.

Senator HANSEN. We appreciate your appearing, Mr. Bell, and if you would like to make further indications on your map that will help clarify these points that you have referred to here this morning, I think it would be helpful. As I understand, you are going to leave that for the committee's use.

Mr. BELL. Yes, sir. Thank you, Senator.

Senator BELL. Thank you very much, Mr. Bell.

Senator HANSEN. We will next hear from Mr. William Crump, district game supervisor, Wyoming Game and Fish Commission of Lander, Wyo.

STATEMENT OF WILLIAM CRUMP, DISTRICT GAME DIVISION SUPERVISOR FOR THE WYOMING GAME AND FISH COMMISSION, LANDER, WYO.

Mr. CRUMP. Mr. Chairman and members of the Senate Interior Subcommittee on Public Lands: I am William Crump, district game division supervisor for the Wyoming Game and Fish Commission, and live at Lander, Wyo. I have been asked to testify on behalf of the Wyoming Game and Fish Commission in relation to the proposed Washakie Wilderness Area and its effects on wildlife in the upper Wind River drainage of Fremont County, Wyo.

I have worked as a professional big game biologist in the upper Wind River drainage for 17 years. In the early 1950's my work was on moose food habits, distribution, and migrations in this area.

In the mid-1950's it was my pleasure to work for 3 years on a bighorn sheep study in this drainage. In 1958, I became district big game biologist with responsibilities for the collection of population trends, hunter harvest, distribution and migration information on elk, mule

deer, moose, antelope and bighorn sheep in the upper Wind River drainage and other sections of Fremont, Natrona, and Carbon Counties, Wyo.

Our department has submitted a formal statement to Regional Forester David Nordwall under date of January 6, 1967, entitled "Statement of the Wyoming Game and Fish Commission Concerning a Proposal to Establish the Washakie Wilderness Area in Fremont, Hot Springs, and Park Counties, Wyo."

This statement expressed the official views of Wyoming concerning the proposed Washakie Wilderness Area in the Shoshone National Forest of Wyoming.

Statements have been made concerning the effects of wilderness area status on wildlife in the area under discussion that have not originated from our commission. We intend to clarify our position and present the wildlife values concerned for your evaluation.

We have derived our conclusions and recommendations concerning the Washakie Wilderness proposal on the basis of known facts, determined on the ground by qualified wildlife people.

It is not our intention to speak in generalities but in specifics relative to specific and particular parts of the Wind River drainage. It is entirely possible that our recommendations would be greatly revised under different circumstances and in different areas.

Moose, Rocky Mountain elk, bighorn sheep, and grizzly bear are classified as wilderness animals. Remote, wilderness type habitat is essential for survival of these species in a wild state. All of these animals are present now or have been inhabitants of the upper Wind River drainage. Our greatest concern is for the elk in this area due to their significant numbers, high desirability by hunters, and economic return to the State of Wyoming.

We have two basic concerns on elk management in this area relative to the proposed wilderness area. The first is the depletion of resident elk herds on summer ranges at lower elevations within the drainage. Our second concern is the possible deflection or alteration of established migration patterns of elk which utilize valuable natural winter ranges available in this area.

DEPLETION OF RESIDENT ELK HERDS

The greatest change in elk distribution in the Wind River drainage over the past 20 years have evolved with the development of extensive road systems on National Forest Service lands and the widespread use of four-wheel-drive vehicles.

Small summer resident elk herds existed over many sections of the lower forest lands in the Wind River drainage prior to the development of extensive road systems.

Increased human activity in these areas by hunters, rockhounds, timber operators, recreationists, et cetera, have reduced the numbers of these herds and in some cases have eliminated them completely.

Thus elk, a wildlife species recognized for multiple use on public lands, have been substantially decreased by other public land users.

Resident elk herds formerly ranged over the lower drainages of the Wiggins Fork, Horse Creek, upper Wind River, and Warm Springs Creek areas. Numerous access roads have been built in most of

the lower drainages, primarily in conjunction with timber removal operations on national forest lands. The removal of timber in heavy, extensive coniferous stands is not, in itself, detrimental to elk.

However, the access provided by roads associated with timbering operations has resulted in the reduction of use in these areas by summer resident elk herds. The Rocky Mountain elk will not tolerate human activity if they have inaccessible areas into which they can move or reestablish populations.

We collect information annually on the dates and locations of elk killed in the Wind River hunting area. Dates of kill in the Horse Creek-Wiggins Fork area were formerly spread over the entire season in relatively equal 2-week periods.

In comparing 1959 kill dates with 1967 kill dates, most of the present harvest in these drainages occurs near the end of the season. This kill is primarily taken from migratory herds which move into these lower elevations late in the season dependent on weather conditions. Relatively few elk are killed during the early part of the hunting season in these drainages today compared with just a few years ago. Less resident elk are available in these areas for early season hunter harvest.

Extensive access roads have been recently built in the Wind River drainage above Dubois, Wyo. These roads are built primarily to aid in timber removal operations. These operations are in the Warm Spring Creek, Lava Creek, Sheridan Creek, Crooked Creek, and Brooks Lake Creek drainages.

During 1963 and 1964 approximately 27 percent of the entire Wind River elk harvest came from these drainages. This percentage of harvest has declined to approximately 9 percent of this by 1967. Again available resident elk populations have declined in these areas.

The access roads in much of the Wind River area have already been built. Extensive road developments will continue to open areas for varied human activity and pursuits. It is realistic to assume that elk will have to take a back seat in these areas.

I would like to discuss migration and their importance to Wind River elk.

MIGRATIONS AND THEIR IMPORTANCE TO WIND RIVER ELK

We are fortunate that in the upper Wind River area we have some excellent winter range areas for elk. These areas, including the Whiskey Basin and East Fork winter range units, provide natural winter forage for elk, mule deer, moose, and bighorn sheep.

There are no artificial big game feeding programs in this drainage. We are primarily concerned with the East Fork unit, an area of approximately 11,000 acres which includes fee lands purchased with game and fish funds combined with lands formerly controlled by the Bureau of Land Management.

This unit and surrounding national forest and Bureau of Land Management lands have proven most valuable in providing sufficient winter forage to winter from 2,000 to 3,000 head of elk over the past 10 years.

Elk damage complaints from private landowners have been almost eliminated by acquisition of this winter range unit. The use of this

winter range is dependent on the severity of weather conditions during the winter period. During light winters, the higher forest lands are extensively used for winter elk range.

During heavy snowfall periods these elk are found mostly within the unit confines. The original acquisition of this range was begun in 1949. It has required a period of years to develop movement of elk from scattered, small winter range sites to this large, extensive range where most of the annual forage growth is retained for winter elk feed. At the present time, excellent use of this range is made by elk which summer within and outside of the Wind River drainage.

Extensive ear tagging and neck banding projects were initiated on winter elk herds in the East Fork unit beginning in 1959. The purpose of this program was to determine seasonal distribution and migration patterns of elk which utilized the East Fork winter range.

As of 1966 we have received ear tag returns on 131 head of elk out of a total of 524 animals marked at the Dennison Meadows trap site. Approximately 37 percent of the ear tags returned have come from elk killed outside of the Wind River drainage. The majority of these animals were killed in the headwaters of the Buffalo Fork River, the South Fork of the Shoshone River and the drainages of Thorofare Creek.

Elk marked with neck bands on the East Fork winter range have been observed numerous times on the headwaters of the Buffalo Fork River and South Fork of the Shoshone River during the summer and early fall periods. Late spring and early winter observations have shown these animals reach these summer ranges and return in the fall through the low passes at the headwaters of the East and West Fork of the DuNoir River.

It is most important to continue this migration pattern to provide hunting opportunity on these elk in the Wind River hunting area and utilize available winter forage on the East Fork winter range. Between 750 and 1,000 elk make this movement each year.

There is limited hunter pressure along this mountain divide at the present time, due to restricted road access. We feel this must be continued to prevent alterations or changes in migration movements through this area.

There is a summer resident population of elk in the east and west forks of the DuNoir River at this time estimated at 250 to 350 head of animals.

The development of road systems in the upper drainage of this area would result in population declines similar to those experienced in other drainages of the Wind River.

We are not opposed to the development of public access into the lower drainages of the east and west forks of DuNoir River. A recommendation to obtain hunter access into this area has been clearly stated in our formal statement.

We are vitally concerned with the elk movement into the East Fork winter range along the Caldwell Creek-Wiggins Fork-Bear Creek divide. This area is presently hunted over relatively rough "jeep" roads which limit hunter access. We are opposed to development of good access roads in this area which would permit increased hunter pressure along a major route to our winter range.

The Wind River Indian Reservation lies immediately to the east of this area. We have observed small groups of elk wintering on this reservation which had been marked at the Dennison Meadows elk trap.

We strongly believe that increased hunter pressure afforded by "passenger car" roads in this particular area will result in a shift of elk eastward into the reservation lands for the winter period. We have no control over hunting in these lands.

We believe the State of Wyoming would lose many of these elk permanently as hunting is not controlled by either seasons or bag limits on the reservation.

IMPORTANCE OF ELK CALVING AREAS

Cow elk normally bear their young on sagebrush covered slopes and openings. These areas are normally wet and inaccessible by most roads during the calving period of late May and early June.

For this reason, we are not particularly concerned about road developments in these areas. We would be vitally concerned if any of these small but important habitat types were included in sagebrush control range improvement projects.

VALUE OF ELK HUNTING IN THE WIND RIVER AREA

Elk populations and hunting of these animals has a real and measurable value to the State of Wyoming. An intensive economic survey was completed in 1966 by the University of Wyoming and published under the title "Hunting and Fishing—What It Means to Wyoming."

The 1966 study of check station data reveals that 1,384 resident elk hunters and 189 nonresident elk hunters pursued elk in the upper Wind River drainage.

With an average expenditure of $270.91 per resident hunter and $547.85 per nonresident elk hunter these 1,573 Wind River elk hunters contributed $478,483 to the economy of Wyoming.

A good share of this was spent in the Dubois community and Fremont County, Wyo. We believe this is an important renewable resource of the State of Wyoming and deserving of protection and sustained yield management.

It was on the basis of the foregoing data and research information that our original statement claimed substantial benefits to wildlife values if the upper drainages of the DuNoir River were granted wilderness status.

We appreciate sincerely this opportunity to be more specific in presenting our reasons and know that your committee, in its wisdom, will place our remarks in their proper perspective when reaching final determinations.

Senator HANSEN. Thank you very much, Mr. Crump. We certainly appreciate your testimony, and I am sure that it will be of great interest to the members of the committee.

Let me ask you, are there any mountain sheep residing in any of these areas that are in controversy as indicated by the Forest Service map presented yesterday?

Mr. CRUMP. There are, in the headwaters of the DuNoir, yes. The crest of the mountain area, and both east and west from the crest of the mountain itself.

Senator HANSEN. How much of the year do they spend in the winter area?

Mr. CRUMP. A very good percentage of the year is actually spent in area J itself.

Senator HANSEN. Do they go up and out of it in the summer months, or do they come out of it in the winter months?

Mr. CRUMP. No, they are pretty much year around residents in this area. This is true of the Absoraka Mountain sheep north of the river.

This is different in the Wind River area, where they actually come down just above town, and are enjoyed by many people as a winter attraction in the country.

Senator HANSEN. What about grizzly bear? Have any been sighted in area J?

Mr. CBUMP. Yes; the most recent kill has been a few years ago. I think about 1957 or 1958 one was killed by one of Bill Picketts' hunters in the headwaters. I believe it was just up somewhere from Dundee Meadows, right in that general area.

Senator HANSEN. I gathered from one of the last statements you made in your testimony that unless the sagebrush is removed, you don't really anticipate a problem insofar as visitors are concerned in elk calving areas, because the time of year that elk are calving, the country is pretty wet and would be largely inaccessible.

Mr. CRUMP. That is largely true. It is our feeling when the time is right, the apple will fall, and I think that we are not particularly concerned about them calving. Now sagebrush is essential as an escape cover and a hiding cover for the first few days after birth.

Senator HANSEN. Yes; I gathered that that was what you were implying in your testimony.

Mr. CRUMP. Yes, sir.

Senator HANSEN. We certainly appreciate your being here, Mr. Crump. Thank you for a very fine statement.

You did present a map here?

Mr. CRUMP. I should like to point out the importance, if I could, Senator Hansen, of these migrations and why it is a little different than has been explained here earlier. One of the——

Senator HANSEN. May I interrupt, first? You say why it is a little different than has been explained here earlier. Now what is your basis for that statement?

Are you saying that you think you know better than others who have spoken on it? I am not trying to be critical. I just think it would be of importance to the committee to have you explain what you mean by that.

Mr. CRUMP. I think in explaining the problems concerned with migrations, as has been explained here earlier, we have a problem here that does not exist in these other areas with regard to migrations.

For instance, the area in which reference was made to the Jackson country, between Moran Junction and Four Mile Meadows, say, the elk moves across this road; they move across many roads, this is true.

The big difference is, I think, that we are talking about the top of a mountain divide here, and not elk that are already committed, as the elk are, coming down in Jackson Hole.

They are 15 or 20 miles from the divide by the time they come to these roads. They are committed, and they will come through, re-

gardless. But in this case, these elk are moving down from the southeast corner of Yellowstone Park.

They are moving down through the Buffalo Plateau, they move down through the Shoshone Pass, West Pass, and Bonneville Pass, down through this area, and over toward their winter range, which is indicated by the red on this map.

Senator HANSEN. You are talking now, obviously, about the fall migration?

Mr. CRUMP. Yes, sir. This is coming back, in the late fall months. We are very concerned, of course, about hunter access, additional hunter access along this divide, which could very easily, in our estimation, shift his migration toward Jackson, where we do have problems with regard to sufficient winter range, or down the South Fork of the Shoshone.

This is a very high rim. I am sure that you are acquainted with it, Senator. It is a very high preciptous range. I think some of the photographs that Mr. Bell showed you illustrate how sharp it is.

There are not a lot of passes where these elk can move into this area. We have this buffer zone of the present primitive area that lies immediately north and east and most of the elk that move from our winter range here, up into the primitive area, are not bound over the divide. In this case, they are, clear up toward the southeast corner of Yellowstone Park.

It is for these reasons that we are concerned about this movement. We are pushing against them, or could be pushing right against them on the head of the divide.

Senator HANSEN. If I could, just let me offer a suggestion I hope might be helpful, Mr. Crump. I can follow you, very well, because I am looking at a map, and you are indicating with a pointer, but it is going to be a little hard for the other members of the committee to know precisely what you are talking about. So far as you are able, if you would, identify areas or divides.

That might be helpful.

Mr. CRUMP. I see. The other movement we are particularly concerned about is this one that comes down and through Bear Creek, down Caldwell, on to Indian Point, and down into our winter range here.

We feel very strongly that diversion of this could very possibly go eastward through this upper part here, in the primitive portions of it, where they are under relatively limited hunter access, onto the Wind River Indian Reservation itself. This has occurred in the past.

We have tag returns from that area. We have several band sightings. There is already movement that occurs in there, and we are very concerned about it because of the lack of control on the reservation. This is, of course, under Indian control and we have no jurisdiction.

Senator HANSEN. They set their own seasons and bag limits, and that sort of thing?

