

07260-00-905

THE UNITED STATES OF AMERICA.

To all to whom these presents shall come, Greeting:

WHEREAS, a Certificate of the Register of the Land Office at Denver, Colorado, has been deposited in the General Land Office, whereby it appears that full payment has been made by the State of Colorado, in accordance with the provisions of the Act of Congress approved June 25, 1910 (36 Stat., 847), entitled "An Act granting certain public lands to the State of Colorado for the use of the State Agricultural College, for agricultural, forestry, and other purposes," for the northeast quarter of the northwest quarter, the northwest quarter of the northeast quarter and the southeast quarter of the northeast quarter of Section thirteen in Township seven north of Range seventy-four west, the Lots two and four, the southeast quarter of the southwest quarter and the south half of the southeast quarter of Section eighteen, the southeast quarter of the southeast quarter of Section seventeen, the southeast quarter of the southwest quarter of Section sixteen, the Lots one and two, the south half of the southeast quarter and the northeast quarter of the southeast quarter of Section thirty, the west half of the southwest quarter of Section twenty, the northwest quarter of the northwest quarter of Section twenty-nine and the southwest quarter of Section twenty-one in Township seven north of Range seventy-three west, the Lots two and three, the south east quarter of the northwest quarter and the southwest quarter of the northeast quarter of Section six, the northwest quarter of the southeast quarter of Section eight, the south half of the northeast quarter and the north half of the Southeast quarter of Section eighteen, the north half of the northwest quarter of Section sixteen and the northeast quarter of the southwest quarter, the north half of the southeast quarter and the southeast quarter of the northeast quarter of Section twenty-nine in Township seven north of

Range seventy-two west and the northeast quarter of the southeast quarter of Section twenty-three and the southwest quarter of the northeast quarter and the northwest quarter of the southeast quarter of Section twenty-six in Township

07260-00-905  
NSU

07260 00-905

4/16/24

seven north of Range seventy west of the Sixth Principal Meridian, Colorado, containing one thousand six hundred nine acres and eighty seven hundredths of an acre, according to the Official Plat of the Survey of the said Land, returned to the General Land Office by the Surveyor General:

NOW KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress approved June 25 1910 (36 Stat., 847), HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said State of Colorado, and to its assigns, the lands above described; TO HAVE AND TO HOLD the same, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said State of Colorado, and to its assigns forever, in accordance with the provisions of said Act; subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.

IN TESTIMONY WHEREOF, I, Warren G. Harding, President of the United States of America, have caused these letters to be made Patent, and the Seal of the General Land Office to be hereunto affixed.

Given under my hand, in the District of Columbia, the twenty fifth day of May in the year of our Lord one thousand nine hundred and twenty three and of the Independence of the United States the one hundred and Forty seventh.

By the President:

Warren G. Harding

By Viola B. Pugh, Secretary.

M. P. LeRoy



B+S.



## The United States of America,

To all to whom these presents shall come, Greeting:

WHEREAS, a Certificate of the Register of the Land Office at Denver, Colorado, has been deposited in the General Land Office, whereby it appears that full payment has been made by the State of Colorado, in accordance with the provisions of the Act of Congress approved June 25, 1910 (36 Stat., 847), entitled "An Act granting certain public lands to the State of Colorado for the use of the State Agricultural College, for agricultural, forestry, and other purposes," for the northeast quarter of the northwest quarter, the northwest quarter of the northeast quarter and the southeast quarter of the northeast quarter of Section thirteen in Township seven north of Range seventy-four west, the Lots two and four, the southeast quarter of the southwest quarter and the south half of the southeast quarter of Section eighteen, the southeast quarter of the southeast quarter of Section seventeen, the southeast quarter of the southwest quarter of Section sixteen, the Lots one and two, the south half of the southeast quarter and the northeast quarter of the southeast quarter of Section thirty, the west half of the southwest quarter of Section twenty, the northwest quarter of the northwest quarter of Section twenty-nine and the southwest quarter of Section twenty-one in Township seven north of Range seventy-three west, the Lots two and three, the southeast quarter of the northwest quarter and the southwest quarter of the northeast quarter of Section six, the northwest quarter of the southeast quarter of Section eight, the south half of the northeast quarter and the north half of the southeast quarter of Section eighteen, the north half of the northwest quarter of Section sixteen and the northeast quarter of the southwest quarter, the north half of the southeast quarter and the southeast quarter of the northeast quarter of Section twenty-nine in Township seven north of

aka  
NW of NE  
NE of NW

Denver 022401

4-1044-R.

Range seventy-two west and the northeast quarter of the southeast quarter of Section twenty-three and the southwest quarter of the northeast quarter and the northwest quarter of the southeast quarter of Section twenty-six in Township seven north of Range seventy west of the Sixth Principal Meridian, Colorado, containing one thousand six hundred nine acres and eighty-seven hundredths of an acre, according to the Official Plat of the Survey of the said Land, returned to the General Land Office by the Surveyor General:

NOW KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress approved June 25, 1910 (36 Stat., 847), HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said State of Colorado, and to its assigns, the lands above described; TO HAVE AND TO HOLD the same, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said State of Colorado, and to its assigns forever, in accordance with the provisions of said Act: subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.

IN TESTIMONY WHEREOF, I, Warren G. Harding,

President of the United States of America, have caused these letters to be made Patent, and the Seal of the General Land Office to be hereunto affixed.

GIVEN under my hand, in the District of Columbia, the TWENTY-FIFTH

(SEAL)

day of MAY in the year of our Lord one thousand nine hundred and TWENTY-THREE and of the Independence of the United States the one hundred and FORTY-SEVENTH.

By the President

By

*Warren G. Harding*  
*Viola B. Pugh*  
*W. P. LeRoy*

Secretary,

RECORD OF PATENTS: Patent Number

907602

Recorder of the General Land Office.

6-2186



Mark Horvat

T7N R72W Sec 6

E $\frac{1}{2}$  NW $\frac{1}{4}$       W $\frac{1}{2}$  NE $\frac{1}{4}$

Patent

SE $\frac{1}{4}$  NW $\frac{1}{4}$       SW $\frac{1}{4}$  NE $\frac{1}{4}$

Nancy Hurt

NE $\frac{1}{4}$

Paula Maxwell ○ clerk's office

April of 1916

NW of NE

SW of NE ✓

SE of NW ✓

NE of NW

↓  
look for  
green

State of Colorado, )  
 ) ss.  
 County of Larimer.)

I, Charles R. Parks, a Notary Public in and for said County, in the State aforesaid, do hereby certify that James Chadek who is personally known to me to be the person whose name is subscribed to the within and foregoing mortgage, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument of writing as his free and voluntary act and deed for the uses and purposes therein set forth.

And I further certify that on this day personally appeared before me Elizabeth Chadek, personally known to me to be the wife of the said James Chadek, and to be one of the persons who signed the within and foregoing mortgage and being by me duly sworn, and, separate and apart from her husband, fully appraised of her rights in the premises and of the effect of signing the within and foregoing instrument of writing, did then and there, so separate and apart from her husband, sign the same and acknowledge that she signed, sealed and delivered the said instrument of writing as her own free and voluntary act and deed, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 13th day of Oct. A. D. 1924.

My commission expires March 8, 1927.  
My commission expires



Charles R. Parks  
 Notary Public.

Filed for record at 9.03 A. M., October 14, 1924.

Matthew Auld....Recorder  
 G. R. Cushing....Deputy

No. 280890

PATENT TO FORESTRY TRACT.

Denver 022401

4-1043

May 29 1923

THE UNITED STATES OF AMERICA.