Mr. CRUMP. They do not have, at least in our understanding, any seasons or bag limits at this time. They can kill any time they wish to, in any amounts.

Senator HANSEN. I see.

Mr. CRUMP. I believe that pretty well summarizes the migrations and why we are concerned about them in specific areas. This may not

be true at all in other areas of the State. I am merely concerned here.

Senator HANSEN. You have been talking here this morning as I understand it, with specific reference to an area?

Mr. CRUMP. To the Wind River area, yes.

Senator HANSEN. That area under discussion. Very good. I assume that you will leave this map, or have you a copy?

Mr. CRUMP. I could certainly arrange to leave it.

Senator HANSEN. If you could, or if you might be able to make an extra copy. I would like to compliment you on the extremely fine job you have done along with the other witnesses who have testified here this morning, who speak knowledgeably about an area.

I think Wyoming can be very proud indeed of the expert sort of testimony that has been supplied, and certainly you have added significantly to that record here this morning.

Thank you for coming.

Mr. CRUMP. I appreciate that. Very frankly, I think I know less about elk after 20 years than I did when I was just starting in the business.

Senator HANSEN. Thank you, Mr. Crump.

We will next hear from Mr. Joseph Loeb, an attorney for the Signal Oil Co., accompanied by Mr. Lucius Geer, a geologist. Will you gentlemen please have a chair, and we will be happy to hear from you?

STATEMENT OF JOSEPH LOFB, ATTORNEY, SIGNAL OIL & GAS CO.; ACCOMPANIED BY LUCIUS GEER, GEOLOGIST

Mr. LOEB. Mr. Chairman, and distinguished members of the committee, my name is Joseph Loeb, and I am an attorney in the legal department of the Signal Oil & Gas Co.

Seated on my right is Mr. Lucius Geer, manager of exploration of Signal Oil & Gas Co. I deeply appreciate your courtesy in permitting me to appear before you today to express Signal's views on this pending legislation, S. 2630, which designates a portion of the Stratified Primitive Area as a part of the Washakie wilderness.

We are here today for two purposes:

(1) We are in effect responding to the request of the conference committee which approved the final version of the Wilderness Act of 1964:

> The conference committee expects that the mining industry and the agencies of the Department of the Interior will explore existing primitive areas so that when legislation pertaining to such primitive area is considered at a later date, Congress will have the benefit of professional, technical advice as to the presence or absence of minerals in each area.

(Conference report, House of Representatives, Rept. No. 1829, 88th Cong., second sess., p. 10.)

(2) We wish to call to the attention of the committee the erroneous interpretation that the Departments of Interior and Agriculture have placed on the provisions of the Wilderness Act of 1964 pertaining to oil and gas leasing.

After preliminary geological investigation Signal filed application for U.S. oil and gas leases on a portion of the Stratified Primitive Area. These lease offers were rejected by the Department of Interior.

We believe these rejections were contrary to the provisions of the

Wilderness Act of 1964. After additional geological studies, both surface and subsurface we are more convinced than ever that the area offers excellent prospects for oil and gas development.

Signal is ready to perform additional exploration work leading to eventual drilling but is stymied by the refusal of the Department of Interior to issue oil and gas leases.

I. SIGNAL LEASE OFFERS

Signal is vitally concerned with a portion of the lands covered by S. 2630 as an oil and gas exploration prospect. After some preliminary geological work in the area Signal filed oil and gas lease offers with the Bureau of Land Management during the period from April to June 1967, on approximately 53,000 acres in the Shoshone National Forest, of which 20,000 acres were just within the extreme eastern boundary of the Stratified Primitive Area.

Our lease offers cover about 17,000 acres of that portion of the Stratified Primitive Area including within the Forest Service proposal for inclusion as wilderness.

All the lease offers as to the lands within the primitive area were rejected by the Bureau of Land Management on the basis that such lands were in a primitive area and were being studied for possible inclusion in a wilderness area.

This decision was pursuant to the recommendation of the U.S. Forest Service, the agency of the Department of Agriculture which administers the primitive area.

These offers were rejected notwithstanding the specific language of section 4(d)(3) of the Wilderness Act (Public Law 88–577; 78 Stat. 890) which provides in part as follows:

> (3) notwithstanding any other provisions of this Act, until midnight, December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall to the same extent as applicable prior to the effective date of this act, extend to those national forest lands designated by this act as wilderness areas.

Upon request by Signal, the Bureau of Land Management vacated the rejection decisions so that Signal might have an opportunity to prevail upon the Forest Service to change its recommendations.

Signal representatives met with members of the Forest Service in Denver, Colo., on June 1 and 6, 1967, and in Washington, D.C., on October 11, 1967, to discuss oil and gas leasing within the primitive area.

Those efforts were unsuccessful but the Forest Service did issue a permit for wilderness prospecting to Signal which permitted Signal to perform reconnaissance surface geological work within the primitive area by means of foot and helicopter.

During the months of August and September 1967, our geologists did the necessary surface geological mapping of the area. The permit terminated December 31, 1967. Signal's oil and gas lease offers are still in a pending status.

II. EXPLORATION RESULTS

This area of interest was first brought to Signal's attention by one of our geologists who had done extensive surface work in the area a few year previously.

For some years oil companies which were familiar with the area considered it to have great potential as an oil province, but only recently have exploration methods, such as refinements, in seismic equipment and interpretation, developed to the point where prospecting in an area of this type is feasible.

In planning its exploration program, Signal made a thorough search of all the literature concerning the area and compiled all data into a series of maps and cross sections which represented Signal's total knowledge of the area. All available information concerning drilled wells in the vicinity was purchased and used in a subsurface geological map study of the region.

An aerial photographic geological map was compiled of the area, and negotiations are in progress to obtain gravity studies made in the vicinity.

After compiling all existing data, Signal did its surface mapping by the use of surface vehicles, helicopter, and fixed-wing aircraft. Field work was terminated by the combination of snowfall and the start of hunting seasons.

This field work confirmed our belief that productive sediments exist below the volcanic cover, and that intrusive rocks have not disturbed their potential.

At this point Signal rates this an area containing excellent oil and gas prospects. We have the combination of the occurrence of sedimentary formations which produce oil in adjacent areas and the presence of very probable anticlinal structural features to trap oil and gas.

Signal is now at the point where in order to justify additional money being spent on this exploratory prospect, it must be assured of obtaining oil and gas leases. This is an area that just has not been explored for oil and gas, one reason being that, to our knowledge, the Bureau of Land Management has never issued any oil and gas leases in the primitive area.

When weather conditions permit and if leases are obtained, Signal plans the following exploratory program:

1. Additional surface mapping.
2. Gravity survey.
3. Seismic program.
4. Drilling when prospect is further delineated.

The U.S. Geological Survey in USGS Bulletin 1230–E "Mineral Resources of the Stratified Primitive Area, Wyoming" made a studv of the mineral resources of the Stratified Primitive Area to aid Congress in evaluating this area as a wilderness area prospect.

As to oil and gas potential, the report states that conditions are favorable for accumulations of oil and gas, but that intrusive rocks are likely to have rendered any possible oil and gas reservoirs unproductive.

In our opinion this is just not the case. One of the primary reasons for last fall's field work was to obtain assurance that intrusive activity in the rocks had not destroyed hydrocarbon accumulations.

Our field geologists found evidence of intrusive rocks and were impressed with the accuracy of the mapping presented in USGS Bulletin 1230–E.

However, our geologists found positive evidence that intrusive rocks have not adversely affected accumulations of oil. Immediately north of our area of interest is an intrusive body which forms a feature called Rose Butte and is described in detail in the Geologic Society of America Bulletin, volume 51, page 1420 (Sept. 1, 1940).

Our geologists confirmed its presence and also noted its proximity to a well drilled by Richfield Oil Corp. This well located only 1,500 feet from the intrusive body, encountered and cored oil saturated reservoir rocks identical in appearance to those occurring in adjacent proven productive areas.

Sediments had not been altered by the intrusive, nor had the hydrocarbon content been destroyed. Last fall Natural Oil & Gas Corp. drilled a well in an area of interest in an area geographically similar to the easternmost part of the Stratified Primitive Area.

This well proved beyond any doubt that potential reservoir rocks identical with those now productive of hydrocarbons east of the area exist beneath the volcanic cover which is present over most of our area of interest. This well also encountered oil shows in the potential horizons.

Notwithstanding the conclusions of the U.S. Geographical Survey, Signal has concluded that this area exhibits great potential for finding oil and gas accumulations and is willing to expend substantial sums of money in this endeavor.

III. INTERPRETATION OF THE WILDERNESS ACT

We have been advised by the Forest Service that it will not approve an oil and gas lease application within a wilderness or primitive area which includes the right of surface entry, and the Forest Service knows of no instance where a Federal oil and gas lease has been granted covering lands within a wilderness or primitive area, and I believe the testimony of Mr. Cliff verifies this.

Notwithstanding the leasing provisions of section 4(d)(3) of the Wilderness Act, the official policy of the Secretary of Agriculture against recommending leasing is clearly set forth in section 2323.73 of the Forest Service manual:

> 2323.73—Mineral leasing and permits. The authority to permit prospecting or mining for minerals not subject to location and entry is discretionary with the Secretary of the Interior.
>
> Advice and consent of the Secretary of Agriculture is required. Authority to consent or give a favorable recommendation to lease in wildernesses or primitive areas is reserved to the chief.
>
> The chief will not normally recommend approval of mineral leases or permits in wildernesses or primitive areas unless directional drilling or other methods can be used which will avoid any invasion of the surface. For the further guidelines, see FSM 2820.

As far as the executive agencies are concerned, the period set forth in section 4(a)(3) ending December 31, 1983, in which the mineral leasing acts are to be effective has no meaningful application, and the executive agencies have, in effect, withdrawn wilderness and primitive lands from the operation of the mineral leasing acts as of the effective date of the Wilderness Act, September 3, 1964. This interpretation is directly contrary to the express direction and intent of Congress as shown by the legislative history of the Wilderness Act.

IV. HISTORY OF THE WILDERNESS ACT

A number of wilderness bills were introduced in Congress between 1957 and 1964, of which the major bills were S. 174 (1961), H.R. 776 (1962), S. 4 (1963), and H.R. 9070 (1964).

Throughout the history of wilderness legislation, there was considerable conflict as to the treatment of mineral development within primitive and wilderness areas.

Some conservationists desired a complete prohibition against mineral development, whereas commercial interests recommended the multiple-use concept of utilizing the resources of wilderness areas.

Wilderness bills previously referred to presented two compromise solutions to this question:

(1) Section 6(c)(2) of S. 174 would have allowed the President to authorize prospecting, mining, and mineral leasing in wilderness areas if he thought such use would better serve the interests of the United States and the people thereof than would its denial, and

(2) Section 4 (d)(3) of the final form of the Wilderness Act permitted the application of the mining and mineral leasing laws to wilderness areas for a 20-year period.

After conference on S. 4 the present section 4(d)(3) was agreed upon, and the Wilderness Act became effective on September 3, 1964. The conferees rejected the concept of a complete prohibition against mineral development and leaving mineral development to Presidential discretion, and chose to permit mineral leasing and mining development for a period terminating December 31, 1983.

V. DISCUSSION OF THE ACT

Section 4(d) of the Wilderness Act was designed to allow the executive agencies and private industry sufficient time to explore primitive and wilderness areas and either develop substantial mineral values or condemn the areas for mineral development, so that after December 31, 1983, wilderness areas which had not demonstrated mineral potential would be absolutely withdrawn from the application of mining laws and the mineral leasing acts.

The current interpretation by the executive agencies of the provisions of section 4(d)(3) will result in wilderness and primitive areas never being tested or meaningfully explored for oil and gas by private industry as Congress intended.

The agencies have interpreted the Wilderness Act as if the above mentioned section 6(c)(2) had remained in the Wilderness Act and not section 4(d)(3).

The discretionary power which section 6(c)(2) would have given to the President to allow or not to allow mineral leasing is now being exercised by the agencies.

This leads to the untenable result that the Secretaries of Agriculture and Interior are exercising the same authority which Congress had expressly refused to grant to the President.

We have been advised that the agencies are basing their discretionary authority on the language in section 4(d)(3) which states that the laws pertaining to mineral leasing shall extend to those national forest areas designated by the act as wilderness areas to the same extent as applicable prior to the effective date of this act.

Their theory as to the above-quoted language is that as the policy of the agencies prior to the Wilderness Act was to not permit leasing in wilderness areas, the Wilderness Act perpetuates this policy.

There is nothing in the history of the act to support this theory, and it is perfectly clear that the Wilderness Act was intended to change this leasing policy and to authorize exploration to either develop or condemn wilderness areas for mineral values during a limited period of time.

In answer to the executive agencies' theory, the only logical interpretation of the quoted language is that it has reference to areas within the wilderness areas in national forests that were subject to specific withdrawals from the mining and mineral leasing laws by act of Congress or otherwise prior to the date of the Wilderness Act.

In order to prevent section 4(d)(3) from being construed as restoring such specifically withdrawn areas to the operation of the mining or mineral leasing laws, it was necessary to add the above quoted language.

An example of this type of withdrawal is found in the proposed San Rafael Wilderness in which about 25 percent of the area is subject to a withdrawal from location or entry under the mining laws by the act of April 20, 1936 (Public Law 526, 74th Cong.) for the purpose of conserving water resources.

If the above quoted language had not been included, section 4(d)(3) could have been constructed to have restored this water resource area to location and entry under the mining and mineral leasing laws.

This is the natural interpretation of the above quoted language. The agencies' interpretation is a strained one, and is contrary to the intent of section 4(d)(3) to allow meaningful oil and gas exploration for a limited period of time.

The arbitrariness of the agencies' position is demonstrated by the resulting different treatment of the application of the mining laws in wilderness areas as opposed to the mineral leasing laws.

Operation of the Wilderness Act on wilderness areas since 1964 has seen the permitting of the filing and location of mining claims and mining activities under section 4(d)(3) whereas there have been no oil and gas leases issued during this period.

This results in complete discrimination in oil and gas development as opposed to mining development. There is nothing in the history of the act to indicate any difference of intent in Congress as to wilderness and primitive areas in permitting mining versus oil and gas development under the mineral leasing acts.

This unusual case of discrimination is brought about by the differences in procedure under the mining laws and the mineral leasing acts.

The agencies have no power to prevent the location and filing of mining claims, and under the Wilderness Act can only prescribe reasonable regulations for mining operations within wilderness areas—whereas the procedure under the mineral leasing acts requires an express grant from the Department of Interior of an oil and gas lease, which in every case has been refused.

It is difficult to understand the agencies' discriminatory application of section 4(d)(3) since mining activities affect surface and wilderness values as much or more than development of oil and gas.

Further confirmation of the intent of Congress is shown by the contemporaneous interpretation voiced in House hearings on the San Rafael Wilderness Act on June 19, 20, and 21, 1967.

Reference is made to pages 40 and 51 through 63 for evidence of the intent of Congress that there be meaningful mineral exploration of the proposed wilderness area.

The entire problem and solution thereto are stated succinctly in the questions of Chairman Aspinall and the statement and answers of Mr. Stewart M. Brandborg, executive director, the Wilderness Society, on pages 118 and 119 of said hearings, as set forth on exhibit A attached hereto.

In brief it was recognized that there would have been no Wilderness Act without providing for a meaningful period of mineral value exploration and development.

Additional confirmation as to congressional intent is contained in the statements of Congressman Walter Baring and Craig Hosmer at the House floor debate in the proposed San Rafael Wilderness (H.R. 5161) (Congressional Record—House, Oct. 16, 1967, p. H13405) attached hereto as exhibit B.

(The documents referred to follows:)

EXHIBIT A

[From House Hearings on the San Rafael Wilderness Act on June 19, 20 and 21, 1967—pp. 118 and 119]

Mr. ASPINALL. I have one other question. This has to do with this matter of mineral survey.

Wouldn't you folks who are backing additional acreage in the Wilderness System rather see complete surveys and then have those areas nailed down as wilderness areas without the right of subsequent mineral development, or would you rather see inadequate surveys and let them remain open to mineral development, and in many cases open to the filing of claims as well as mineral leasing the application for patents under our mining laws?

Mr. BRANDBORG. Mr. Aspinall, as you remember in order to gain approval of the wilderness law in 1964 it was necessary for the supporters of the wilderness bill to recognize that such a bill could not be enacted unless the section 4 provisions calling for mineral studies and mineral development . . .

Mr. ASPINALL. You recognize the situation.

Mr. BRANDBORG. Unless conservationists agree to this mining provision, the measure would not move through the Congress. It could not be passed into law. We, as one organization which wants very much to see the wilderness law through to a successful start and to see it function properly in providing for orderly additions to the National Wilderness Preservation System, are trying hard to make it work. We believe that we should in all good faith apply those provisions, prepare for the hearings, do the necessary work ourselves, enlist the cooperation of the people in the field who know the areas, and encourage them to work closely with the agencies administering these areas.

EXHIBIT B

[From the Congressional Record, Oct. 16, 1967]

Mr. ASPINALL. Mr. Speaker, I yield such time as he may consume to the gentleman from Nevada [Mr. BARING], the chairman of the subcommittee which handled the legislation.

Mr. HOSMER. Mr. Speaker, will the gentleman yield?

Mr. BARING. I yield to the gentleman from California.

Mr. HOSMER. Mr. Speaker, I rise in support of this legislation, but I believe there is a question as to the interpretation of the Wilderness Act of 1964 under which San Rafael would be created that definitely should be cleared up. During

his remarks the gentleman from Colorado, the distinguished chairman of the Committee on Interior and Insular Affairs already alluded to it and specified his belief that the 1964 act requires continued renewal and leasing development of these lands until the end of 1983.

It is my understanding that this bill, H.R. 5161, creates a new wilderness area, the San Rafael Wilderness, which adds about 145,000 acres of land to lands administered under the provisions of the 1964 Wilderness Act. Now, I am gravely concerned about the administration of lands under the Wilderness Act by the Departments of the Interior and Agriculture insofar as mineral development is concerned. In the report of the Committee on Interior and Insular Affairs on H.R. 5161, there is the following reference to oil and gas leasing.

"However, as practically all of the area has been segregated from oil and gas leasing since 1953 and much of it has also been withdrawn from mining location since 1936, the area has probably not been prospected thoroughly. The area will remain open to mineral development under the conditions stated in the 1964 act."

It has come to my attention through testimony of representatives of the Department of the Interior at the hearings on this legislation and from policy statements by the U.S. Forest Service, that there is an erroneous interpretation by the Executive agencies of those sections of the 1964 Wilderness Act dealing with oil and gas leasing af lands within wilderness areas under the Mineral Leasing Act.

There are two sections in the Wilderness Act that apply to mineral development of wilderness areas. Section 4(d)(2) of the Wilderness Act provides for obtaining information on mineral values of wilderness areas by the Executive agencies. Section 4(d)(3) provides for the development of minerals under the mining laws and the various mineral leasing acts by private industry, and reads in part as follows:

"(3) Notwithstanding any other provisions of this Act, until midnight December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall, to the same extent as applicable prior to the effective date of this Act, extended to those national forest lands designated by this Act as 'wilderness areas' . . ."

In the administration of primitive and wilderness areas under the 1964 Wilderness Act, I have been advised that the Secretary of Agriculture acting through the Forest Service will not recommend approval of oil and gas leases except where the lands subject to the least can be developed from drill sites located outside of a primitive or wilderness area. This policy is expressly set forth in the Forest Service manual and has been repeated in communications to private industry. In other words, the Secretary of Agriculture has construed section 4(d)(3) of the 1964 Wilderness Act to authorize the Secretary to prohibit the leasing of wilderness or primitive area lands for the purposes of oil and gas development if surface use is required. Since the passage of the 1964 Wilderness Act, the Department of the Interior, act upon the recommendations of the Secretary of Agriculture, has issued no oil and gas leases in wilderness or primitive areas with the right of surface entry. This has effectively blocked any development of wilderness and primitive areas for oil and gas purposes. It is depriving the United States of what might be substantial revenues at a time when the Treasury is sorely in need of every cent it can get.

This interpretation of the Executive agencies flies directly in the face of both the intent and the intent and the expressed language of section 4 of the Wilderness Act. The passage of the subject bill, H.R. 5161, appears to be an appropriate time to reemphasize the intent and purpose of section 4(d)(3) of the Wilderness Act, and to make this perfectly clear to the agencies administering lands subject to the Wilderness Act. It was at the time of the passage of the Wilderness Act, and is now, the intent of Congress that the Mineral Leasing Acts, as well as the mining laws, shall have a meaningful application to primitive and wilderness lands until December 31, 1983. Applications for oil and gas leases may not be rejected by the Department of the Interior and the Department of Agriculture solely on the basis that such lands are within a primitive or wilderness area.

Is the gentleman from Nevada [Mr. BARING], chairman of the Public Lands Subcommittee, in agreement with my statement as to the effect of the provisions of the Wilderness Act on oil and gas leasing, and the intent of the Congress in this regard?

Mr. BARING. Mr. Speaker, I am in complete agreement with the gentleman's statement. The Wilderness Act was the result of 8 years of hearings, studies and

conferences and was an attempt to harmonize viewpoints which, in some cases were in violent conflict. As chairman of the Public Lands Subcommittee, I held extensive hearings and heard the views of over 600 witnesses. One of the biggest conflicts that appeared during the deliberations on this legislation was the treatment of mineral resource development. The final compromise solution between the views of the House and Senate after conference appears in the Wilderness Act as section 4(d)(3). The final solution followed the House viewpoint and consisted of a phasing out of mineral development activity during the period terminating December 31, 1983. I am confident that the Wilderness Act would have never become law without the inclusion of the provision that allowed a definite period of time for private industry to either develop or condemn a wilderness area for its mineral values.

Now, to my great shock, it has come to my attention that the executive agencies have interpreted 4(d)(3) to be authority for the agencies, in their discretion, to withdraw from the operation of the Mineral Leasing Act all lands within wilderness areas. To me, this is a glaring example of executive agencies defying the express direction of the Congress. It is therefore appropriate and necessary at this time to reaffirm the intent of Congress in regard to the administration of section 4(d)(3) of the Wilderness Act. It is now and always has been the intent of Congress in the Wilderness Act that no application for a lease under the mineral leasing laws shall be rejected for the reason that the lands involved are contained within a wilderness or primitive area—and the Secretaries of the Interior and Agriculture are obligated to administer these lands accordingly. Any other interpretation of section 4(d)(3)' would lead to the untenable result that wilderness areas would be completely withdrawn from the operation of the mineral leasing acts, without ever having been tested or explored under the procedures provided by the Congress in the Wilderness Act.

Mr. HOSMER. I thank the gentleman for his very explicit clarification of this matter.

Mr. LOEB. In order to insure that the Secretaries of Interior and Agriculture will comply with the directives of Congress under the Wilderness Act and issue oil and gas leases within wilderness areas during the remaining period prescribed by Congress, we respectfully propose that the following language be added at the end of section 3 of S. 2630:

No offer or application for a lease under any law pertaining to mineral leasing on lands within the Washakie Wilderness shall be rejected by the Secretary of the Interior solely for the reason that the lands embraced within such offer or application are within a wilderness area.

Signal finds itself in the unusual position of wanting to spend a substantial sum of money to explore this area which Congress has said can be explored until December 31, 1983, but is prevented from doing so by the executive agencies.

Signal's proposed exploration program could result in developing a considerable source of income to the United States and to the State of Wyoming.

In these days of increasing governmental costs, higher taxes, and scarcity of new sources of revenue, we do not believe that this committee would wish to condone the continued abandonment of this possible source of income because of an arbitrary decision by the Departments of Interior and Agriculture.

Again I wish to say that I and my company are most grateful for your courtesy in permitting me to appear before you today.

We will deeply appreciate any consideration which you may wish to give to our views in this matter.

Thank you.

Senator CHURCH (presiding). Mr. Loeb, the question you raised concerning the applicability of the Wilderness Act to the right of entry

for mining purposes is one that this committee is going to have to carefully review. I think that you were privy yesterday to the testimony of Ed Cliff, and you have set out that particular interpretation of the law into your discussion here, and have raised very serious objections to it. I think the committee needs to look at that point very carefully, and so your testimony has been helpful. Before we pass judgment on this case, I think this is a question that needs to be probed.

Senator Hansen, do you have any questions?

Senator HANSEN. I have no questions, Mr. Chairman. I would like to say that there are a number of us who have been concerned with the desirability of continuing legislative oversight, in seeing that the executive agencies of Government do indeed carry out the intent of the Congress, and I think you have touched upon that, and indicated our serious concern about it. I share your feeling that we will indeed want to look very closely at this.

Senator CHURCH. Yes; there is a gray area here that I am not certain enough specific attention was given to at the time the Wilderness Act was passed. That gray area is the difference between hard rock mineral interests, governed by the provisions of the earlier mineral laws, and oil and gas leases.

I think it is true that in the case of the latter, there has always been administrative discretion. In the case of the former, that is not true, except in places where public lands have been withdrawn from entry, but otherwise, the locator had certain rights that came to him by force of law.

In the case of leases, on the other hand, there has been, from the beginning, a discretionary authority vested in the administrative agencies, with jurisdiction over the land concerned. So I think we just need to take another look at the two interpretations that have developed since the passage of the Wilderness Act and discuss this in the committee.

Mr. LOEB. We would appreciate your consideration of our points.

Senator CHURCH. Yes; thank you, Mr. Loeb.

At this time I would like to include in the hearing record some letters I have received concerning the Washakie Wilderness proposal.

(The letters referred to follow:)

NATIONAL WILDLIFE FEDERATION,
Washington, D.C., February 16, 1968.

Senator FRANK CHURCH,
Chairman, Subcommittee of Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

DEAR SENATOR CHURCH: I am writing to you as the Regional Director of the National Wildlife Federation for Region 13 which includes the states of Montana, Idaho, and Wyoming.

I wish to support in general the Forest Service's recommendation relative to the reclassification of the Washakie Wilderness Area. There are two additions which the Wyoming Federation is most desirous of having included in addition to the recommendations of the Forest Service. These are the Bear Creek Basin Area and the East and West Forks of the DuNoir River. It is my understanding that these two areas have a great deal of significance for wildlife and their inclusion in the Washakie Wilderness is essential to the continued well being of the wildlife of this area. The Bear Creek area is utilized by summer elk herds and is excellent as a spring and fall range for elk. Roads in this area would reduce the use of this area by resident elk herds.

The East and West Fork of the DuNoir River is an important area for big horn sheep, moose, elk and deer and is important to patterns of migrating elk.

The Wyoming Federation believes that these would be jeopardized by road systems or clear-cut timbering operations in this area. Their President, Bill Isaacs informs me that these are the top priority items on their list of suggestions.

I respectfully request that every consideration be given to the inclusion of these areas within the proposed Washakie Wilderness upon reclassification.

Sincerely,

ERNEST E. DAY.

CARBON COUNTY CONSERVATION CLUB,
Rawlins, Wyo., February 12, 1968.

Senator FRANK CHURCH,
Washington, D.C.

DEAR SENATOR CHURCH: We understand that there will be a hearing on the proposed Washakie Wilderness on February 19, 1968. We, the members of this conservation organization are on record supporting the needed additional acreages as recommended by the Wyoming Game and Fish Commission and heavily supported by other conservation groups as well as civic groups and individuals, to insure the continuance of an elk herd in the proposed Washakie Wilderness.

We all know too well that in this rapidly shrinking world, those lands that were so worthless not too many years ago, our National Parks and Forests that were set aside by wise and far-sighted men, who fought long and hard to make them what they are today, are now being eye-balled by some industries as well as individuals out after the mighty dollar. They, who in no way consider the impact of their operations on the ecology of both wildlife and plants, other natural resources, recreation and waters, let alone the natural beauty which such operations scar and mar.

Therefore please enter this letter into your hearing as our support to the addition of the needed acreages to the Washakie Wilderness to insure our dwindling elk herd at least one small rampart against the encroachment of civilization and what we like to call modern progress, on what is now one of the least wanted frontiers left our wildlife in its escape and adjustment to civilization, from the rest of their natural environment which formerly included many of our western states.

Yours sincerely,

H. L. TREJO,
President.

SEATTLE, WASH., *February 21, 1968.*

Re Washakie Wilderness Proposal.

Hon. FRANK CHURCH,
Chairman, Public Lands Subcommittee, Senate Interior and Insular Affairs Committee, New Senate Office Building, Washington, D.C.

DEAR SENATOR CHURCH: We have had a summer place in Jackson, Wyoming, for twenty years.

I favor the addition to the Washakie Wilderness of East and West DuNoir Creek drainages.

The case that Mr. Tom Bell makes for including these fringe effect areas, particularly when the elevations are so high and the timber of marginal merchantability, seems to me persuasive. I hope you will support an enlarged proposal, despite the Forest Service recommendation.

Sincerely yours,

PALMER SMITH.

STATEMENT OF J. SUTTON MYERS, DOVER, DEL.

WASHAKIE WILDERNESS PROPOSAL

The study groups that researched the problems and conditions that resulted in the establishment of the original Absaroka Wilderness and the proposed boundaries to the Stratified Primitive Area are to be commended for their efforts.

As is often the case, the original proposal fell short of the most desirable boundaries for wilderness areas, as expressed by later studies. These subsequent studies, made in more depth, are nearly unaminous in their opinion that the wilderness area should be larger than presently proposed. It was the intent of the

wilderness concept that entire ecological areas be included, not just bare mountain sides or treeless meadows. It is vitally important that the valleys, side slopes and tops all be included in wilderness areas so that the full range of conditions in the various areas can be protected.

It is necessary therefore that wooded areas, be they on thin soil rocky slopes or in protected valleys, be included, even though the trees might be of merchantable size. It is also necessary to have a proper depth to the wilderness areas so that the full life conditions of vegetation and animal life can be protected and preserved. If the timber is removed from the slopes, then the thin top soil will also be lost, with resultant damage for many years to come.

Thus, I concur with the various local conservation groups and others that recommend that the present S–2630, (H–13560) 189,024 acres be increased by 45,813 acres as proposed by the citizen groups, and the addition of 7,366 acres as suggested by the Forest Service, to make a total of 242,203 acres.