To all to whom these presents shall come, Greeting:

WHEREAS, a Certificate of the Register of the Land Office at Denver, Colorado, has been deposited in the General Land Office, whereby it appears that full payment has been made by the State of Colorado, in accordance with the provisions of the Act of Congress approved June 25, 1910 (36 Stat., 847), entitled "An Act granting certain public lands to the State of Colorado for the use of the State Agricultural College, for agricultural, forestry, and other purposes," for the northeast quarter of the northwest quarter, the northwest quarter of the northeast quarter and the southeast quarter of the northeast quarter of Section thirteen in Township seven north of Range seventy-four west, the Lots two and four, the southeast quarter of the southwest quarter and the south half of the southeast quarter of Section eighteen, the southeast quarter of the southeast quarter of Section seventeen, the southeast quarter of the southwest quarter of Section sixteen, the Lots one and two, the south half of the southeast quarter and the northeast quarter of the southeast quarter of Section thirty, the west half of the southwest quarter of Section twenty, the northwest quarter of the northwest quarter of Section twenty-nine and the southwest quarter of Section twenty-one in Township seven north of Range seventy-three west, the Lots two and three, the southeast quarter of the northwest quarter and the southwest quarter of the northeast quarter of Section six, the northwest quarter of the southeast quarter of Section eight, the south half of the northeast quarter and the north half of the southeast quarter of Section eighteen, the north half of the northwest quarter of Section sixteen and the northeast quarter of the southwest quarter, the north half of the southeast quarter and the southeast quarter of the northeast quarter of Section twenty-nine in Township seven north of

Denver 022401

4-1044

Range seventy-two west and the northeast quarter of the southeast quarter of Section twenty-three and the southeast quarter of the northeast quarter and the northwest quarter of the southeast quarter of Section twenty-six in Township



... north of Range seventy west of the Sixth Principal Meridian, Colorado, containing one thousand six hundred and nine acres and eighty seven hundredths of an acre, according to the Official Plat of the Survey of the Land, returned to the General Land Office by the Surveyor General:

NOT KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress approved June 25 1910 (36 Stat., 847), HAS GIVEN AND GRANTED, and by these presents DO GIVE AND GRANT, unto the said State of Colorado, and to its assigns, the lands above described; TO HAVE AND HOLD the same, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said State of Colorado, and to its assigns forever, in accordance with the provisions of said Act; subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.

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Given under my hand, in the District of Columbia, the twenty fifth day of May in the year of our Lord one thousand nine hundred and twenty three and of the Independence of the United States the one hundred and forty sixth.

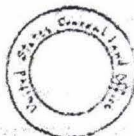
By the President:

Warren G. Harding

By Viola B. Fugh, Secretary.

M. P. LeRoy

Recorder of the General Land Office.



Patent Number 907602

Filed for record at 11.50 A. M., October 14, 1924.

Matthew Auld,....Recorder

G. R. Cushing...Deputy

AGREEMENT FOR SALE AND PURCHASE OF PROPERTY.

THIS AGREEMENT, Made in duplicate, this 13th day of October, A. D. 1924, between James Farquharson, of the County of Larimer, and State of Colorado, of the first part, and E. M. Bullock and Leota Bullock, of the second part:

WITNESSETH, That if the parties of the second part shall first make the payments and perform the covenants herein mentioned to be made and performed by the party of the second part, the party of the first part will hereupon convey to the parties of the second part the following described property situate in the County of Larimer and State of Colorado, to-wit:

Lot twenty four (24), in Block Seventy-six (76), in the city of Fort Collins, Colorado: free simple by good and sufficient Warranty Deed, free and clear from all liens and encumbrances except deed of trust dated October 4th, 1924, securing \$4,000.00 to Mary P. Stover in five years, with interest at 7% per annum, payable semi-annually; and deliver an abstract of title therefor so showing.

And the parties of the second part agree to pay, to the party of the first part, as the purchase price for said property, the sum of Sixty five hundred (\$6500.00) Dollars, in the manner following, to-wit:

Twenty thousand (\$2,000.00) dollars cash in hand paid, the receipt whereof is hereby acknowledged, and \$500.00 per month, the first payment to be made on or before November 1st, 1924; when said \$500.00 is paid, with the interest thereon, second parties shall be entitled to the deed above mentioned, and shall assume and agree to pay said above mentioned \$4000.00 encumbrance; also assume all unpaid

January 11, 1978

RECEIVED OF: Michael Brent Hoff

AMOUNT OF: \$2500.00

For Monument Gulch timber sale



Nursery & Fire Warehouse  
**Foothills Campus on West**  
**La Porte Avenue, Fort Collins,**  
**Colorado. Phone: 482-9512**

**COLORADO STATE FOREST SERVICE**  
**Colorado State University**  
**Phone: 482-8185**  
**Fort Collins, Colorado 80521**

File \_\_\_\_\_ CSFS #800

Original Invoice  
 TRANSACTION NO. **15339**

THIS IS A:  Sale:  Cash,  Charge.

CSU Sales Service Inv. # \_\_\_\_\_

Batch Report of \_\_\_\_\_

Intra CSFS property transfer.

Trust Fund Purch.  Mdse. return.

Remarks: \_\_\_\_\_

SOLD TO  or  
 Transfer from  **Mike Brinkhoff**

Bill to: \_\_\_\_\_

Addresses: \_\_\_\_\_

Town: \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

SEND TO  or  
 Transfer to  Address \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

How: Customer Pickup  
 (Item Nos. & Dates)

Comm'l Carrier \_\_\_\_\_

CSFS Delivery \_\_\_\_\_

Collect   
 Prepay   
 Prepay & Bill

Order Authz'd by: \_\_\_\_\_

(circle one)  
 Order \_\_\_\_\_ Letter \_\_\_\_\_

Tel. \_\_\_\_\_ In Person \_\_\_\_\_

Title \_\_\_\_\_  
 Purchase Ord. No. \_\_\_\_\_

Item No.	CSU # SOURCE	Inv't'y Loc.		QUANTITY		UNIT	Full Description Key Name	(WRITE FIRMLY & CORRECTLY USING BALL POINT) Stk.#, Size, S/N, Mfr. (Also describe services)			N-E	Unit Cost	Total	
		From	To	Ord'd	Final									
1.	.....	B					<b>Monument Gulch Timber Sale (partial payment)</b>							
2.	.....	R												
3.	.....	B												
4.	.....	R												
5.	.....	B												
6.	.....	R												
7.	.....	B												
8.	.....	R												
9.	.....	B												
10.	.....	R												

Also use this line for shipping or delivery chgs. to be collected.

CSFS ORIGINATOR

CSFS Employee originating this transaction:  
 Sign: \_\_\_\_\_  
 Date: \_\_\_\_\_ Dist. or Project \_\_\_\_\_  
 Notified originator of payment   
 Rfd. Req# \_\_\_\_\_ Am't. \_\_\_\_\_

Customer's receipt for above items numbered:  
 Sign: \_\_\_\_\_  
 Date: \_\_\_\_\_

Fd-Srce	Dept	Proj	Class	Amount
<b>Transfer of cash to E.J. Early, CSU</b>				

Invoice date \_\_\_\_\_ Co. Voucher sent   
 Submit \_\_\_\_\_ copies. \_\_\_\_\_

Total of above  
 Amt. Pd. \_\_\_\_\_  
 Ck-Ca-Mo \_\_\_\_\_  
 AMT. DUE \_\_\_\_\_  
 Pd. Ck# \_\_\_\_\_ Dated \_\_\_\_\_  
 Rcvd by \_\_\_\_\_ F.Y. \_\_\_\_\_







Nursery & Fire Warehouse  
**Foothills Campus on West**  
**La Porte Avenue, Fort Collins,**  
**Colorado. Phone: 482-9512**

**COLORADO STATE FOREST SERVICE**  
**Colorado State University**  
**Phone: 482-8185**  
**Fort Collins, Colorado 80521**

File F4I CSFS #800

**15747**

SOLD TO  or Bill to:  
 Transfer from  **Mike Brinkhoff**  
 Addresses: \_\_\_\_\_  
 Town: \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 SEND TO  or \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Transfer to  \_\_\_\_\_ Address \_\_\_\_\_

Original Invoice  
 TRANSACTION NO. \_\_\_\_\_  
 THIS IS A:  Sale:  Cash,  Charge.  
 CSU Sales Service Inv. # \_\_\_\_\_  
 Batch Report of \_\_\_\_\_  
 Intra CSFS property transfer.  
 Trust Fund Purch.  Mdse. return.  
 Remarks: \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 How:  Customer Pickup  Comm'l Carrier  CSFS Delivery  
 (Item Nos. & Dates) Collect   
 Prepay   
 Prepay & Bill

Order Authz'd by: \_\_\_\_\_  
 (circle one)  
 Order \_\_\_\_\_ Letter \_\_\_\_\_  
 Tel. \_\_\_\_\_ In Person \_\_\_\_\_  
 Title \_\_\_\_\_  
 Purchase Ord. No. \_\_\_\_\_

Item No.	CSU # SOURCE	Inv't'y Loc.		QUANTITY		UNIT	Full Description Key Name	(WRITE FIRMLY & CORRECTLY USING BALL POINT)							
		From	To	Ord'd	Final			Stk.#, Size, S/N, Mfr. (Also describe services)	N-E	Unit Cost	Total				
1.	.....	B					<b>Monument Timber Sale</b>								
		R													
2.	.....	B													
		R													
3.	.....	B													
		R													
4.	.....	B													
		R													
5.	.....	B													
		R													
6.	.....	B													
		R													
7.	.....	B													
		R													
8.	.....	B													
		R													
9.	.....	B													
		R													
10.	.....	B													
		R													

Also use this line for shipping or delivery chgs. to be collected.

CSFS Employee originating this transaction:  
 Sign: \_\_\_\_\_  
 Date: **10/21/77** Dist. or Project **FC**  
 Notified originator of payment   
 Rfd. Req# \_\_\_\_\_ Am't. \_\_\_\_\_

Customer's receipt for above items numbered:  
 Sign: *[Signature]*  
 Date: *[Date]*

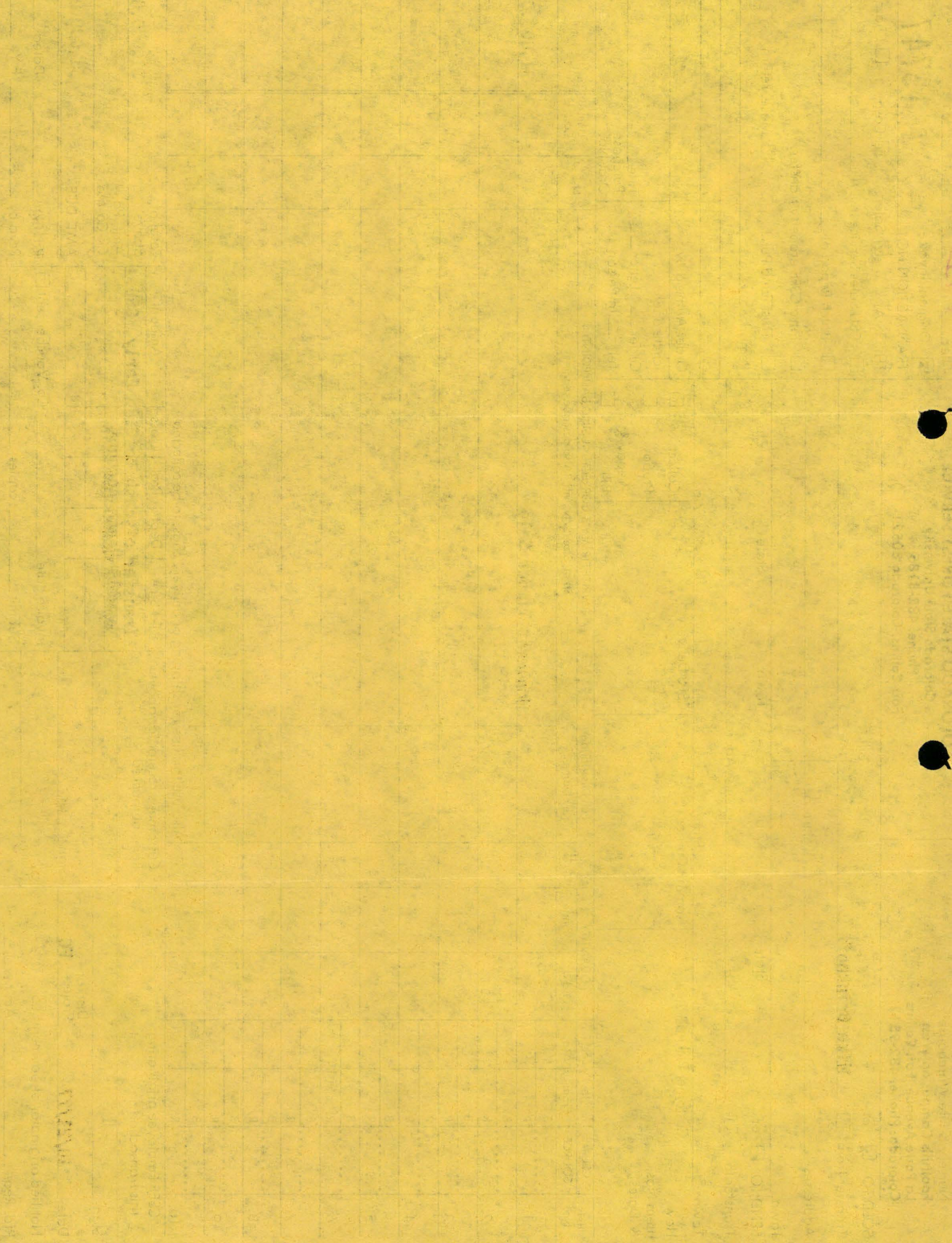
Fd-Srce	Dept	Proj	Class	Amount
				<b>Transfer of cash to E.J. Early, CSU.</b>
				<del>Maxwell Ranch Account</del>

Invoice date \_\_\_\_\_ Co. Voucher sent   
 Submit \_\_\_\_\_ copies \_\_\_\_\_

Total of above **\$1,000.00**  
 Amt. Pd. \_\_\_\_\_  
 Ck-Ca-Mo \_\_\_\_\_  
 AMT. DUE **\$1,000.00**  
 Pd. Ck# \_\_\_\_\_ Dated \_\_\_\_\_  
 Rcvd by \_\_\_\_\_ F.Y. \_\_\_\_\_

CSFS ORIGINATOR





HS

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ISBN 0-02-231462-7

000000



# PHONE CALL

Date \_\_\_\_\_

Mr. Allen Westcamp

You were called at \_\_\_\_\_

By Mr. \_\_\_\_\_

Call him at \_\_\_\_\_

His message was \_\_\_\_\_

Received 1000<sup>00</sup> Cash  
for first payment  
on amount given under  
from Mike Brinkhoff  
E. H. Long

PROCLAIM LIBERTY THROUGHOUT ALL THE LAND  
USA 13c



Colorado State Forest Service  
Colorado State University  
Fort Collins, Colorado  
80523

~~W.C. Hopkins  
6901 Tall Spruce Dr.  
Anch, Ak 99502~~

Attn  
Mr. Mark Horwath Jr.  
District Forester.



8





Mark B Harvat Jr.  
District Forester  
Colorado State Forest Service  
Ft. Collins, Co. 80523

Dear Mr. Harvat:

I will grant you permission to use the temporary road that crosses our property in the Poudre River area if you will guarantee that the road will be returned to its present state after you are done using it for the logging operation.

We are glad to cooperate with the State Forest Service and hope you are successful in your fight against the mountain pine beetle.

Sincerely  
Warren C. O'Neil Jr.  
6901 Tall Spruce Dr.  
anch. ak 99502



file

Colorado State Forest Service

Colorado State University  
Fort Collins, Colorado  
80523

June 29, 1977

Mr. Warren C. Hoflich, Jr.  
6901 Tall Spruce Drive  
Anchorage, Alaska 99502

Dear Mr. Hoflich:

As you know the Front Range of Colorado, and in particular Larimer County, is experiencing a very severe epidemic of mountain pine beetle. These beetles are destroying thousands of acres of ponderosa pine in our forest stands. In an effort to lower the epidemic and utilize this dead wood, private landowners, the U.S. Forest Service, and the Colorado State Forest Service are jointly trying to harvest this valuable natural resource. If this wood is not harvested, generally within five years after death, it is lost to rot.

To make one phase of this program successful, your assistance is needed. According to the Larimer County Courthouse, you own property bordering the following described Colorado State University holdings: E $\frac{1}{2}$  NW $\frac{1}{4}$ , W $\frac{1}{2}$  NE $\frac{1}{4}$ , S6, T7N, R72W, 6th PM. This property is approximately one mile off the Pingree Park Road, up Monument Gulch Road. In order to facilitate removal of the insect and disease infested trees from this 160 acres of CSU ownership, a temporary right-of-way across your land would be very helpful. This right-of-way would consist of improving approximately 200 yards of an existing four-wheel drive trail into the logging area. Both four-wheel drive pickup and logging trucks would be using this temporary road.

If you will grant up permission to use this temporary road, I will personally guarantee:

1. Winter use only, thereby minimizing any disturbance to the terrain.
2. The road will be levelled, water-barred, and seeded to eliminate erosion after completion of the timber sale.

If your permission is not granted, approximately one-half mile of new, temporary road will have to be built through the CSU ground. It will be cheaper and less disruptive to the environment if you will allow us the temporary right-of-way.

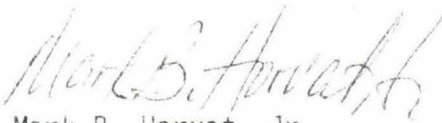


Mr. Warren C. Hoflich, Jr.  
June 29, 1977  
Page Two

To help orient you, I have enclosed a map showing the proposed road.  
If you have any further questions, I can be reached by calling  
303-482-9512 or by writing to me at the address on the letterhead.

Thank you for your time and effort.