The administration of this area of 242,203 acres should be combined with that of the adjacent Absaroka Wilderness Area of 483,130 acres for a total of 725,533 acres of unquestionable wilderness splendor.

This is respectfully submitted to be included in the official hearings of this Wilderness hearing.

SAN RAFAEL WILDERNESS PROPOSAL

The Wilderness law specifically gives congress the right and authority to study the wilderness proposals as submitted by the Department of Interior and Agriculture, and others and to make *final* decisions on the wilderness proposals.

This is the situation here, the first major test of the power of congress and that of the Forest Service. The Forest Service, as an agency of the government should be more amenable to the wishes of the public and congress, not indifferent, as at present.

The suggested change, namely, a small but important 2200 acres addition should be included in the wilderness areas of the San Rafael proposal for the following and other reasons:

a. It is scientifically significant,
b. It is archeologically important,
c. It is important to aid in preserving the Condor,
d. It is not needed, as suggested by the Forest Service, for fire protection, as other nearby routes are available, just outside the suggested wilderness area.
e. The inclusion of this area would aid in keeping the ridge free of major roads and thus more compatible to a wilderness concept.

The statements by the Forest Service that their original plan is the only proper one and no others need to be considered is completely refuted by written and spoken records of knowledgeable people. The Congressional Record, for example, Dec. 5, pages, H–16309 and 10 and also on Dec. 6, H–16396 to 400, records some of the very important reasons for inclusions of this additional 2200 acres to this wilderness area.

I heartly concur and urge that the original 143,000 acres be increased by 2200 acres, S–889, as amended by the House.

If the area is worth preserving at all, it surely is worthy of full and adequate protection. This is as recommended by many, including the Honorable Charles M. Teague, in whose district this area is situated.

Above respectfully submitted to be included in the official hearings for this S–889, as amended by the House.

MOUNT JEFFERSON WILDERNESS PROPOSAL

Senators Hatfield and Morse of Oregon and the Forest Service are to be commended for their forsight in S–2751 to establish the Mount Jefferson Wilderness Area.

One of the great problems of our wonderful country is respect to establishing Wilderness Areas, National Parks, preserving our natural heritage of unpolluted streams and lakes, is the inherent slowness of establishing and preserving these features. This need and the problem is admirably stated by Senator Gaylord Nelson, of Wisc. "While it is possible to postpone action in many fields of social responsibility without permanent damage, it is not possible to do so in the field of resource preservation. When any part of this asset is lost it is lost forever."

With the very narrow confines of this proposed Mount Jefferson Wilderness Area it is very necessary at this time, our last chance, to establish as large a

wilderness area as possible. With this in mind, and noting how the available acreage has shrunk with the Forest Service lack of action to designate part of the roadless and primitive area as part of the original Wilderness Area, as earlier recommended by Oregon conservationists, or even to withhold road building or logging in these areas until final decision is made, it is necessary to act now.

The Forest Service flagrant misuse of some of the lands under their management, as exemplified here by the road building and logging and other actions in areas that were known to be of wilderness category and being considered for inclusion official wilderness classification is regarded as a blatant excerption of power and mismanagement of authority. This same charge has, unfortunately, been made at many other similar Wilderness Area proposals, and National Park study areas. For example, I quote from the North Cascades Study Report, Oct. 1965, page 41: "The Forest Service periodically is requested to suspend harvesting or declare a 'moratorium' on timber sales in areas that various organizations or groups believe should be reserved from timber cutting for recreation or other reasons pending either Congressional or Secretarial resolution of an issue." Thus the situation is not new.

It would appear that the Forest Service method is to continue to disagree with the rising tide of conservation and to continue to cut and chop as if the forests were as easily renewable as a crop of crab grass, and to be equally oblivious to the scenic and esthetic values that are also necessary. This wanton, deliberate sabotage of wilderness values in this area is unfortunately also true in other areas under Forest Service administration, and must cease.

This would be a good area to start, that is to include these areas, as earlier recommended for wilderness consideration, knowing that the unnecessary road intrusion can be removed as required and the land left to rejuvinate back to the unspoiled wilderness as it should be.

The proposed extensive mass recreation areas at Square and Marion lakes should be excluded as not being compatible to the intent of the wilderness area. There certainly are other areas where the masses can have water skiing and other similar activity without encroaching upon the wilderness areas. The timber here is also needed to round out the ecological balance of this wilderness area.

Thus, as a summary, I strongly urge that this Mount Jefferson Wilderness Area be established with the addition of approximately 28,000 acres as proposed by several Oregon conservation groups, the Wilderness Society, and others.

In the near future, full and complete wilderness protection should be sought by having hearings on protection of similar outstanding isolated mountain peaks, such as Adams, St. Helens, Three Sisters, Bailey, McLaughlin, in the Cascades, and others.

Above respectfully submitted for inclusion in the hearings on this Mount Jefferson Wilderness proposal, S. 2751.

Senator CHURCH. I think now, at this time, I am going to adjourn the hearing until this afternoon at 2 o'clock, when we hope that it will be possible to complete the remaining witnesses and close the hearing on these three bills.

The meeting will stand adjourned until 2 o'clock this afternoon.

(Whereupon, at 12:15 the subcommittee adjourned, to reconvene at 2 p.m.)

AFTER RECESS

(The committee reconvened at 2:15 p.m., Senator Clifford P. Hansen presiding.)

Senator HANSEN. The committee will please be in order.

We are very pleased, indeed, to have the distinguished Senator from the State of Oregon here this afternoon.

Senator Morse, we would be very pleased to hear from you, sir.

STATEMENT OF HON. WAYNE MORSE, A U.S. SENATOR FROM THE STATE OF OREGON

Senator MORSE. Senator Hansen, I want to thank you very much for accommodating me. I could not be here this morning because of

the Foreign Relations Committee hearings with Secretary of Defense McNamara, and, when I finish my brief testimony, I have to return to a continuation of those hearings this afternoon. I want to thank you very much for helping me make the record, for that is the primary purpose of these hearings, anyway.

I am happy to appear before your committee in support of legislation to designate the Mount Jefferson Wilderness in my State of Oregon. I am particularly pleased that the only remaining national forest primitive area in Oregon is receiving such early consideration under the Wilderness Act.

The proposed Mount Jefferson Wilderness will be a superb addition to the national wilderness preservation system. Mount Jefferson itself is one of the outstanding landmarks of the Cascade Range. Rising 10,497 feet above the sea, the peak is one of the many steep-sided volcanic cones that characterize this unique and strikingly scenic mountain range. Mount Jefferson is joined in the proposed wilderness by another remnant of the volcanic age—Three-Fingered Jack. This unusual peak is famous in the Cascade area for its three towering rock spires. The interior of the summit cone is an especially good example of the structure of the ancient, now quiet, volcanoes that dominate this region.

The slopes and valleys that surround Mount Jefferson and Three-Fingered Jack are covered with lush vegetation, rushing streams, gentle, picturesque meadows, and many lakes and ponds. Other attractions include active glaciers, lava flows, rocky cliffs and ledges, and bountiful fish and wildlife.

One feature of the proposed Mount Jefferson Wilderness that I especially like is its accessibility. This is a wilderness that many people can easily use and enjoy. Roads suitable for auto travel reach close to its borders. Portland, Salem, Albany, Eugene-Springfield, and Bend are all less than 150 miles away, and are cities whose people will enjoy the wilderness area, once established. This means that one can leave the teeming activity of these bustling cities in early morning and camp on the wild and quiet slopes of Mount Jefferson that same night. There are about 160 miles of hiking and riding trails to get in and about the wilderness. The Oregon Skyline Trail extends its entire length. Because it is so easy to reach, the proposed wilderness is a favorite of Oregon's Boy Scouts, Girl Scouts, and other youth groups.

I commend the administration for its reasonableness in developing recommendations for the Mount Jefferson Wilderness. I know this involved some hard decisions, because much of the Cascade Range region is timber country. Timber is the backbone of the local economy and also is what makes the slopes of Cascade Mountain peaks so wild and beautiful, and worth preserving.

I recognize that the proposed wilderness includes approximately 1.3 billion board feet of commercial timber, and that 61 percent of the area is classed as productive forest land. But the bulk of this timber has been set aside for just about 35 years as a part of the Mount Jefferson Primitive Area. It has not been included in the allowable cut calculations for the national forests involved.

I want to repeat that sentence, Mr. Chairman, because the committee is going to have points of view expressed in regard to this matter

of timber resources and allowable cut, and so I want to say that the timber that is involved in this area has been set aside by our national forest administrators for 35 years, as a part of the Mount Jefferson Primitive Area. It has not been included in the allowable cut calculations for the national forests involved.

There are proposals and recommendations by some to include much more productive timberland in the proposed wilderness.

I am sure that the present position I occupy, Mr. Chairman, is no novelty to you, for I am in the position where the timber people want more of allowable cut, and more land set aside for commercial timber uses; the wilderness people and other conservation groups, as I shall demonstrate shortly, want more set aside for more wilderness. I am confronted with a policy of our Government, based upon Federal statutes already on the books, that our national forests will be developed and administered, and preserved and conserved, on a multiple-use basis, where we take into account timber resources, we take into account the recreational resources that go along with wilderness areas, we take into account the matter of flood control, and all the other multiple purposes that are within the overall concept of multiple use of our forests. So the responsibility that rests on us, as Members of Congress, is to strike what we think is a balance in the interest of the overall general welfare of our people, dealing with limits of degree.

How much are you going to set aside for commercial forest? How much are you going to set aside for wilderness? How much are you going to set aside for recreational areas that are not designated as wilderness areas, scenic areas?

Giving a very brief comment about one of those areas involved before your committee, before you get through with the final handling of the passage or modification of this bill you are going to have to consider the requests of these groups that have different objectives; but may I say to all of them, in behalf of all of them, they are not quarreling with the multiple-use concept.

Timber people think that you can simply have good multiple use and still cut more timber; the wilderness people think the opposite; and then you have other groups in between.

And so I say, there are proposals and recommendations by some to include much more productive timberland in the proposed wilderness. But as the President's proposal now stands, the administration is within the multiple-use concept.

I think that a good job has been done, as I have said, in blending economic and esthetic and intangible factors.

In conclusion, Mr. Chairman, I urge you to enact this bill that will round out Oregon's contribution to the wilderness system. Oregon's contribution of the rugged and beautiful Mount Jefferson Wilderness will then be a valuable asset to the Nation for all time, for all generations to come.

Mr. Chairman and members of the committee, I am not saying today that this bill could not be improved by amendments. I haven't had an amendment submitted to me yet that I think, on my present knowledge, overcomes the prima facie case that has been made to date in support of the bill.

I wouldn't have introduced the bill if I didn't think it represented a prima facie case.

But I want to say that the Forest Service is at the present time preparing a study now for a proposed 1,596-acre Marion Lake Scenic Area, in recognition of the recreational and scenic importance of Marion Lake Scenic Area, and the importance of the scenic value of Marion Lake.

The scenic area would include recreation facilities such as tables, grills, water systems, sanitation installations, boat ramps, and storage. No roads would be constructed in the scenic area, motorized vehicles would not be allowed on access trails, and use of motor-boats on Marion and Ann Lakes would be phased out.

At Square Lake and Long Lake, road access and campgrounds are planned by the Forest Service. I want to say that I am not going to prejudge this question, as to whether or not these should be the boundaries or some other boundaries should be instituted for these boundaries.

All I am testifying to today is that, as one who has the responsibility I have, and as one who, as I have already said, is in the middle as far as the conflicting recommendations of various groups are concerned, I did not offer this bill until I came to the conclusion that a strong prima facie case has been made for it.

Now, in regard to Marion, Square, and Long Lakes, the wilderness people and the conservationists generally would like to have them included in the wilderness area. They would like to modify the boundaries. I am sure you probably have already had testimony, and I am sorry I haven't had the opportunity to familiarize myself with it, but as your map up there in the blue areas shows, there are those that want to include that blue area in the boundaries of this wilderness area.

They point out, for example, that at the throat of the area, there around Pamelia Lake, a horizontal line across there is only about 3 miles. They don't think that is wide enough for a wilderness area. They may be right. They may be able, by a preponderance of the evidence, to justify an extension of it.

I want to say to them on this record, as I have said to them as they talked to me personally—and I have talked to all of these groups—if you can get this bill adopted, if you can get this area set out for a wilderness area, you have accomplished a great deal for future generations of Oregon boys and girls, and boys and girls across this country, of having that much within a wilderness area.

The conservationists would prefer that Marion, Square, and Long Lakes not be in scenic areas, as the Forest Service presently contemplates, and is preparing a study for extending its scenic area to that particular area of the range.

They would like to have those lakes in the wilderness area. What is the position of the senior Senator? The position of the senior Senator is that I want them at least in scenic areas. I want at least to have them put into scenic areas to befit the pattern for a multiple-use purpose. I don't want to see the timber cut off around them.

We all have adequate timber supplies out there in other areas that will not involve the despoiling of a range such as this that I think is especially suitable for three types of areas: (1) The wilderness area that Senator Hatfield and my bill talks about, (2) the scenic areas, and

(3) the recreational areas. I hope that, and I know you will, if you modify the boundaries of it, you will modify them on the basis of the clear proof that you can justify an expansion of the area.

I am more concerned about going the other way. I am more concerned about the proposals that would seek to deny us in perpetuity this area as encompassed in the bill for wilderness area, and deny us the so-called fringe area for scenic areas and recreational areas.

I would be less than honest if I didn't tell this committee quite frankly you are going to have strong and vigorous points of view presented on both sides.

I want to thank you, Mr. Chairman, and I will take your questions.

Senator ANDERSON (presiding). Senator Hansen, do you have any questions?

Senator HANSEN. Let me thank you, Senator Morse, for a very able presentation. I compliment you. I have no questions.

Senator MORSE. Thank you, Senator.

Senator ANDERSON. I heard you say that you were not talking about boundaries. You will have some comments about that later on?

Senator MORSE. That is right.

Senator ANDERSON. Thank you very much, Senator Morse.

Mr. George Alderson.

STATEMENT OF GEORGE ALDERSON, WASHINGTON, D.C.

Mr. ALDERSON. I am George Alderson, of 323 Maryland Avenue NE., in Washington, D.C. Having been a resident of Oregon during the early proceedings on the Mount Jefferson Wilderness proposal, I would like to support the proposals of the Federation of Western Outdoor Clubs which have been made at this hearing.

The Mount Jefferson area, in its proximity to the growing metropolitan area of the Willamette Valley, and in its geographic handicaps, presents special problems in defining a practical boundary. The ease of access to the areas of visitor concentration, such as Jefferson Park, Marion Lake, and Pamelia Lake, promotes a high degree of recreational use, but also creates a threat of overuse which could seriously impair the resource. This has already been noted, particularly at Jefferson Park. The narrowness of the wilderness as proposed by the Forest Service, furthermore, tends to favor deterioration of the area's wilderness values through failure to protect the forested approaches.

These principles were supported at the Forest Service field hearing by the distinguished Maryland conservationist and former Oregonian, Grant Conway. Because he was unable to attend this Interior Committee hearing, Mr. Conway asked me to present some of his comments, which are based on several decades' experience with Mount Jefferson. In his statement for the Forest Service hearing record, he said:

> Only by extending the wilderness area boundaries can the wilderness qualities of the Mount Jefferson region be protected from the over-use to which it has been subjected.

He remarked that this overuse goes back a long time and has done severe harm to the Jefferson Park area:

> The flora and fauna of this narrow valley, spanning the divide of the Cascade Range, has been altered by heavy use by man because of its easy accessibility.

As early as the 1930's, the grassy meadows surrounding Russell and smaller alpine lakes suffered from the easy access by way of the road to Breitenbush Lake. Even in those years the lupine and Indian paint brush were trampled by horses and hikers, and campers left a residue of tin cans and other trash around the campsites. In addition, the scarcity of firewood was beginning to take its toll on the scattering of stunted trees bordering the lakes. In recent years the construction of logging roads up the valley of Whitewater Creek have made it possible to reach Jefferson Park and return in an easy day's walk.

If Mr. Conway's statement, dated November 21, 1966, is not among the materials submitted to the Interior Committee by the Forest Service, then I request that it be incorporated in the record of this hearing as a part of my statement.

It is my hope that the committee will act to include the additions recommended by the Federation of Western Outdoor Clubs, establishing an integrated Mount Jefferson Wilderness which will be capable of preservation.

(Mr. Conway's letter follows:)

BROOKMONT, MD., *November 21, 1966.*

Mr. J. HERBERT STONE,
Regional Forester,
U.S. Forest Service,
Portland, Oreg.

DEAR MR. STONE: Your proposal to reclassify the Mount Jefferson Primitive Areas as the Mount Jefferson Wilderness Area and make it a part of the National Wilderness Preservation System is a good one, and you are to be commended for recommending a net increase over the present size of the Primitive Area of 10,417 acres, thereby providing additional protection for the wilderness. However, the question arises as to whether this increase is sufficient to protect this small strip of wilderness in the years ahead.

The Primitive Area has proven too small to protect its wilderness "core." Too-easy access has upset the fragile ecological balance around many of the alpine lakes. The proposed Wilderness Area is a small enclave of 95,450 acres—only 12 miles square—in the midst of the vast Cascade Mountains. The reclassification stage is the opportune time to provide buffer zones to help protect this beautiful alpine region in the years to come when the pressure for outdoor recreation from an expanding population with more leisure time will be even greater.

Jefferson Park, an alpine valley hanging from the north side of Mount Jefferson, is a unique scenic and geological attraction. The flora and fauna of this narrow valley, spanning the divide of the Cascade Range, has been altered by heavy use by man because of its easy accessibility. As early as the 1930's, the grassy meadows surrounding Russell and smaller alpine lakes suffered from the easy access by way of the road of Breitenbush Lake. Even in those years the lupine and Indian paint brush were trampled by horses and hikers, and campers left a residue of tin cans and other trash around the campsites. In addition, the scarcity of firewood was beginning to take its toll on the scattering of stunted trees bordering the lakes. In recent years the construction of logging roads up the valley of Whitewater Creek have made it possible to reach Jefferson Park and return in an easy day's walk.

It was my privilege to walk from the Chemeketan Cabin on Whitewater Creek near the Junction with the North Santiam River to Jefferson Park and return before the destructive logging.

For protection of this area's wilderness values, the following actions are recommended:

1. Closing of the logging roads along Whitewater Creek for public use and setting aside a buffer zone for protection and regeneration (a principle proposed by the National Park Service in Great Smoky Mountains National Park) to include the Whitewater Creek watershed, including the tributary of Cheat Creek and its headwaters in Wildcheat Meadow as far west as Route 22 and southward to the Marion Lake Road, and closing to the public other spur roads leading from Route 22.

2. Extending the proposed west boundary at Route 22 and Whitewater Creek northward, following ridges when possible, to Breitenbush Hot Springs on the North Fork of the Breitenbush River, and thence following the Brei-

tenbush Lake Road eastward to the lake and thence southward to the intersection with the proposed northern boundary of the wilderness area. As well as being a buffer, the extended line, as herein proposed, would protect the upper watersheds of the North and South Forks of the Breintenbush River and Firecamp Lakes.

3. Including Marion Lake and the remaining areas which the Forest Service proposes designating as a scenic area in the Mount Jefferson Wilderness Area. Motorboating on the lake would not preclude its inclusion as an existing use, and it would be hoped that motorboating could be phased out over a specified period. Motorboats are not necessary for safety purposes on a lake of the size of Marion, and Corps of Engineers dams on nearby rivers provide adequate water surface for motorboat recreation.

4. In the southern part of the proposed wilderness area proposed by the Forest Service, extending the far west boundary southward to its intersection with the fork of Routes 20 and 22 and thence using Route 20 as the southern boundary of the proposed Wilderness Area continuing eastward until a point south of Round Lake is reached and thence northward to include Round Lake, but excluding the loop road to the east, and thence to a point where the headwaters of First Creek and the revised boundary as proposed by the Forest Service coincide and thence following the revised boundary on the east side northward until Breitenbush Lake is reached.

The boundaries proposed herein would result in a Mount Jefferson Wilderness Area of approximately 162,000 acres.

Only by extending the wilderness area boundaries can the wilderness qualities of the Mount Jefferson Region be protected from the over use to which it has been subjected. The proposed boundaries should accomplish this purpose. It was my privilege to enter this area from several sides before the heavy use of recent years, camp at some of the geometrical lakes, and explorer for artifacts in Minto Pass where the Molalla and Cayuse Indians were twice engaged. Entering Jefferson Park from the north in earlier years was an unforgetable experience.

A Wilderness experience which I hope will be possible for others was camping in the amphitheater above Santiam Lake, listening to the weird howling of the coyotes in the moonlight and following the far apart footprints of the mountain lion ascending the south ridge of Three Fingered Jack, a familiar silhouette from our home east of the Cascades during World War I and before.

Protection was not provided Suttle and Blue Lakes southeast of the proposed Mount Jefferson Wilderness Area. I can remember entering Suttle Lake by a dusty Forest Service road winding through tall ponderosa pine, about 45 years ago, bushwhacking up Link Creek and reaching Blue Lake. From floating driftwood logs at the outlet huge lake trout could be seen in the crystal clear water. There were several bald eagle nests around the lake, and the eagles were frequently seen flying and diving in the shallow water of Suttle Lake. Driving along Route 20 in the late 1950's, I was shocked to look down on these desolate looking, sand surrounded, unshaded lakes. We did not stop. If these nearby alpine lakes are not provided protection, future generations may not know a pristine mountain lake.

Sincerely yours,

GRANT CONWAY.

Senator ANDERSON. Frank C. Daniel.

STATEMENT OF FRANK C. DANIEL, SECRETARY, NATIONAL RIFLE ASSOCIATION OF AMERICA

Mr. DANIEL. Mr. Chairman and members of the committee, my name is Frank Daniel. I am secretary of the National Rifle Association of America. My statement is in support of S. 2630. It is necessarily repetitive of much that has been said over and over yesterday and today. In the interest of saving time, I would ask permission to introduce my statement for the record, and then comment only briefly.

Senator ANDERSON. Before you start, are you speaking in behalf of the National Rifle Association?

Mr. DANIEL. Yes, sir.

Senator ANDERSON. Go ahead.

Mr. DANIEL. The National Rifle Association of America, a sportsmen's organization of close to 950,000 members, speaks for a fairly large segment of the users of the public land. We would like to associate ourselves with the other national conservation organizations that have testified here in support of bill S. 2630.

Our prepared statement is directed solely at S. 2630. However, we would like, for the record, to associate ourselves with Wildlife Management Institute, the National Wildlife Federation, the Izaak Walton League, the Wilderness Society, and others in support of S. 2531 and S. 2751, the other two bills subject of this hearing.

Mr. Chairman, we would like to commend the Forest Service for the excellent planning and the leadership they have given in this area. We think it is a tremendous service to the people of this country. Specifically, in connection with S. 2630, it is our opinion that the Wyoming Game and Fish Commission have uncommonly well documented and prepared their recommendations to this committee, recommendations that we feel have a great deal of merit, and which have been supported here by the sportsmen and conservation groups within the State of Wyoming. We urge that the committee give careful consideration to the recommendations of the State of Wyoming.

I would only say in conclusion, Mr. Chairman, that we are completely confident that when the record is complete, the committee will make the decisions that will in the long run be best for everybody.

Thank you very much. I appreciate the opportunity to appear.

Senator ANDERSON. Senator Hansen, any questions?

Senator HANSEN. I have no questions. Thank you, Mr. Chairman.

Senator ANDERSON. We have your full statement in the record, and is there anything in this bill that worries the present conservation society?

Mr. DANIEL. I beg your pardon, sir?

Senator ANDERSON. If this is classified as wilderness, are you satisfied with the ordinary definition of wilderness?

Mr. DANIEL. Yes, sir.

Senator ANDERSON. There is wilderness area out there now; is there not?

Mr. DANIEL. I believe that is correct; yes, sir.

Senator ANDERSON. How would you change it?

Mr. DANIEL. Well, as I understand it, Senator, this bill adds to the wilderness area in certain highly desirable instances. It sets aside an additional area to be preserved as wilderness that is not now preserved.

Senator ANDERSON. Do you understand once it is put in a wilderness area, it is permanently locked up for awhile?

Mr. DANIEL. Yes, sir.

Senator ANDERSON. I just wanted to be real sure about it.

Mr. DANIEL. We feel very strongly that the time to act is now. That if certain of these areas are not preserved now, they can never be preserved, and we feel it is highly to be desired.

Senator ANDERSON. Thank you very much.

Mr. DANIEL. Thank you, sir.

(The statement referred to follows:)

STATEMENT OF FRANK C. DANIEL, SECRETARY, NATIONAL RIFLE ASSOCIATION OF AMERICA

Mr. Chairman, the National Rifle Association of America is highly pleased to be given the opportunity to appear before this Committee in support of S. 2630 sponsored by the distinguished Committee Chairman to designate the Stratified Primitive Area as a part of the Washakie Wilderness heretofore known as the South Absaroka Wilderness, Shoshone National Forest, in the state of Wyoming.

Mr. Chairman, numbered among the 900,000 members of the National Rifle Association are many sportsmen who are deeply concerned with the administration, preservation and multiple use of our public domain. We are delighted to add our voice in support of this important legislation which will add to the Stratified Primitive Area established in 1932, added to in 1951 comprising some 203,930 acres and located in the Shoshone National Forest. The proposal that 188,358 acres of this primitive area and 4,768 acres of adjacent unclassified National Forest land, all within the Shoshone National Forest in Wyoming, be added to the National Wilderness Preservation System, and that these 193,126 acres of National Forest land be combined with the existing South Absaroka Wilderness Area is a logical development under the terms of the Wilderness Act. The entire area would be named the Washakie Wilderness Area and encompass some 676,256 acres.

We understnd that this wild area of broad, flat-topped mountains and plateaus cut by deep narrow valleys formed of the eruptive material from the volcanic area of Mount Washburn in Yellowstone National Park and Lava Mountain at the head of Wind River, is an area of seclusion and unspoiled charm which naturally abounds in wildlife including all the native Rocky Mountain species, both large and small, including important populations of elk, deer and moose.

We would go further and concur in the recommendations made by the responsible authorities of the state of Wyoming. We too believe that the Washakie Wilderness Area should be forever opened to public hunting and fishing in accordance with applicable state laws and regulations, except during temporary periods when co-operative administrative closures to recreational use may be necessary for the preservation of the area and public safety. Further, that the sovereign and constitutional right of the state of Wyoming to manage, regulate, harvest, and propagate all fish and wildlife species be recognized by the United States Government and agencies thereof. Further, that the Wyoming Game and Fish Commission be authorized and allowed to continue all fisheries and game management practices presently carried out under existing state and federal law.

Based on the foregoing, we believe that the Wyoming Game and Fish Commission's position that the area boundaries be established at the base of the escarpments rather than on the high rims is a sound one.

Possibly the greatest issue at stake regarding wildlife on and adjacent to the proposed Washakie Wilderness is the development of road systems in heretofore undisturbed areas which would occur if logging operations are permitted in the several areas not included in the original bill, but which would be included if the boundaries were placed at the base of the escarpments as proposed by the responsible officials of the state of Wyoming.

Increased vehicular access to the area would seriously reduce the potential for elk habitat by restricting summer distribution at lower elevations and interfering with the herd on their natural calving ground during the summer. For this reason, we ask the Committee to amend the act to include the small additional areas recommended by the state of Wyoming into the Washakie Wilderness.

Again, Mr. Chairman, may I express our appreciation for the opportunity to present this brief statement in support of S. 2630 and ask that my remarks be made part of the official record of proceedings of the Senate Committee on Interior and Insular Affairs.

Senator ANDERSON. Mr. Quigley, will you come forward?

STATEMENT OF JAMES M. QUIGLEY, VICE PRESIDENT, SPECIAL RELATIONS, U.S. PLYWOOD-CHAMPION PAPERS, INC.

Mr. QUIGLEY. Mr. Chairman, I am James M. Quigley. I am vice president for special relations of U.S. Plywood-Champion Papers. It

is a pleasure, Mr. Chairman and members of the committee, for me to be here today. Although I have appeared before many committees of the Congress in the past, I am here today in a new capacity, and I would like, if I could, Mr. Chairman, to preface my testimony with the observation that my new role is reflective of a changing attitude in the American business community.

My responsibilities with U.S. Plywood-Champion Papers includes not only activities in my familiar fields of air and water pollution control, but in the general area of conservation.

American industry generally, and U.S. Plywood-Champion Papers specifically, has a real and abiding interest in the best possible conservation practices. For this reason, Mr. Chairman, as a corporate citizen of the State of Wyoming, U.S. Plywood-Champion Papers is pleased to endorse the U.S. Forest Service proposal for the Washakie wilderness as submitted to this committee.

We believe that the Forest Service proposal for the establishment of the Washakie Wilderness Area, if ratified by the Congress, will assure the State of Wyoming and the people of the United States the benefits in perpetuity of one of Nature's unspoiled masterpieces. We urge this committee to take prompt and positive action on this proposal.

Mr. Chairman, as you are all well aware, numerous suggested changes by way of additions to or deletions from the proposed Washakie Wilderness Area have been advanced, and will be considered by this committee. Each of these has been evaluated by the Forest Service after hearing public testimony pro and con. The professional judgments of the Forest Service are reflected in the proposal now before you. We believe that the Forest Service has reached valid conclusions as to what properly belongs in the Washakie Wilderness Area. Nevertheless, each of the proposals to include or exclude acreage deserves serious and sober consideration by this committee. To a considerable extent the Congress will be guided by your recommendations in this matter and the ultimate congressional decision will have long-range implications for both the beauty and the prosperity of a vast area in central Wyoming. A wise decision now, Mr. Chairman, will go a long way to guarantee both.

Mr. Chairman, I would like to comment briefly on two suggested areas for the Washakie Wilderness Area, the two that have been discussed most of the time by most of the witnesses before this committee yesterday and today.

I am referring to the area known as Bear Creek, designated as area D, in the Forest Service report, and the area known as DuNoir Creek Drainage Basin, designated as area J, on the same map, in the same report.