Sincerely,



Mark B. Horvat, Jr.  
District Forester

MBH/js

Encl.



file

Colorado State Forest Service

Colorado State University  
Fort Collins, Colorado  
80523

June 29, 1977

Mr. Joseph W. Harper  
Route 1, Box 2685  
Longmont, Colorado 80501

Dear Mr. Harper:

As you know the Front Range of Colorado, and in particular Larimer County, is experiencing a very severe epidemic of mountain pine beetle. These beetles are destroying thousands of acres of ponderosa pine in our forest stands. In an effort to lower the epidemic and utilize this dead wood, private landowners, the U.S. Forest Service, and the Colorado State Forest Service are jointly trying to harvest this valuable natural resource. If this wood is not harvested, generally within five years after death, it is lost to rot.

To make one phase of this program successful, your assistance is needed. According to the Larimer County Courthouse, you own property bordering the following described Colorado State University holdings: E $\frac{1}{2}$  NW $\frac{1}{4}$ , W $\frac{1}{2}$  NE $\frac{1}{4}$ , S6, T7N, R72W, 6th PM. This property is approximately one mile off the Pingree Park Road, up Monument Gulch Road. In order to facilitate removal of the insect and disease infested trees from this 160 acres of CSU ownership, a temporary right-of-way across your land would be very helpful. This right-of-way would consist of improving approximately 200 yards of an existing four-wheel drive trail into the logging area. Both four-wheel drive pickup and logging trucks would be using this temporary road.

If you will grant us permission to use this temporary road, I will personally guarantee:

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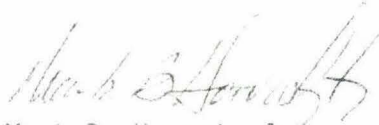
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June 29, 1977  
Page Two

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If you have any further questions, I can be reached by calling  
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Thank you for your time and effort.

Sincerely,



Mark B. Horvat, Jr.  
District Forester

MBH/js

Encl.





- Lodgepole  
clearcut



Lodgepole thinning



MIPB - Pine  
"clearcut"



selective - shelter-  
wood cuts



LPP - potential  
Post-pole clearcut



Colorado State University  
Fort Collins, Colorado  
80523

Colorado State Forest Service

April 7, 1977

Mark B. Horvat, Jr.  
482-9512

...for immediate release...

### Public Notice of Timber for Sale on State Land

Notice is hereby given by Mark Horvat, Jr., District Forester, Colorado State Forest Service, for a timber sale located within E $\frac{1}{2}$  NW $\frac{1}{4}$ , W $\frac{1}{2}$  NE $\frac{1}{4}$ , Section 6, Township 7 North, Range 72 West, 6th P.M., Larimer County, Colorado. Sealed bids will be received by the District Forester, Colorado State Forest Service, Foothills Campus, Colorado State University, Fort Collins, Colorado 80523. Attention: Monument Gulch Timber Sale, at 2:00 P.M. local time at the place of bid opening May 9, 1977. Timber will be sold to the highest responsible bidder.

Timber for sale is post, pole, and sawtimber size material. Principal species are ponderosa pine, lodgepole pine, and Douglas-fir. All timber is marked or otherwise designated for cutting on 84 acres, more or less. Approximately one mile of temporary road construction will be required. Sale will be awarded to the single bidder submitting the most advantageous overall bid. Minimum bid on this sale is \$6500.

No bids less than the minimum price indicated for the sale will be considered. Payment will be made in three installments. Initial payment in the amount of \$2000 will be made at the time the contract is awarded to the successful bidder. An additional deposit of \$1500 as a surety bond will also be required at this same time.

...More...





Full information concerning the timber and conditions of the sale may be obtained from Mark Horvat, district office located on West LaPorte Avenue at the State Forest Service Nursery, or 482-9512. A tour of the timber sale area will leave from this location at 9:30 A.M. local time, May 3, 1977.

Mr. Horvat reserves the right to reject any or all bids.

-CSFS-

# SALE VOLUMES

	ACRES	VOL/AC	TOTAL VOL
UNIT 1	6.3	866 CF	5456 CF
		2843	17911 BF
1 - CC	4.9	1441 CF	7060 CF
		6099 BF	29885 BF
UNIT 2a	7 11 } 18	1387 CF	24970 CF
		5958 BF	107245 BF
UNIT 3a	4.1	3014 CF	12357 CF
		1915 BF	7852 BF
3b-CC#1	3.9	6459 CF	25190 CF
		4104 BF	16006 BF
3b-CC#2	2.3	1318	14856 CF
			9439 BF
3b-THIN	3.3	3014 CF	9946 CF
		1915 BF	6320 BF
UNIT 4 - DE	3.0	2285 CF	6855 CF
		19364 BF	58093 BF
4 - CC	13.7	1768 CF	24221 CF
		1708 BF	23400 BF
UNIT 5	18.0	1508 CF	27144 CF
		5833 BF	104,994 BF
UNIT 6a	3.7	2645 CF	9787 CF
		11955 BF	44234
UNIT 7	2.9	866 CF	2511 CF
		2843 BF	8245 BF
Misc - along road			<u>5000 CF</u> 30,000 BF
			175,353 CF 463,624 BF







Please help me PREVENT FOREST FIRES!

## MONUMENT GULCH Sale Areas

Unit 1 - 6.25 acres - shelterwd  
1 CC - 4.9 acres

2a - 6.8 ac } salvage  
2b - 11.7 ac }

3a - 4.1 ac (thin)

3b CC#1 - 3.9 ac

CC#2 - 2.3 ac

thin - 3.3 ac

4 DF - 3.0 ac shelterwd

4 CC - 16.7 - 3.0 ac of DF - 13.7

5 - 18 ac salvage

6 - 3.7 ac shelterwd

7 - 2.9 ac sanitation

---

84.6



11

11



YIELDS PER ACRE OF LODGEPOLE PINE, STAND NUMBER 1.

SITE INDEX 45  
 THINNING INTENSITY-- INITIAL-- 80. SUBSEQUENT-- 80.

CSU MONUMENT GULCH

CHARACTERISTICS BEFORE AND AFTER THINNING

PERIODIC INTERMEDIATE CUTS

STAND AGE (YEARS)	DMR	TREES NO.	BASAL AREA SQ.FT.	AVERAGE D.B.H. IN.	AVERAGE HEIGHT FT.	TOTAL VOLUME CU.FT.	MERCHANT-ABLE VOLUME CU.FT.	SAWTIMBER VOLUME BD.FT.	TREES NO.	BASAL AREA SQ.FT.	TOTAL VOLUME CU.FT.	MERCHANT-ABLE VOLUME CU.FT.	SAWTIMBER VOLUME BD.FT.
60	1.8	675	81	4.7	34	1360	0	0					
60	.7	323	34	4.4	32	550	0	0	352	47	810	0	0
70	.9	318	51	5.4	36	920	280	0	0	0	0	0	0
70	.9	318	51	5.4	36	920	280	0	0	0	0	0	0
80	1.3	315	66	6.2	40	1310	730	0					
80	1.0	274	59	6.3	40	1190	700	0	41	7	120	30	0
90	1.3	272	75	7.1	43	1600	1250	0					
90	1.0	237	67	7.2	43	1440	1150	0	35	8	160	100	0
100	1.3	235	80	7.9	45	1820	1570	5900					
100	1.0	208	73	8.0	45	1660	1440	5900	27	7	160	130	0
110	1.7	205	85	8.7	48	2030	1840	7500					
110	1.4	182	77	8.8	48	1850	1680	6900	23	8	180	160	600
120	2.1	179	88	9.5	50	2200	2040	8500					
TOTAL YIELDS											3630	2040	8500

MERCH. CU. FT. - TREES 6.0 INCHES D.B.H. AND LARGER TO 4.0-INCH TOP.  
 BD. FT. - TREES 6.5 INCHES D.B.H. AND LARGER TO 6.0-INCH TOP.  
 INITIAL THINNING FROM ABOVE ALLOWED IN STANDS WITH DWARF MISTLETOE.  
 DWARF MISTLETOE RATING ABOVE WHICH PERIODIC THINNINGS WILL NOT BE EXECUTED - 3.0.  
 MINIMUM CUTS FOR INCLUSION IN TOTAL YIELDS-- 240. CUBIC FEET AND 1000. BOARD FEET.  
 ALL THINNINGS MAY BE NONCOMMERCIAL.  
 NOTE THAT NOT ALL SCHEDULED THINNINGS WERE POSSIBLE.



LINE NO.	DESCRIPTION	QTY	UNIT PRICE	TOTAL	TAX	NET TOTAL	AMOUNT PAID	AMOUNT DUE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								

ALL PAGES ARE OF APPROXIMATE EQUAL SIZE AND WEIGHT.



YIELDS PER ACRE OF LODGEPOLE PINE, STAND NUMBER 1.

SITE INDEX 45  
 THINNING INTENSITY-- INITIAL- 80. SUBSEQUENT- 80.