Mr. Chairman, in my opinion, neither area D nor area J can be properly included in any soundly conceived and soundly established wilderness area. Both of these, I submit, Mr. Chairman, are precluded by the definition of what constitutes a wilderness in section 2(c) of the Wilderness Act as approved by Congress in 1964.

Mr. Chairman, neither the DuNoir nor the Bear Creek Basin qualify as "an area of Federal land retaining its primeval character and influence without permanent improvements or habitation." No amount of wishing it were otherwise can change the fact that the DuNoir

Valley was logged in the 1920's and 1930's, leaving a network of old logging roads. By no stretch of the imagination can the DuNoir area be deemed "untrammeled by man," the essential requirement which must be met for an area to qualify under the Wilderness Act.

The Bear Creek Basin is similar in makeup and, while it has no prior history of logging, it has long since lost much of its primeval character. It has been penetrated, as has been brought out in the testimony yesterday and today, by a road and the usual developing jeep trails.

The urging for the addition of the DuNoir and Bear Creek Basins in the Washakie Wilderness appears to be based on an understandable desire to protect the big game habitat and especially the elk herds found in the area. Mr. Chairman, this worthwhile objective can and should be accomplished but I submit that the way to this worthy end is not to be found in the distortion of the Wilderness Act. As is borne out in the Multiple Use and Sustained Yield Act, Public Law 86–517 of June 12, 1960, wilderness status is not a prerequisite of good game management. Critical game management areas can effectively be protected by judicious access and harvesting operations. We are not aware of any scientific information which would indicate that land which is properly administered under the full multiple-use concept will damage big game habitat. Certainly, as has been brought out by a number of witnesses, the existence of a road system in the Jackson Hole area of Wyoming seems not to have had an adverse impact on the concentration of big game, including elk.

In summary, we are supporting the Forest Service recommendation for the makeup of the Washakie Wilderness because we believe that it is scientifically, as well as legally, sound. In exercising your power of review, we are confident that this committee will come to the same basic conclusion. The establishment of the Washakie Wilderness along the lines outlined in the Forest Service report will assure not only the preservation of a precious natural resource in its still undisturbed primeval character, it will at the same time promote sound conservation practices and equally sound economic development in the area. Despite any past tragic history to the contrary, we know now that these seemingly conflicting purposes are not mutually exclusive.

Senator ANDERSON. You then support the recommendations of the Forest Service?

Mr. QUIGLEY. Yes, Mr. Chairman; this is our position and our recommendation.

Senator ANDERSON. Has it been proposed in any bill that these other lands be added?

Mr. QUIGLEY. Mr. Chairman, I am not so sure I heard you.

Senator ANDERSON. Senator McGee has offered such a bill.

Mr. QUIGLEY. I believe Senator McGee has suggested some possible addition, including the additions of the areas J and D that I had reference to in my prepared statement.

We agree with the Forest Service, that this is not a sound recommendation, and that because one of the areas was logged over in the past, because a road exists in the other area along the jeep trail, we feel that, any other considerations aside, that these areas are not primeval in character, and as such, however beautiful they may be, whatever steps should be taken to preserve and protect their scenic

value, and their recreational potential, we do not feel that they qualify as wilderness under the definition in the Wilderness Act, and for this reason, suggest and urge that the committee do not include them in its final version of the bill.

Senator ANDERSON. Thank you.

Senator Hansen?

Senator HANSEN. Thank you, Mr. Chairman. Before Mr. Quigley finishes his testimony before this committee, there is a matter related to the Washakie Wilderness legislation that I want to clear up, if I can.

Mr. Quigley, it has been reported to me, both in writing and verbally, that Mr. Emery Tomlinson, manager of the Teton Division, U.S. Plywood-Champion Papers, Inc., based in Riverton, Wyo., made certain statements to other Wyoming citizens concerning my role in the Washakie Wilderness proposal now pending before this committee. I can't verify whether Mr. Tomlinson did or did not make these statements for, of course, I did not hear them personally.

I am not telling you, therefore, that Mr. Tomlinson did or did not make these statements, but I must tell you in this public hearing that there are a sufficient number of people in Wyoming who now claim that the statements were made to cause me great concern.

As a former Congressman, I am sure you can appreciate the fact that legislation pending before the Congress must be responsibly and objectively considered by all interested parties. To cloud this consideration with inflammatory rumor, no matter how unfounded, would pervert the proper exercise of our constitutional government. I can't fulfill my responsibilities to the people of Wyoming, and to the U.S. Senate, under the present cloud of rumor surrounding this legislation.

Therefore, let me ask you, Mr. Quigley, to your knowledge, did the corporation which you are representing here today, or did any employees, officers, or representatives of that corporation, at any time, seek to influence by any improper or illegal means my views on the Washakie Wilderness legislation which is now pending before this committee today?

Mr. QUIGLEY. Senator, the answer to your question is an unqualified "No."

Now, these hearings, up to this point, have been characterized by a judicial calm. This is the way they should be. However, we are all aware that in the Dubois area of Wyoming, the proposed Washakie Wilderness has been a highly emotional issue. I will simply say we regret, whether anything was said in jest or in the heat of argument, or however, if any employee of U.S. Plywood-Champion Papers said anything that could be construed by anyone as impinging in any way on your integrity, and in the process, I suppose, impinge on our own integrity, so Senator, I deeply regret anything that was said, if it was said, or anything that has been rumored to have been said. I trust that it has not caused you too much embarrassment, though I appreciate that a public official has little but his integrity going for him, and any impingement of that integrity is bound to be a source of great pain and embarrassment.

So, I say again, that we regret if anything was said that could have in any way been interpreted by anyone as an impingement on your integrity. May I say further, Mr. Chairman, that I appreciate this opportunity to set the record straight, and to do it on the record.

Senator HANSEN. Thank you, Mr. Quigley.

Senator ANDERSON. Let me say that I have been acquainted not very long with this distinguished Senator, but I would jump in to say that he is a very fine person, a very excellent person, a man of integrity, whom all of us trust and appreciate being on this committee.

I think I am the oldest surviving member of the Interior Committee, and I have been happy to have the Senator on the committee. I was very happy to have Senator Hansen come on the committee, and to work along with him. He is a very fine person.

Mr. QUIGLEY. May I say, Mr. Chairman, that my acquaintance with Senator Hansen is very recent and very pleasant, but I know of nothing in his public or private performance that would in any way justify any kind of suggestion that he was or could be influenced by any improper motives or forces. I deeply regret that the emotions which apparently did get out of hand in some of the public and private discussions of this issue in the Dubois area reached the point where statements attributed to one or more of our employees did not cast either U.S. Plywood-Champion Papers, or the Senator, in a very kind or pleasant light.

This is most unfortunate. I would hope that with this exchange, we can set the record straight. And I would hope that whatever decision is made—I won't say hope, I know whatever decision this committee makes will be made on the facts and on the record. Whatever decision is to be made should be made only in that basis.

This is the way we want it. On the basis of my experience with the Congress and with this committee, I am confident that this is the way it will be, and should be.

Senator ANDERSON. I am happy to have your statement. I always realize that we people in public life have a pretty rough road once in awhile. In a recent campaign, I was designated as a person who was going to die within 3 or 4 months. I have outlived the time already now, and I hope maybe to live a little bit more.

By the way, off the record.

(Brief discussion off the record.)

Senator ANDERSON. I did want to comment also on roads in the wilderness areas. I hope we won't be inclined to decide that one single road can destroy a wilderness. Nature probably will re-cover such a small mark and as long as most of the values are there for wilderness status, the area should be preserved. I have been very much interested in the Gila Wilderness in New Mexico. There might have been a little road in there at one time but it does not hurt the area. Let's not bar the primitive areas entirely because some little road has been built.

Mr. QUIGLEY. Well, as Senator Morse indicated previously, this is the tough assignment of this committee. The tough assignment that the Congress has reserved to itself, under the Wilderness Act, is to make these value judgments.

They are not easy. They do, as Senator Morse and others have indicated, involve conflicting interests, conflicting attitudes, conflicting sets of values. What this committee must do, and I am confident it will do, is to consider all of the arguments, all of the positions, including that of U.S. Plywood-Champion Papers, but considering all of the other points of view, and then make a value judgment as to what should be included in the Washakie Wilderness area. We believe that

the Forest Service has come in with a sound recommendation, and we urge the committee to seriously consider it.

To use Senator Morse's words, I think they have made out a prima facie case in their submission and in their report to this committee. Perhaps I am prejudiced, though I don't believe so, but I don't believe that I heard any persuasive testimony, sitting here yesterday and today, that would cause me to come to a contrary conclusion. But this is not my responsibility; this is the judgment that has to be made by the individual members of this committee.

We are confident that you will make that decision on the record. Whatever that judgment is, as corporate citizens of the State of Wyoming, we will abide by it. And, as individuals, I am sure we and our children will continue to be blessed by the decision to have a wilderness in the Washakie area.

Senator ANDERSON. Thank you very much.

Senator Hansen?

Senator HANSEN. I have no questions. Thank you, Mr. Chairman.

Mr. QUIGLEY. Thank you, Mr. Chairman.

Senator ANDERSON. Mr. Vern Vivion.

STATEMENT OF VERN VIVION, COCHAIRMAN, WYOMING PUBLIC LAND USERS COORDINATING COMMITTEE

Mr. VIVION. Mr. Chairman, I do have two additional pieces of testimony I would like to have entered into the record.

One is from the Wyoming Wool Growers, and one is for the Wyoming Stock Growers. I am going to attempt to combine two of them into one statement.

Senator ANDERSON. You wish to include the other statements in full.

Mr. VIVION. Yes.

Senator ANDERSON. Without objection that will be done.

Mr. VIVION. Thank you very much.

I am Vern Vivion, cochairman of the Wyoming Public Land Users Coordinating Committee. This committee is composed of members of the Wyoming Stock Growers Association and Wyoming Wool Growers Association using public lands in Wyoming.

The Wyoming Stock Growers and the Wyoming Wool Growers join together in support of S. 2630, which would transfer the status of the Stratified Primitive Area in Shoshone National Forest to the national wilderness preservation system, with full recognition that livestock grazing shall be permitted to continue according to the Wilderness Act.

We feel that grazing is the utilization of a recurring natural resource which would be wasted and become a fire hazard if not used, and it is compatible with recreation and all other beneficial uses in a wilderness area. Let me emphasize here that domestic livestock have been permitted in the proposed area since 1902. It is with pride that we, as livestock producers, can point to the statement of the U.S. Department of Agriculture in the Washakie Wilderness Area, wherein they state, "There has been no apparent conflict between commercial grazing use and the elk, deer, moose, and bighorn sheep which forage here."

This is noteworthy because it points up the fact that after some 60 years of livestock grazing use, the area still possesses the qualities that are sought in what we are choosing to call wilderness lands.

There are 1,495 cattle and 6,800 sheep permitted to graze in this area. Since I am not one of the permittees, I feel free to brag a little on the high-quality cooperative use and management that this area exemplifies.

In the existing primitive area, animals which prey upon wildlife and livestock have been controlled. We urge that this be continued in the wilderness area to enhance the management of wild game and livestock. Uncontrolled predators will drive the game animals and livestock to perimeter areas which could force an overutilization of surrounding lands.

We support the proposed Washakie Wilderness Area plan, which was originally outlined by the U.S. Forest Service, and we recognize its value; however, we would oppose the inclusion of additional lands which would materially enlarge the present primitive area. We feel that enough public land has been designated as "wilderness area" in the West and especially Wyoming.

We would like to remind the committee that, once an area is locked up in a "wilderness" designation, this can mean that only a few "privileged" persons will ever be able to see or enjoy the beauty of the area. The severe restrictions placed on access to wilderness areas alone have much to do with making travel through these areas extremely slow and expensive. The items of time and cost necessarily eliminate the use of these areas to the mass of our general public.

Finally, we urge this committee, and ultimately the Forest Service, to be most cognizant of the extremely important role these lands contribute to the production of our Nation's food and fiber, and respectfully submit that the multiple-use principle is the greatest good for the greatest numbers.

Thank you, sir.

Senator ANDERSON. You support the Forest Service proposal, then?

Mr. VIVION. Yes, Mr. Chairman.

Senator ANDERSON. All right.

Senator Hansen?

Senator HANSEN. Mr. Vivion, where is your home?

Mr. VIVION. I live in Rawlins, Wyo., Senator.

Senator HANSEN. Are you a user of any national forest areas?

Mr. VIVION. Yes, we are.

Senator HANSEN. What areas?

Mr. VIVION. The Medicine Bow National Forest, in southern Wyoming.

Senator HANSEN. Is there any wilderness within that Medicine Bow forest?

Mr. VIVION. There is no designated wilderness area in the Medicine Bow National Forest.

Senator HANSEN. Any primitive areas?

Mr. VIVION. I think not.

Senator HANSEN. Have you been over this primitive area that is being proposed for inclusion in the wilderness system in northwestern Wyoming, the area we are talking about here this afternoon?

Mr. VIVION. Quite a number of years ago, and at that time I wasn't aware of whether it was being designated as a "wilderness area," and so as to the exact and specific areas, I am certainly not familiar with them, Senator.

Senator HANSEN. Yes. And by speaking for the Wyoming Public Land Users Coordinating Committee, you speak both for the Wyoming Stock Growers and the Wyoming Wool Growers Associations?

Mr. VIVION. Yes.

Senator HANSEN. Thank you very much.

Mr. VIVION. I might add that there was indication, and of course, always being concerned about Wyoming, I was concerned about some remarks that were made this morning, about Wyoming not being concerned about its water going to some other States. I think the people in Wyoming, if I might say this, Senator and Mr. Chairman, would be quite concerned about ever losing its water to some other State. I just throw this in because some misunderstanding might have happened this morning.

Thank you.

Senator ANDERSON. Thank you, Mr. Vivion.

(The statements referred to follow:)

STATEMENT OF VERN VIVION, PRESIDENT, WYOMING WOOL GROWERS ASSOCIATION

The Wyoming Wool Growers Association, which represents over 1200 sheep-producing families, during it's 61st Annual Convention held in Riverton, Wyoming November 13–14, 1964, adopted the following resolution:

"We oppose the further withdrawal of public lands for the extension of wilderness areas and national parks. More than enough wilderness areas exist in the West. The principle of multiple use should apply to all public lands."

Now to be more specific, as the Association's policy and position relates to the proposed Washakie Wilderness in the Shoshone National Forest, we note that grazing of domestic livestock has been permitted in the proposed area since 1902, and as stated in the brochure published by the Forest Service, United States Department of Agriculture, announcing the proposed Washakie Wilderness Area . . . "There has been no apparent conflict between commercial grazing use and the elk, deer, moose, and bighorn sheep which forage here."

We also note from the brochure that nine sheep allotments are located within the proposed boundary and that in 1965, this amounted to 11,900 sheep months.

This is noteworthy because it points up the fact that after some 60 years of other uses the area still passes the qualities that are sought in what we are choosing to call wilderness lands.

We do not oppose the proposed Washakie Wilderness Area Plan as outlined by the U.S. Forest Service, in fact, we recognize its value; however, we would oppose the inclusion of additional lands which would materially enlarge the present primitive area. The Wyoming Wool Growers Association feels enough public land has been designated as Wilderness Area in the West and especially Wyoming.