CSU MONUMENT GULCH STATUS QUO HORVAT

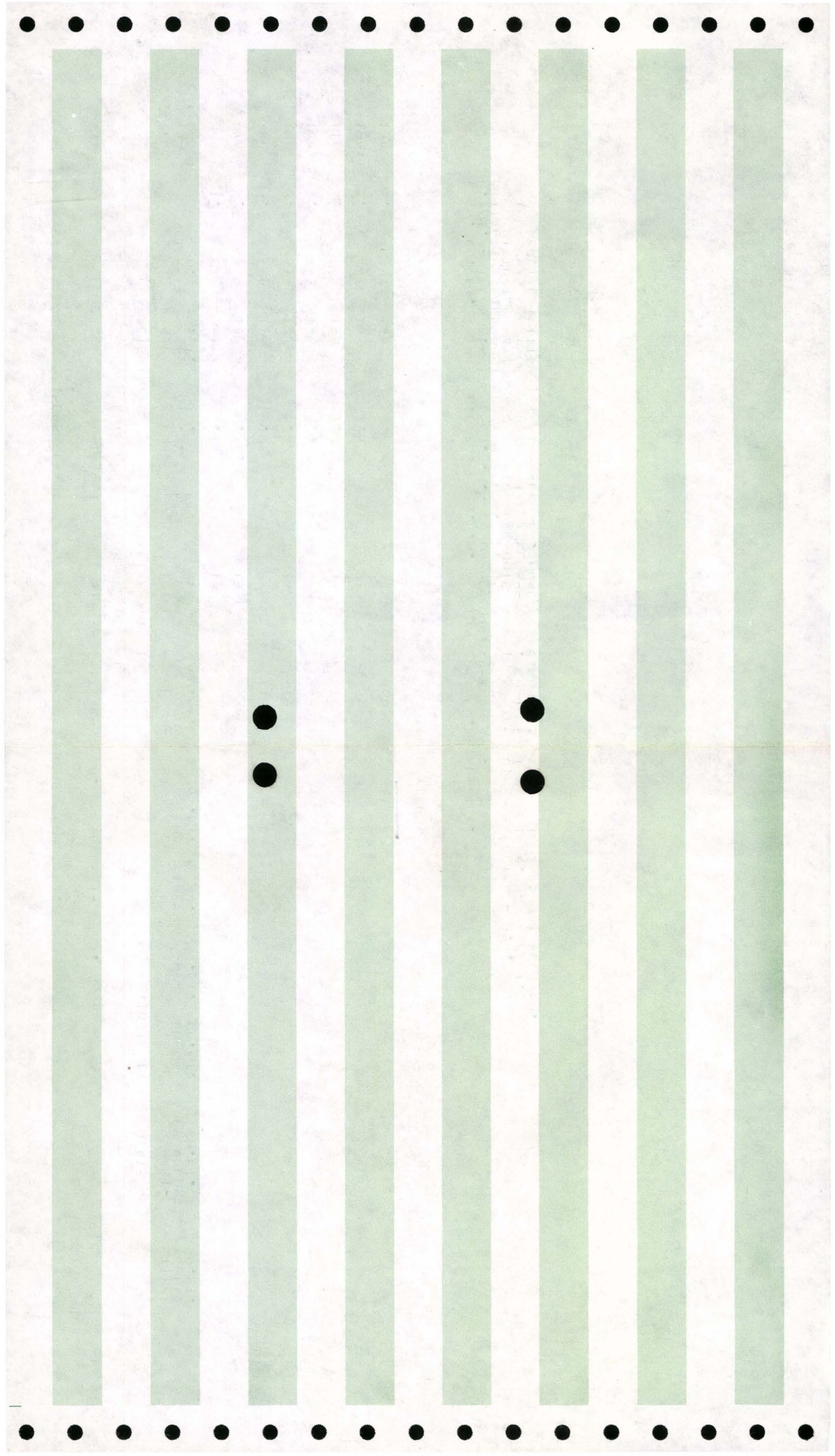
CHARACTERISTICS BEFORE AND AFTER THINNING

PERIODIC INTERMEDIATE CUTS

STAND AGE (YEARS)	DMR	TREES NO.	BASAL AREA SQ.FT.	AVERAGE D.B.H. IN.	AVERAGE HEIGHT FT.	TOTAL VOLUME CU.FT.	MERCHANT-ABLE VOLUME CU.FT.	SAWTIMBER VOLUME BD.FT.	TREES NO.	BASAL AREA SQ.FT.	TOTAL VOLUME CU.FT.	MERCHANT-ABLE VOLUME CU.FT.	SAWTIMBER VOLUME BD.FT.
60	1.8	675	81	4.7	34	1380	0	0					
70	2.5	669	102	5.3	38	1950	530	0					
80	3.2	650	123	5.9	40	2420	112	0					
90	3.9	614	137	6.4	42	2870	1790	0					
100	4.6	563	146	6.9	44	3230	2430	0					
110	4.9	502	150	7.4	45	3370	2740	0					
120	5.3	441	146	7.8	46	3330	2850	0					
130	5.6	381	140	8.2	46	3230	2850	11700					
TOTAL YIELDS											0	0	0

MERCH. CU. FT. - TREES 6.0 INCHES D.B.H. AND LARGER TO 4.0-INCH TOP.  
 BD. FT. - TREES 6.5 INCHES D.B.H. AND LARGER TO 6.0-INCH TOP.  
 INITIAL THINNING MUST BE FROM BELOW.  
 DWARF MISTLETOE RATING ABOVE WHICH PERIODIC THINNINGS WILL NOT BE EXECUTED - 3.0.  
 MINIMUM CUTS FOR INCLUSION IN TOTAL YIELDS-- 240. CUBIC FEET AND 1000. BOARD FEET.  
 PRECOMMERCIAL INITIAL THINNING ALLOWED. NONCOMMERCIAL SUBSEQUENT THINNINGS NOT ALLOWED.





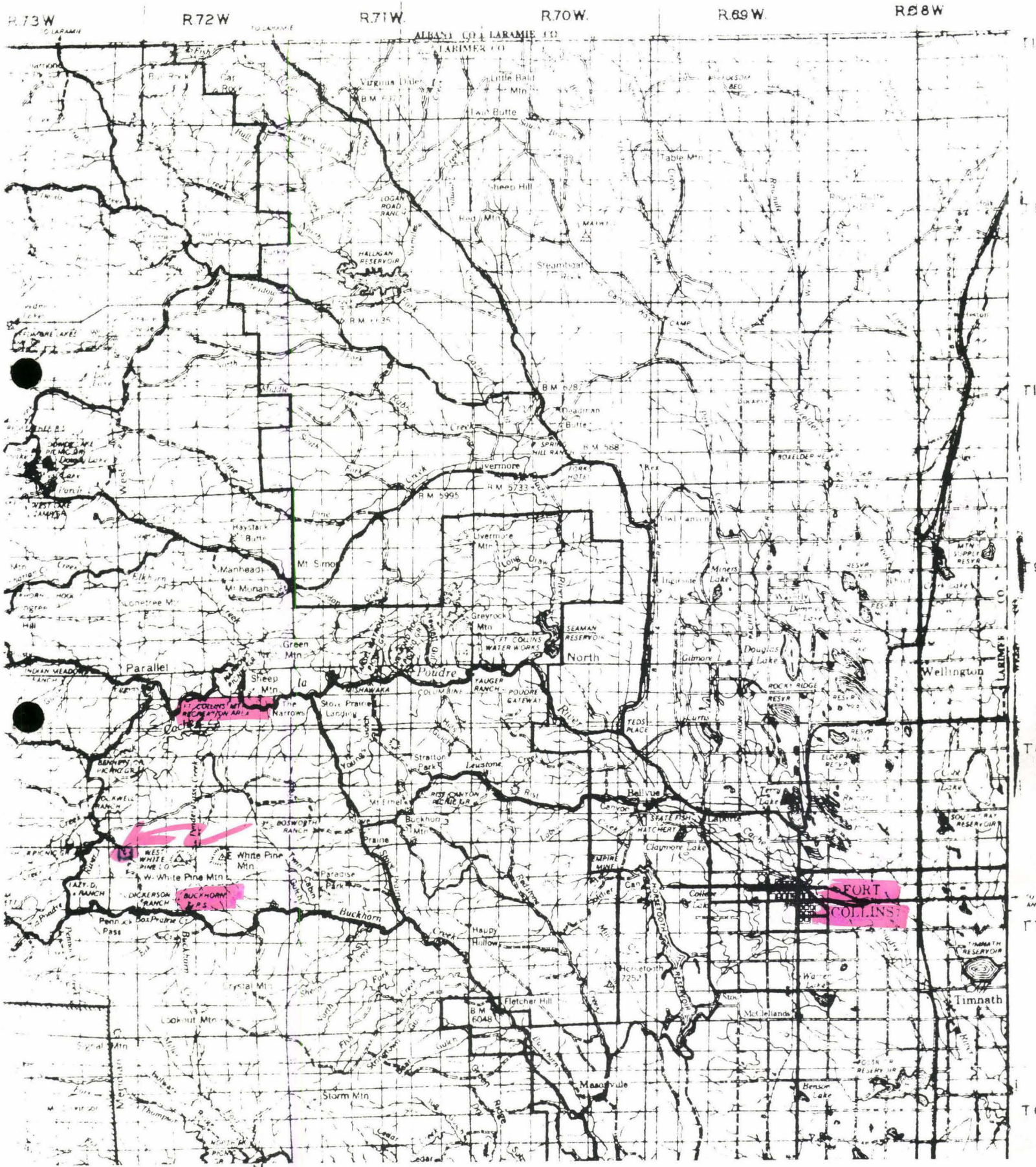
FOREST MANAGEMENT PLAN  
COLORADO STATE UNIVERSITY  
MONUMENT GULCH  
S6, T7N, R72W

Prepared By:

Mark B. Horvat  
Colorado State Forest Service  
Fort Collins, Colorado



# LOCATION MAP



Scale 1/4 inch = 1 mile



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## I. INTRODUCTION

### Purpose

This plan is intended to provide a management schedule for the forested area on 160 acres of CSU property located in Monument Gulch.

Management of the property will be chiefly concerned with converting the forest to a healthy, vigorous stand of trees, free of insects and diseases. High priority will be placed on improving wood production, recreational values, and fire protection.

### Location

The property is located in Central Larimer County, Colorado, and legally described as follows: E $\frac{1}{2}$  NW $\frac{1}{4}$ , W $\frac{1}{2}$  NE $\frac{1}{4}$ , S6, T7N, R72W, 6PM.

It is approximately 50 miles west of Fort Collins. Access is available through Buckhorn or Poudre Canyons. The 160 acres is bisected by the Monument Gulch Road, which connects the Pingree Park Road and the Buckhorn Canyon Road.

### History of the Forest

This property was acquired by the State Board of Agriculture under Patent 907602 from the U.S. Government. Administration of the land originally was passed to the College of Forestry but has since come under the general supervision of the University.

Most of the accessible areas were cut over at some time in the distant past. In addition, evidence indicated the area has been burned over by fire. The lodgepole stands are a direct result of fires that occurred before the turn of the century.

## II. FOREST DESCRIPTION

### A. Explanation of forest divisions.

#### 1. Useable and nonuseable areas.

The following factors determined whether an area was nonuseable:

- a. Slope - over 30 percent
- b. Barren surface rock

These factors were used because the economic and safety hazards of logging are greatly increased when these conditions exist.

#### 2. Forest types.

The assignment of type rested upon the species which are predominant in the stand. Species which appear in the type name in most cases form fifty percent or more of the composition. Predominance was judged on the number of stems in the dominant and codominant classes combined. If more than one species is listed in the type name predominance is figured by combining the number of species in the name.

#### 3. Size classes.

The two classes used for segregation of the stand were roundwood and sawtimber. Roundwood material is 4-11 inches dbh. Sawtimber is 11+ inches dbh.

### B. Areas.

Total land area is 160 acres, all contiguous. To facilitate management the forest stands have been divided into units each with numerical designations. Within each management unit the forest stands have been categorized according to type, size and use. These areas are as follows:



Table 1  
AREAS BY MANAGEMENT UNIT AND USE, 1976

Unit	Roundwood acres	Sawtimber acres	Useable acres	Nonuseable acres	Total Area	
					acres	percent
1	0	14	9	5	14	9
2a	0	7	6	1	7	4
2b	0	11	7	4	11	7
3a	3	0	3	0	3	2
3b	4	0	0	4	4	3
3c	26	0	18	8	26	16
4	16	4	14	6	20	12
5	0	28	18	10	28	18
6a	0	14	14	0	14	9
6b	2	0	2	0	2	1
7	0	31	0	31	31	19
	<u>51 (32%)</u>	<u>109 (68%)</u>	<u>91 (57%)</u>	<u>69 (43%)</u>	<u>160</u>	<u>100%</u>

Table 2  
Forest Types, By Useable and Total Acres, 1976

Type	Roundwood	Sawtimber	Total
Ponderosa pine	—	31	46
Lodgepole pine	21	12	51
Lodgepole pine - Douglas-fir	—	11	16
Mixed Conifer	—	14 (1)	14
Blue spruce	2	—	2
Ponderosa pine - Douglas-fir	—	—	31
	<u>23</u>	<u>68</u>	<u>160</u>

(1) Understory could be managed for Christmas Trees or transplant stock.

C. Stand Description.

Each management unit is principally a different forest type, with some variations. Most of the variances are for size and use. Unit descriptions are as follows.

Unit 1

- a. Type: Lodgepole pine - Douglas-fir
- b. Condition: Overmature. Heavily infested with dwarf mistletoe causing the lodgepole pine to break up. Single-storied stand.





The Douglas-fir, although, overmature has good form with no heart rot. Regeneration is primarily Douglas-fir and understocked.

- c. Site: Site index is 66. North aspect and slope ranges from 5-30+ percent. Good soil moisture regime.
- d. Management problems: Accessibility. A road will have to be built into the unit. Slope over 30 percent will pose a logging problem.

#### Unit 2

- a. Type: Ponderosa pine
- b. Condition: Old growth with little or no reproduction. Heavily infested with mountain pine beetle. Some old beetle hit trees are falling down. Many old hit trees have been dead for at least three years. Sparse regeneration is primarily spruce, Douglas-fir, and aspen. Heavy grass cover.
- c. Site: Site index 62. Some surface rock. Slope exceeds 30 percent in a relatively short distance after leaving the bottom.
- d. Management problems: 1) U.S. Forest Service phone line to Buckhorn Ranger Station runs through the unit. It poses a problem for felling, skidding, loading, and hauling. 2) Establishment of ponderosa pine reproduction.
- e. Miscellaneous: Evidence of elk usage.

#### Unit 3

- a. Type: Lodgepole pine.
- b. Condition: Primarily pole age material and overcrowded. Unit 3a

was thinned at one time but requires another reduction in basal area. Unit 3b, located along the south boundary, is extremely dog haired, and stagnated. Dwarf mistletoe present. Single-storied with no underbrush, grass or reproduction. Western gall rust, although not abundant, is very evident throughout the stand.

- c. Site: Site index 52, north aspect, slope 20-35 percent.
- d. Management problem: Good potential for management, but slopes and accessibility will cause some problems.
- e. Miscellaneous: Evidence of elk usage.

#### Unit 4

- a. Type: Lodgepole pine.
- b. Condition: Overmature, heavily infested with dwarf mistletoe. Although overmature stand borders on pole-sawtimber size material. Douglas-fir is scattered throughout the unit. Generally of good size and form, with no heart rot. Some Douglas-fir regeneration is scattered throughout the stand.
- c. Site: Site index 50-55, north aspect, slope 20-30 percent.
- d. Management problems: Accessibility and slope.
- e. Miscellaneous: Evidence of elk usage.

#### Unit 5

- a. Type: Ponderosa pine.
- b. Condition: Before attack by mountain pine beetle the stand was fairly thrifty. Although overstocked and at maturity it looked in fairly good condition. Mountain pine beetle, though, has all but decimated the pine stand. Open grown with abundant grass. No regeneration.



- c. Site: Site index 45-50, south aspect, slope 25-35 percent.
- d. Management problems: 1) Accessibility, steep slopes. 2) U.S. Forest Service telephone line. 3) Limited space for a landing.

Unit 6

- a. Type: Mixed conifer (lodgepole pine, ponderosa pine, Douglas-fir, spruce, subalpine fir).
- b. Condition: Multi-storied stand. Overstoried material is overmature, and possesses some very large trees. Reproduction is very abundant, in patches, and consists primarily of spruce, subalpine fir, and Douglas-fir. Lodgepole pine is infested with dwarf mistletoe.
- c. Site: Site index 65-70, north aspect, slope 0-25 percent.
- d. Management problems: 1) Access across intermittent stream.  
2) U.S. Forest Service telephone line.

Unit 7

- a. Type: Ponderosa pine - Douglas-fir.
- b. Condition: Stand was not inventoried because of extreme steepness of slope and large amount of surface rock.