In addition to this, the Association is deeply concerned, and most justifiably, because regulations will not permit predator control in Wilderness Areas.

If sheepmen are denied, by regulation, the right to protect their livestock, eventually their only alternative is to remove the livestock, which in essence will eliminate sheep grazing in the Wilderness Areas.

The alternative would then be to utilize the foothill private lands more intensively to sustain a profitable livestock operation. What do I mean by more intensive use of private lands? I'm talking about timber extraction. I'm talking about safe-brush spraying. I'm talking about pesticide spraying. I'm talking about plowing the land for greater production. I fear that a more intensive use of these private foothill lands could very well have a detrimental effect on the wild game that depend on these base private lands for their fall, winter and spring grazing.

Now, back to why we are concerned about predator control.

The Wyoming Department of Agriculture and the United States Department of Agriculture reported in their annual sheep loss for Wyoming in 1966 that over 118,400 head of sheep were lost to predators.

These sheep were valued at $1,682,000. The largest loss was from coyotes, which killed 82,200 head valued at slightly over $1 million. These losses contribute to the increased cost of production and finally effect the cost of meat to the housewife in the market place.

In summary, the Wyoming Wool Growers Association opposes any extension of the proposed Washakie Wilderness area for the following reasons:

1. There now exist in Wyoming enough areas of land designated as Wilderness Area.

2. Wilderness Areas, because of the restrictions on predator control, serve as a breeding area for coyotes which move into sheep ranges to seek and destroy and, thus, have caused and will cause more Wyoming sheepmen to go out of the wool growing industry, thus causing an adverse effect on the many communities in Wyoming.

Therefore, we urge the Forest Service to be most cognizant of the extremely important role the lands they administer contribute to the production of our nation's food and fiber, and respectfully submit that the multiple use principle is the greatest good for the greatest number.

STATEMENT OF THE WYOMING STOCK GROWERS ASSOCIATION

Mr. Chairman: The Wyoming Stock Growers Association has a membership of about 2500 ranchers located in the State of Wyoming. Many of these ranchers graze their livestock on the high mountain ranges in the summer months. Although grazing, where already established, is allowed in Wilderness Areas, we have always been somewhat fearful that multiple use groups that are interested in preservation rather than utilization of our natural resources, might bring enough pressure to bear to cause the elimination of grazing from Wilderness Areas sometime in the future.

Our Association has gone on record as not objecting to the original Washakie Wilderness proposal, which would transfer the status of this area from "Primitive" to Wilderness. We feel that grazing is the utilization of a recurring natural resource which would be wasted and become a fire hazard if not used, and it is compatible with recreation and all other beneficial uses in a Wilderness Area. However, we are not in favor of any expansion of the area beyond the confines of the original Primitive designation of this Washakie Area. The original land lies high on the mountain range and includes lands that are only usable for summer grazing permits. If any expansion were granted we contend that lands would then be included that are now being used for fall and early spring grazing and could possibly include some areas that would be considered ranch headquarter lands.

We also feel that only very limited areas of our forest lands should be "locked up" in Wilderness classification because we must remain interested in the future development of our natural resources to their fullest economic and practical level. The Wyoming Stock Growers Association believes that Wyoming will have sufficient areas of Wilderness and Parks to meet the needs of our society once the Washakie primitive area is declared a Wilderness, and we are opposed to the inclusion of any more of our Forest lands in the Wilderness system except for the express purpose of squaring up the boundaries to fit the topography of any given area.

We would like to remind the Committee that once an area is locked up in a Wilderness designation this can only mean that only a very few "privileged" persons will ever be able to see or enjoy the beauty of the area. The severe restrictions placed on access to Wilderness Areas alone have much to do with making travel through these areas extremely slow and expensive. The items of time and cost necessarily eliminate the use of these areas to the mass of our general public.

In behalf of the Wyoming Stock Growers Association and the Fremont County Cattlemen's Association, whose members live close to the Washakie Forest Area, we would like to state that we believe that the ever increasing population growth of our nation and the world proves that there will be a need for all our Public Lands to be administrated under the multiple use concept in order to fill our needs for food, fiber, timber, minerals and recreation.

We feel that many of these public land areas can be developed to a larger extent than has been the case in the past, so that they may achieve their maximum economic and practical level under the multiple use concept. This will require range improvement practices such as seeding, brush spraying, road building, and numerous other management practices which are not allowed under Wilderness designation.

For these reasons we wish to go on record as favoring the establishment of the Washakie Wilderness area strictly upon the boundaries of the now existing primitive area. We would necessarily be in opposition to the extension of this original land area in any way.

Senator ANDERSON. Mr. Blackburn.

STATEMENT OF GEORGE F. BLACKBURN, WASHINGTON, D.C., METROPOLITAN AREA

Mr. BLACKBURN. Mr. Chairman, Senator Hansen, I am George F. Blackburn. I live in nearby Maryland. I wish to testify as an individual in support of S. 2630, to establish the Washakie Wilderness.

I think the Forest Service is to be commended for their conscientious effort in carrying out the mandate of Congress to study this and other areas for possible inclusion in the wilderness system. However, I question the validity of certain of their criteria and therefore the wisdom of some of their decisions. I shall illustrate with particular reference to the Washakie proposal.

The statement appears several times that a boundary was located so as to follow readily recognizable topographic features such as ridges, rocky outcrops, water courses, and so forth. I realize that such a location does make for a readily recognizable boundary but I fear that in some cases it may have the results of excluding areas that, under a reasonable interpretation of the Wilderness Act, would qualify as wilderness. In the national forests I am more familiar with, here in the East, the boundary lines go where they have to—that is, where ownership is public on one side and private on the other.

Similarly, I should think it possible, if it is judged that a given area has the characteristics which qualify it for inclusion in a wilderness—granted that a certain amount of arbitrariness will at times be involved in making such a judgment—to determine a line on the ground, whether crooked or straight, following the existing terrain in whatever way the situation requires, that will put the area within such boundary.

It is to be regretted that the bill excludes the upper DuNoir Basin, in view of the importance of this area, according to the Wyoming Game and Fish Commission, to the well-being of big game, particularly elk. The Forest Service justifies its exclusion on the ground that it will be needed for recreationists who travel by car, and that its timber is needed to sustain a sawmill operation at Dubois, a town of about 600 population.

I have not been in the DuNoir area. Last summer my wife and I attempted to visit it, but failed because a Forest Service trail which we intended to follow from the Brooks Lake Road across Pinnacle Buttes was unmarked and we could not find it. In searching for it we got into an area east of Brooks Lake which had recently been logged. The utter devastation that we saw conveyed a message that was abundantly clear; this is the way the DuNoir Basin will look if it is not protected as wilderness.

At this point, Mr. Chairman, I should like to show two photographs which I have here of that logged area east of Brooks Lake. I was at this logged area east of Brooks Lake, Shoshone National Forest, Wyo., September 10, 1967, and the top view is looking north,

and the bottom view is looking northwest. I would like to submit this for the committee files.

I should also interject at this point a slight amendment to what my written statement says. As far as the trail not being marked. We finally found it, marked by the standard Forest Service blaze, but our difficulty lay in the first instance in not finding the trail that was marked along the road, so it is still true, we have not been in the DuNoir area.

However, we have been in the area there, I believe, marked J on the map, because that seems to include a little bit more than the DuNoir area. The line itself on the western side extends to the western side of Pinnacle Butte.

Senator ANDERSON. Could I just stop you there? You say this is the way the DuNoir Basin will look if it is not protected as wilderness. How about the sustained-yield use by the Forest Service?

Mr. BLACKBURN. Beg pardon?

Senator ANDERSON. Would not a sustained-yield basis protect the timber almost as well as wilderness classification?

Mr. BLACKBURN. Sustained yield? I think there is some merit to the sustained-use idea, but the pictures that I took don't demonstrate, it seems to me, that sustained yield is being practiced there.

Senator ANDERSON. That is clear cutting. You don't have to have clear cutting, do you?

Mr. BLACKBURN. Yes, that is clear cut. I am not sure I understand your question altogether yet.

Senator ANDERSON. You don't have to have clear cutting?

Mr. BLACKBURN. No, we don't.

Senator ANDERSON. You could have forest control.

Mr. BLACKBURN. That is right. The forest would be much less objectionable to look at, sir, if sustained yield were practiced. I think that would be my thought in that matter, anyway.

Senator ANDERSON. Go ahead.

Mr. BLACKBURN. While I would not deny the economic benefits that would result from harvesting the timber, I would urge that against this local benefit there be balanced the national interest in preserving the area as wilderness, together with the benefit that would accrue to the local economy from its enhanced recreational value.

A statistic that may be of some significance in this connection is that in 1965, the most recent to which I have access, the 176 persons employed in the lumber industry in Fremont County comprised 3.9 percent of the total number employed, and the payroll, $200,000 was 3.5 percent of the total payroll in the county. (The data are for a total population of about 26,000. Of this number about 11,600 or 44 percent are in the three largest towns—Riverton, Lancer, and Dubois.) Whatever other economic and human factors should be taken into account, these data suggest that the county's economy does not depend so heavily on the timber available in the DuNoir drainage that being deprived of it would result in severe dislocations.

Corroborating this is a report issued some years ago by the Wyoming Industrial Research Council—"Wind River Basin—A Study of Its Resources, People and Economy"—Floyd K. Harmston, 1953 which indicated that because the mineral, water, and other resources in the Wind River Basin are not plentiful, there was promise of only limited indus-

trial growth. On the other hand, describing the scenery, fishing, and wildlife resources as unsurpassed, the report regarded as favorable the outlook for development of recreational opportunities, with resultant good for the economy.

As to the need for recreation-cum-automobile, I note that the proposal cites this as one of the reasons for excluding several areas from the Washakie Wilderness; and in answer I submit that wilderness values should not be degraded when other areas, some with roads already in them, could be utilized without any more harm to the environment than we have come to expect from mass recreational use. In any event, when pressure for using this wilderness to satisfy this particular need becomes intolerably high, if it ever does, the Congress can then open the gates.

I urge, therefore, that the bill be amended to include the DuNoir Basin, an area of approximately 30,000 acres; and I concur in the recommendation made by Wyoming citizens groups for other additions to make a total acreage of approximately 48,300 which should be added to the 679,520 acres which the bill now provides for.

I thank the committee for the opportunity to appear.

Senator ANDERSON. Senator Hansen?

Senator HANSEN. I have no questions, thank you, Mr. Chairman.

Senator ANDERSON. Mrs. Bonney?

STATEMENT OF LORRAINE G. BONNEY, SIERRA CLUB STUDY TEAM

Mrs. BONNEY. Mr. Chairman, Senator Hansen, members of the committee, I am Lorraine Bonney. I reside in Houston, Tex., and Kelly, Jackson Hole, Wyo.

I want to start out by commending the Forest Service for their wonderful wilderness system. I think it is one of the greatest things we have. I realize their job is a tough one. However, I also appreciate the system that allows a citizen to let the Forest Service know that I am unhappy about a couple of things.

I would like to present for the record a series of photographs of the Stratified Primitive Area and adjoining country, taken in August of 1966 by myself and other members of our Sierra Club study team.

As a member of the study team I covered the ground of the Stratified Primitive Area quite thoroughly by hiking and backpacking methods.

Other qualifications that I may offer are: I am coauthor of "The Guide to Wyoming Mountains and Wilderness Areas," and "The Guide to Grand Teton National Park and Jackson Hole."

We started our trip from the little town of Dubois, Fremont County, Wyo. This town has a lot going for it. It's on a mainstream highway to Yellowstone Park, it has ideal climate, outstanding scenery, tremendous hunting, fishing, wilderness on two sides, and it has timber. We in Teton County saw a long time ago that our best livelihood would be tourists. Our economy is geared to that and now Teton County is one of the wealthier counties in Wyoming.

Dubois citizens also feel that, with a lot of foresight and long-range planning, Fremont County could be what Teton County is today. Certainly it could. That is why they are fighting a highly geared Forest Service district that wants to scar scenery. Although the multiple-use slogan of the Forest Service incorporates wood, water,

forage, wildlife, and recreation, in the Wind River district—detrimental emphasis is on wood—timber. Back in Teton County where I live the tourist would have a hard time finding where Teton National Forest does all its clear cutting. But in the Wind River district the evidence is everywhere. They don't bother to hide it, even on the main U.S. Highway No. 26.

The residents of Fremont County would like to see some of that timber spared in order to have something to attract and show their visitors. This album will try to show you the breathtaking scenery of the proposed Washakie Wilderness, and the destruction of the foreground scenery that the Forest Service is determined to continue.

On page 4 you see the approach road going north from Dubois to the area's most popular campground at Double Cabin on Wiggins Fork. It is outside the primitive area. We pass through hundreds of acres where the lumbering operations have resulted in complete destruction of all growth. There is no screen between the road and such operations.

The lower picture shows the Lincoln Point Escarpment.

On page 5 is the well-known Norton Point view, as seen from Double Cabin campground. I believe any plan to preserve this wilderness should be designed to preserve its looks, such as these decorative stringers of timber, since its looks are its greatest value. Now every rockhound and camper in the area sees this view, and many take this very picture. The Forest Service has placed its boundary well above the timberline, exempting all the green seen in the picture. I can't help but feel they have designs on the lower timber, just as they have clear cut the area southeast of here, and all along the road to the campground. I don't believe the insistence of the Forest Service to place the boundary on top of the rims is just to have a clearly defined boundary, but to have access to all of the timber.

Pages 6 to 11 show the very fine quality of the Stratified Primitive Area. Most of the trails are very satisfactory as far as width is concerned. Any money spent on trails should be directed toward keeping them clear of downfall, not in widening them.

On page 12 is Ramshorn Basin. Here the Forest Service and the Sierra Club agree that a recreational area be established in its fringes, and on the edge of one of the most spectacular views anywhere. I will return to this point in a minute, but I would like to bring in Bear Basin here which, like the Ramshorn Basin, would make a great recreational area. However, the faulty method of boundary setting which the Forest Service has selected could ruin the view in Bear Basin if the Forest Service keeps its boundary high, thus leaving the foreground green strip unprotected. Bear Creek itself forms a natural boundary, as suggested by the Sierra Club, with its western bank suitable for wilderness and its eastern bank suitable for recreation sites. I will bring up again the matter of the road down into Bear Basin. The Forest Service says there is a road down into this area, but they are mistaken. Under no circumstances can you call it a road. We could not drive our high-centered vehicle down the highly eroded jeep tracks.

On pages 13, 14, and 15 are the views as seen from a little knoll just north of Ramshorn Basin. Just north of that knoll is Deacon Lake. From the knoll, with this basin as a recreational site, this knoll will

become a popular picture taking spot. The visitor will see the landmark Boedeker Butte which the Forest Service has now included in their wilderness proposal. That is east of the knoll. Looking northeast over Deacon Lake, he will recognize Cathedral Peak. Looking north and northwest he will identify the great Five Pockets area. However, if he looks west and southwest at the great Ramshorn Escarpment, as he is bound to do, he will be looking at the huge Parque Creek pocket which, instead of completing a lovely picture, probably by then will have been thorough clear cut and instead of enjoying a complete picture, he will end up discussing the ravages of clear cutting. Definitely, the base of the escarpment here would preserve the needed green strip to complete the pictures.