D. Stocking, by volume.

Table 3  
Volume Per Management Unit By Species, 1976

Species	Unit 1		Unit 2		Unit 3		Unit 4		Total	
	Cubic Feet	Board Feet	Cubic Feet	Board Feet	Cubic Feet	Board Feet	Cubic Feet	Board Feet	Cubic Feet	Board Feet
Ponderosa pine	4,324	11,522	25,327	109,120	0	0	0	0	29,651	120,642
Lodgepole	4,637	10,462	3,790	5,957	33,043	19,674	31,768	27,509	73,238	63,602
Douglas-fir	10,743	61,472	2,353	13,489	3,521	4,130	3,553	6,627	20,170	85,718
Spruce	464	1,926	3,259	13,307	0	0	0	0	3,723	15,233
	20,168	85,382	34,652	139,605	37,462	23,804	35,356	34,170	125,525	282,960





Table 4  
Volume Per Management  
Unit By Size Class, 1976

Unit	Item	Diameter Classes (Inches)					Total
		5-7	8-10	11-14	15-19	20+	
1	Cords	2	44	133	72	0	251
	Cubic Feet	194	3,532	10,654	5,788	0	20,168
	Board Feet	0	0	50,638	34,744	0	85,382
2	Cords	25	37	127	157	88	434
	Cubic Feet	1,957	2,972	10,164	12,563	6,997	34,653
	Board Feet	—	—	40,619	58,719	40,267	139,605
3	Cords	225	149	71	0	0	445
	Cubic Feet	18,032	11,925	5,661	0	0	35,618
	Board Feet	—	—	23,803	0	0	23,803
4	Cords	122	209	108	0	0	439
	Cubic Feet	9,743	16,693	8,650	0	0	25,343
	Board Feet	—	—	34,170	0	0	34,170
Total	Cords	374	439	439	229	88	1,569
	Cubic Feet	29,926	35,122	35,129	18,351	6,997	125,525
	Board Feet	—	—	149,230	93,463	40,267	282,960

E. Growth, by management unit.

Table 5  
Timber Growth, 1976

	Unit 1 Lodgepole Douglas-fir	Unit 2 Ponderosa Pine	Unit 3 Lodgepole Pine	Unit 4	Unit 5	Unit 6 Mixed Conifer
Average Age Range	150-170 yrs.	150-170	70-90	180+	Unknown	150-170
Average DBH	12.6"	12.1"	5.7"	8.0"	But	
Average Height	63'	60'	40'	44'	Similar	
Average Site Index	66	62	52	50	To	65-70
Rings Per Last Inch of Radial Growth	26	30	29	35	Unit	25
Growth Rate Percent	1.5	1.5%	2.2	1%	2	2.1
Adjective Rating	Low	Low	Low	Low		Low
Average Volume Per Acre	1,441 CF/A 6,099 BF/A	1,925 CF/A 7,756 BF/A	1,292 CF/A 821 BF/A	1,768 CF/A 1,708 BF/A	1508CF 5833BF	2645CF Unknown 11955BF
Growth Per Acre Per Year	22 CF/A 91 BF/A	29 CF/A 116 BF/A	28 CF/A 18 BF/A	11 CF/A 11 BF/A		

### III. PROPOSED MANAGEMENT

#### A. Production Aims

To improve the quality of the forested landscape, a program of proper forest management is needed. This can be accomplished by selecting silvicultural methods to a) reduce mountain pine beetle and dwarf mistletoe infestations, b) regenerate stands that are old and dying, and c) reduce density in areas of overcrowding.

#### B. Silviculture

##### 1. Regeneration Methods:

Natural regeneration is the only method considered on this property. No artificial methods have been considered because of the expense involved. At this time such an expense cannot be warranted with the economic values at stake.

Natural regeneration cuttings serve two purposes. First they harvest trees that are mature according to management criteria. Second they create conditions favorable for establishment of a new stand of trees.

##### a. Guiding Principles.

##### Units 1,3,4

Due to the nature of lodgepole pine seedfall in non-serotinous cones, no openings will be greater than 300 feet wide or about 4 or 5 times tree height.

In serotinous cone areas the slash needs to be lopped and scattered in such a manner as to provide uniform seed dispersal. Slash needs to be as close to ground surface as economically possible. Heights above seven inches from the ground or other reflecting surfaces do not provide



temperatures sufficient to open serotinous cones. At no time should heights exceed two feet. Areas of exceedingly heavy slash can be jack-pot piled and burned at the appropriate time.

Clear cutting is recommended as the regeneration method to be used in lodgepole stand of Unit 4. Cutting blocks need to be laid out in 5-10 acre patches that complement the landscape and follow the natural contour. Reasons for using this method are 1) the stand is overmature and breaking up, 2) dwarf mistletoe is very predominant with the majority of the stand heavily infested.

Shelterwood cutting is recommended in Unit 1. Ten to thirty percent of the volume should be removed in the first cut. In areas of heavy dwarf mistletoe group selection or patch cutting should be used.

All trees infested with western gall rust should be removed.

#### Units 2,5

Most silvicultural regeneration methods in ponderosa pine have been reasonably successful. This does not mean that all methods are equal in their range of applicability, probability of success, efficiency, and esthetic appeal. Experience indicates the shelterwood system should be the primary method for regeneration of ponderosa pine.

Twelve to eighteen mature trees should be left per acre. These should not occupy more than 35 square feet of basal area, and they should have a uniform distribution.

The overstory shelterwood should be removed completely, as soon as a well-stocked replacement stand has become established. Seedlings are solidly established when they average one foot or taller. Removal should not be delayed beyond the time when seedlings are about three feet or taller.

## Unit 6

In this unit a selection system is recommended. This will maintain the "natural" aesthetics of the area and provide a visual barrier to the unit treatments to the south. A diameter limit of 15-20 inches dbh should be used as removal criteria along with individual tree vigor. In the areas where mistletoe is a severe problem, group selection or clear cutting should be employed.

Where advanced reproduction is present, cutting 16 foot logs is recommended. This will reduce the siwashing that can damage reproduction during skidding.

### 2. Thinning Methods.

The exact nature will vary with size and stand conditions, some general considerations, though, are as follows:

1. Thinning will be from below.
2. Stands will be managed at an 80 growing stock level.
3. Stands with a DMR of 3.0+ will not be thinned.
4. Stands will not be thinned if average age is greater than 100 years.
5. Stands will not be thinned if less than 240 commercial cubic feet of wood is present per acre.
6. All trees infested with western gall rust should be removed.



SILV.

Table 6  
Summary of Recommended  
Silvicultural Treatments

Item	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
1. Silvicultural Treatment	Shelterwood and Group Selection	Shelterwood and Salvage	Thinning	Clearcut	Shelterwood and Salvage	Selection
2. Recommended Removal						
a. Percent	10-30%	50%	42%	100%	50%	10%
b. Basal Area	10-20 sq. ft.	48 sq. ft.	18 sq. ft.	105 sq. ft.	50 sq. ft.	Unknown
c. Trees/Acre	18	55	149	All	55	Unknown
3. Recommended Stocking After Cut						
a. Basal Area	60 sq. ft.	35 sq. ft. (Regenerate)	72 sq. ft.	Regenerate	35 sq. ft. (Regenerate)	Variable
b. Trees/Acre	60-75	12-18	208	—	—	—
4. Volume Removed By Product (Approx. only)	64 MBF	107 MBF	10,000 posts or 16 MCF or 196 cords	14,000 posts or 35 MCF or 442 cords	70 MBF	Unknown



1

2

3

4

5

6

7



Table 7  
Silvicultural Treatment  
Time Schedule

Treatment (1)	0	Time (years + 1976)			10
		1	2	3	
A. Regeneration Cuts		Unit 4			
1. Clearcut					
2. Shelterwood					
a. Remove 10-30% of BA 1st cut	1				3
b. Remove 50% of BA 1st cut	2,5				1,2
c. Final removal cut					
3. Selection	6				6
4. Group Selection					
a. 1-3 acre groups	1				
5. Salvage cut					
a. All MPB live and dead hit trees					
B. Thinning	3				
1. Culture Christmas trees		6			

(1) No management work has been scheduled for Unit 7 because it is not feasible at this time.

### 3. Slash Disposal.

Unless otherwise stated the accepted method of slash disposal will be to lop and scatter. All felled trees should be lopped to a two inch diameter top. Slash should not stand more than two feet above the ground surface. Areas of especially heavy concentrations should be jackpot piled and burned at the appropriate time.

### C. Rotation and Regulation of the cut

All management recommendations are based on a rotation age of 120 years for all species.

No cutting cycles or periodic cuts have been calculated, except for Unit 3. All other units are in such a condition as to require regeneration, or salvage cuts. After regeneration has become established in these units then the stands should be regulated and allowable cuts set.

### D. Forest Protection

#### 1. Fire.

Plans for suppression will come under joint agreement with the Larimer County Sheriff's Department, U.S. Forest Service, and the Colorado State Forest Service.