Dr. Cliff said yesterday that the great Parque Creek Valley has been left out because it faces an area that has been timbered. What about the poor tourist who also faces an area that has been timbered if the Ramshorn Escarpment, the Lincoln Point Escarpment, and others are not protected?

Back in our part of the country of Jackson Hole, the Forest Service cuts timber, but does so with the many visitors in mind. There clear cuts are not seen by the highway traveler and visitor. I believe much more discretion should be used in the Wind River district, giving some thought to what the visitor sees.

On page 16 is a photo of the site of a former tie camp on East Du-Noir. This was once the scene of great activity and use. The wilderness character of this country is beginning to restore itself. From here as you head north to Shoshone Pass the few old stumps are all that is left to tell the story, and these are harder to find the farther north one goes.

The brochure-map put out by the Shoshone National Forest contains the following discussion on water:

> Water is the most important and most valuable of all natural resources. It receives highest priority in forest resource management in an effort to produce the maximum amount of usable water. Without an adequate forest or vegetative cover to regulate run off or stream flow, this objective, and protection of our basic resource, the soil, cannot be accomplished.

One of the characteristics of this great primitive area is that the incredibly fragile soil is held in place only by the trees and undergrowth. Torrential rains common in this area can be of the powerful flash-flood type that moves trees, tumbles big boulders, and washes away soil. Every time an area is clear cut on a mountain slope in this area, it leaves that land greatly susceptible to strong erosion forces.

On pages 17 and 18 are pictures of the west and east sides of Pinnacle Buttes, just east of that most popular forest campground at Brooks Lake. The Forest Service makes a lot of Smokey the Bear. Here's a picture of him looking hurt—not at first destruction as usual, but at the tremendous destruction done by the timber cutting on the east slopes of Pinnacle Buttes. In fact we have a photo of the 16-year-old burn up Wiggins Creek with some new growth in, but the 16-year-old clear cuts on Sheridan Creek can't turn up that much. Added to the low price the Forest Service gets for its timber is the high cost of the reforestation. Dr. Cliff describes timber cutting as harvesting the timber. Back in Texas, up in Oregon, yes, in lower Wyoming sections it could be called harvesting—when the timber is cut, reseeeding is

done, and in another generation the process can be repeated. But here, growth rate is very slow at this elevation, and reforestation doesn't pay off. Bill Isaacs of the Wyoming Wildlife Federation brought up the classic example of the Bridger National Forest reforestation program that ended up costing something like $1.70 an acre for two seedings, and still nothing grows there. It is just a point to bear in mind that the timber cutting here cannot be called a crop. I am just an ordinary citizen who can't understand why Smokey the Bear has a fit over a fire, and doesn't even squirm when the Forest Service leaves a devastated cut as seen on page 17 and page 22. The Forest Service method of lumbering on their Wind River district is not making full use of the multiple-use system—it's a one-shot, single-abuse system there.

I would like to add that we climbed through this cut, over the ridge and descended into the splendid DuNoir Valley, near Kissinger Lake. I have been in a lot of wildnerness in Wyoming, most of the wildernesses there, and this was the first time, it was early in September, I had ever heard an elk bugle, and it was the biggest thrill of my life. I know there are elk in the DuNoir Valley in early September. Maybe other visitors would like to have that thrill, too.

I can hardly agree with Dr. Cliff that the DuNoir Valley was not kept out of the Wilderness System because of its timber. I believe they want that timber desperately. I would like to add here that in area J, the Wolf Creek area is virgin timber, and this is what they are heading for now. Maybe the East DuNoir has been timbered, years ago, and the upper west has been, has jeep marks in it, and some old marks, but the Wolf Creek area, that great, big area at the southern end, is virgin timber, and there is no reason why it should not be put into the wilderness, but this is valuable timber crop.

There is plenty of room in the great DuNoir Valley for recreational area. The Sierra Club study team suggested Trail Lake. Perhaps it would fit in as a scenic area, but there are many other areas, ideal meadows, whose fringes would be suitable, but just because an area may be suitable for recreation, why does it have to be cut over and devastated and the ravaged remnants tossed over to the other minor parts of the multiple-use slogan?

I would like to mention here that last fall we saw more and more private campgrounds along the Dubois highway, and it is good to see that the private enterprise is trying to take care of a lot of the future Yellowstone Park pressure.

Thank you very much for this opportunity to speak.

Senator ANDERSON. Senator Hansen.

Senator HANSEN. Mrs. Bonney, let me compliment you on your very fine testimony, and express at the same time my appreciation to you for permitting us to view these excellent pictures you have taken that are included in the brochure here. I am looking at the one on page 22. It is labeled "Timbering Practices as Seen From the Road to Double Cabin."

Mrs. BONNEY. Yes, sir. That is the Lincoln Point Escarpment in the background.

Senator HANSEN. When was this photograph taken?

Mrs. BONNEY. In 1966.

Senator HANSEN. Do you note any improvement insofar as your concern in timbering practices now, as you may first have observed them on the Shoshone Forest, and what you see today? I mean, are the practices now more acceptable to you than they were when you first saw them, or what is your judgment?

Mrs. BONNEY. I just can't get used to clear cutting, Senator. I don't see any improvement. I feel at least, if they are cutting, they could, leave a pretty good screen along Highway 26, the Dubois Highway, into Grand Teton Park. They don't come right down to the highway. You can see across the valley, where they have done timber cutting. But I think, and I understand, according to their plans, that they are supposed to, in any clear cutting, leave a generous screen between the roads and the cutting, but there is no evidence of that on the way up to Double Cabin.

Senator HANSEN. You have partly answered the next question I was going to ask, and that was: Would you make a comparison between the timbering operations as you have observed them on the Teton National Forest with those on the Shoshone?

Mrs. BONNEY. Yes, sir; I would. We get around a lot in Jackson Hole and we come across areas that have been clear cut and we know where they are; but anyone just driving the valley would never see the timber cuts on the shoulder of Jackson Peak, for instance. If they do see them, they don't know what they are. We have had questions about them, but they don't really know what they are. There is no evidence of cutting in plain view to the visitor. If a visitor does see it, they are getting around pretty good.

Senator HANSEN. On the basis of what you have observed in Jackson Hole on the Teton National Forest, is it your opinion that timbering could be continued on the Shoshone and be done in a manner so as to render it less objectionable than it is at the present time?

Mrs. BONNEY. I believe it could. I don't think much of clear cutting, anyway; but apparently, because of the system of the big machines and everything like that, this is the way they do things. But I think that in places such as the fringes where the visitor will be looking up toward the peaks that these clear cuts do not look good and are more noticeable.

Senator HANSEN. Thank you very much, Mrs. Bonney. I am aware of the fact that you have accompanied your husband, as he has led a team on behalf of the Sierra Club, and I know that you are very familiar with this area, and certainly your testimony has been quite important, and most meaningful. I compliment you.

Mrs. BONNEY. Thank you very much, Senator.

Senator ANDERSON. Mr. Walcott.

STATEMENT OF FRANCIS J. WALCOTT, SAN FRANCISCO, CALIF.

Mr. WALCOTT. Mr. Chairman, I have some photographs here I would like to pass up to the committee for reference.

Senator ANDERSON. Thank you.

Mr. WALCOTT. Mr. Chairman, I am Francis J. Walcott, of 3500 Fulton Street, San Francisco, Calif. I wish to speak today in favor of the inclusion of the Washakie Wilderness of the Shoshone National Forest in the national wilderness preservation system, including ad-

ditional acreage above that proposed by the Forest Service. My opinions are based on a visit to the Stratified Primitive Area and surrounding regions during the summer of 1966, at which time I walked through much of the area.

I will direct my remarks primarily to the area referred to by the Forest Service as area J, East DuNoir Creek and West DuNoir Creek. And these photographs I passed up to you are all from this area. I took them myself during my visit in 1966. Although the entire area considered is highly scenic, the most attractive portion, in my opinion, is the East DuNoir-Dundee Meadows-West DuNoir region.

I would like, Mr. Chairman, to make a few additions to my written statement here. I was much disturbed, when I arrived here in Washington, after writing my statement, to learn that there has been considerable cuting in portions of area J; and particularly I am thinking of West Bonneville Pass. I was there apparently just before the cutting was done, and I found it very attractive land. I understand also that in portions of the southern area of area J there has been some cutting.

From Bonneville Pass on the west to the Ramshorn, the entire DuNoir drainage area is a region of high wilderness caliber. It is true that, in past years, tie-hacking was carried out in portions of the area. The type of logging that was done 45 or 50 years ago is certainly not the kind of clear cutting that is going on today.

A few signs of human use do remain from these operations. Improvements, including four-wheel drive access used for cattle-grazing operations, exist in portions. The roads that were built in here, I would also like to add, mostly are on the fringes of the proposed additions. There are some old roads, now barely visible, that extend up into the DuNoir, mostly on the West DuNoir; but, as Senator Anderson mentioned earlier this afternoon, there are old roads that existed when the Gila Wilderness was formed. None of these intrusions are of such a nature as to permanently destroy all wilderness characteristics and possibilities.

I might also add that this is an area, in spite of this, that is a place where man's activities are substantially unnoticeable. The benefits to be gained from wilderness classification will outweigh whatever few disadvantages exist. Thirty or fifty years from now the remaining signs of human use will have disappeared, and the wilderness needed to meet an increasing demand will be there.

Again, I would like to add, we now must look to the future, and the wilderness that we will be needing in the future, and should consider what the area is going to be like in 50 years. We want to protect the area so that we will have enough wilderness 50 years from now to meet the demand that is increasing so rapidly.

The greatly increased public access which would result from the proposed roads into the DuNoir area would be detrimental to the cattle grazing as well as to the wildlife range. The value of the area includes this and its watershed benefits, as well as for the wilderness recreation use. More and more people are taking advantage of this type of recreation. These users include not only people going in on and with horses, but a rapidly growing number of backpackers, who have found this to be the least expensive kind of a vacation, and one of the most rewarding. With the development of new lightweight equipment and dehy-

drated foods, it is an activity no longer limited to the hardy and rugged, but is one which can be participated in by anyone able to walk.

Particularly, the importance of the area as elk range must be emphasized. Studies have indicated that construction of roads is detrimental to resident and migratory elk herds. Elk is a major resource in Wyoming, and anything detrimental to them would be a loss to the State. Unless it can be clearly shown that the benefits that would result from a different course of action are more important and would outweigh this potential loss, this alone would justify inclusion of area J within the wilderness. Here, where any benefit from development of the area is at least questionable, protection of the elk habitat from disturbance is important to the welfare of Wyoming.

Timber values, at best, seem quite marginal, and particularly in this area of steep slopes any potential benefits from timber operations would be overbalanced by the deleterious effects on other values of the region. The Forest Service states in their report that this valuable watershed region contains shallow soils which are easily eroded. I quote:

> Due to the steepness of the country and the high percentage of barren land, the area is susceptible to damage from torrential rainstorms.

This, as well as the undesirable side effects of the road network which would be established, suggests that wilderness classification for the DuNoir Basin is desirable. Further, the damaging effect to a good water supply, that increased erosion would create, would tend to lose one of the area's benefits. Again I quote:

> A continuous flow of quality water from the drainages under consideration for wilderness represents an important public value. Stability of water supply is the major economic contribution, and public service to the dependent downstream lands and users. Mechanical disturbances that would upset the balance of nature, would be avoided within the proposed wilderness. Wilderness management will not change the water yield or quality.

The devastating, clear-cutting procedures evident below Double Cabin on Wiggins Fork are destructive of both recreational values and watershed values. One of the goals of wilderness classification should be to protect other portions of the Stratified Primitive Area and surrounding area so as to best maintain these values.

The strong statements entered into the record of the agency hearing at Riverton, Wyo., by many of the people most directly affected by this proposal, residents of Dubois, Wyo., indicate a conviction that greater benefits will accrue to the immediately surrounding region from classifying the DuNoir as "wilderness" than by leaving it out, exploiting its few natural resources other than its beauty, and developing the area for mass recreation.

The importance of Bear Basin to the welfare of the elk is alone sufficient reason to include this region within the wilderness boundaries. Big game is one of the major facets of outdoor recreation in Wyoming. A very large portion of the recreational use of the area is based on big game, and outdoor recreation potential is one of the primary resources of Wyoming. Many of the other factors mentioned earlier, such as watershed value, also apply to Bear Basin, and it should be included in wilderness. The resources of water, wildlife,

and recreation will all be adversly affected if the DuNoir drainage and Bear Basin are not included in the Washakie Wilderness.

The Forest Service proposal withdraws from wilderness protection steep, timbered slopes now included within the Stratified Primitive Area, on grounds that the boundaries should be on "recognizable natural features." However, for reasons both of scenic and, therefore, recreational value and of soil stability and erosion control, the steep slopes should be given wilderness protection and the boundaries should include the entire escarpments. To accomplish this desirable objective, boundaries as suggested by the many conservation organizations should be adopted below Norton Point and around Lincoln Point and Ramshorn. In some of these areas, too, there has been some lumbering activity in the past. However, the benefits to be gained from wilderness protection, realizing that the previous signs of intrusion will soon disappear, suggest that much of the area could, and should, be placed within the wilderness boundaries. Protection of the entire escarpment should, of course, be followed in all proposed additions to the wilderness. This indicates desirable additions in the vicinity of Wiggins Fork, Lincoln Point, Ramshorn, and perhaps others.

These proposed additions to wilderness will leave ample room for development of nonwilderness recreation, roadside camping, and other such uses around the outside of the proposed wilderness. Such sites as Brooks Lake, Double Cabin, Ramshorn Basin, Lean-To-Creek, and perhaps others can serve this function, and provide fine takeoff points for the wilderness, making access easy for any who wish to use this high-quality area.

I would like to add here to this, since this was discussed at great length yesterday, not only such sites as Brooks Lake and the Double Cabin area, and Ramshorn Basin and Lean-To-Creek, are possibilities, but the need for additional camping and recreation areas near Yellowstone is quite essential. We just had a hearing last week as to the same problem in Yosemite, and the same situation exists there. There is considerable area in the northeastern portion, in the Cooke City area and along the road just east of Cooke City. I was there last August. There were four or five Forest Service campgrounds within 5 miles of Cooke City, which is just outside the Yellowstone boundary in the northeast corner, and they were almost deserted. Besides this, there is a superb area for recreation. I found it highly scenic. It is on the Cooke City-Cody road in the Crandall portion of the Shoshone National Forest.

I found this very attractive country. There are already some Forest Service campsites here. It was a fine road. It was being improved last fall. This is an excellent site, I think, for additional recreation facilities. Much of it is Forest Service land. We could also have here privately operated campgrounds. Many of these would serve the function of the need for nonwilderness recreation, and they would provide fine takeoff points for the wilderness, making access easy for those wishing to use this high-quality Washakie area.

To summarize, I urge the establishment of the Washakie Wilderness proposed by the Forest Service, with the very important additions of East DuNoir Creek, West DuNoir Creek including Dundee Meadows and Bonneville Pass, Bear Basin, and boundary revisions to include the entire escarpment and timbered slopes, especially along