#### 2. Insects and Disease.

##### a. Nature of the problem.

Some of the more common pests found on the property are:

- 1) Insects: mountain pine beetle
- 2) Disease: dwarf mistletoe, western gall rust

##### b. Plan for protection.

All of the above pests should be removed through harvest. This is the most economical method and at the same time of harvest the stand can be manipulated to increase the health and vigor of all remaining trees.



## E. Sales Policy

### 1. Types of operations recommended.

Ideally all regeneration cuts should be completed under one contract. By nature of the material requiring removal, the purchaser should be a multi-product manufacturer.

If such a purchaser can be found it would also be beneficial to let that person do the thinning in Unit 3.

The advantage of having a single purchaser are: 1) Simplified sale administration, 2) cheaper road construction costs (i.e. costs amortized over a larger volume of wood removed).

### 2. Contractual Considerations.

#### a. Scaling.

If at all possible, weight scaling should be utilized.

#### b. Logging.

Designated skid trails with herringbone felling patterns should be used to eliminate damage to existing reproduction.

Logging should take place during winter freeze-up or mid-summer to minimize erosion damage.

#### c. Miscellaneous.

Purchaser will be responsible for maintenance of the U.S. Forest Service phone line if damage should be sustained during the logging. This line should be repaired immediately.



CSU Monument Gulch  
S6, T7N, R72W



APPENDIX



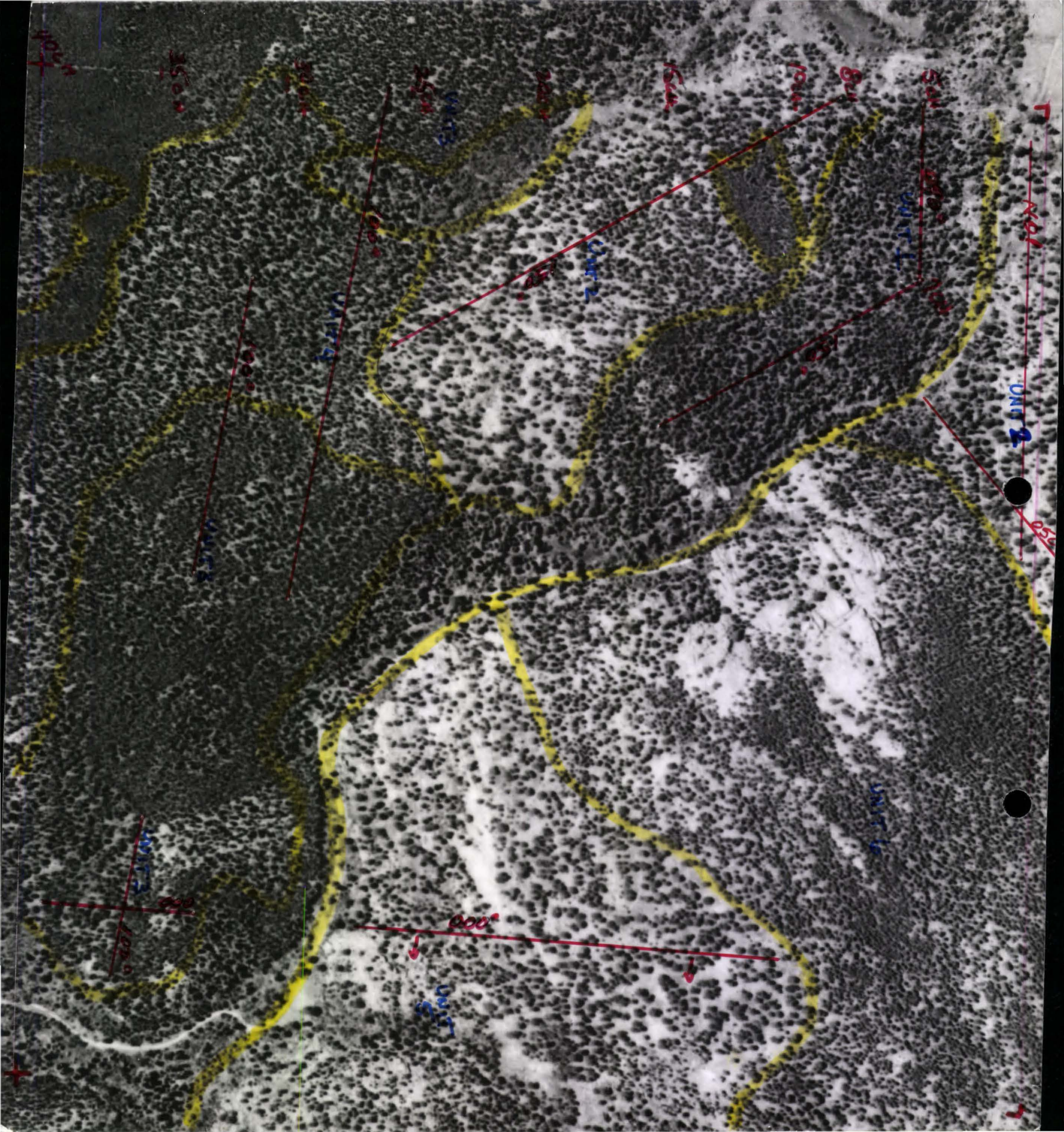




Table 6  
Summary of Recommended  
Silvicultural Treatments

Item	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
1. Silvicultural Treatment	Shelterwood and Group Selection	Shelterwood and Salvage	Thinning	Clearcut	Shelterwood and Salvage	Selection
2. Recommended Removal						
a. Percent	10-30%	50%	42%	100%	50%	10%
b. Basal Area	10-20 sq. ft.	48 sq. ft.	18 sq. ft.	105 sq. ft.	50 sq. ft.	Unknown
c. Trees/Acre	18	55	149	All	55	Unknown
3. Recommended Stocking After Cut						
a. Basal Area	60 sq. ft.	35 sq. ft. (Regenerate)	72 sq. ft.	Regenerate	35 sq. ft. (Regenerate)	Variable
b. Trees/Acre	60-75	12-18	208	—	—	—
4. Volume Removed By Product (Approx. only)	64 MBF	107 MBF	10,000 posts or 16 MCF or 196 cords	14,000 posts or 35 MCF or 442 cords	70 MBF	Unknown

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MARK (TREES)

TAKE TREES

TAKE TREES  
a) sound dead  
b) Green Hit  
c) favor small dbh, high vigor trees capable of producing seed.

LEAVE TREES

mark boundary

TAKE TREES  
Any trees greater than 8" dbh



Route #1, Box 268F  
Longmont, Co. 80501  
July 13, 1977

Mr. Mark B. Horvat, Jr.  
District Forester  
Colorado State University  
Fort Collins, Co. 80523

Dear Mr. Horvat:

In reply to your letter of June 29, regarding mountain property which we own in Larimer County, we are of course interested in the program for the control of the mountain pine beetle in this area; however, we are not willing to grant a road right-of-way across our land for a logging operation. We would like to talk with you about the problem.


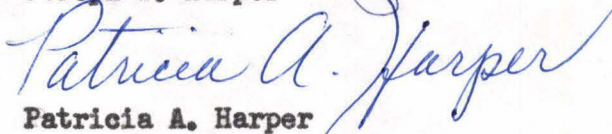
After receiving your letter, we decided to visit our property to examine the extent of beetle damage before responding to your request and were extremely perturbed to find that you were already driving onto our land without permission, and that people apparently hired by you to do the logging, already underway, had set up a very dirty campsite on our property and had scattered litter and garbage throughout the area. Of greater concern, however, was the evidence of a regularly used open fire, in spite of extreme fire danger in the area. Also, cigarette butts were indiscriminately scattered around the camp.

We wish to request, at this time, that you cease using any path or roadway across our land until we have a chance to meet and discuss your needs. We also urge you to have the existing camp removed and cleaned up as soon as possible. We would sincerely appreciate your immediate compliance with these requests.

Please let us know when you would like to meet with us. We suggest a meeting at the Larimer County property in question which would necessitate a week-end meeting time, as it is impossible for us to get up there during the week.

Thank you for your prompt attention to these matters.

Sincerely,

  
Joseph W. Harper  
  
Patricia A. Harper

CC: Mr. Howard Current,  
Attorney at Law

Call 4:30PM 7/19/77

10000  
10000  
July 13, 1957

Mr. J. B. ...  
...  
...

In reply to your letter of June 28, regarding property which we own in ... we are of course interested in the ... for the control of the mountain pine beetle in this area; however, we are not willing to grant a road right-of-way across our land for a logging operation. We would like to talk with you about this matter.

After receiving your letter, we decided to visit our property to determine the extent of beetle damage before responding to your request and were extremely perturbed to find that you were already driving onto our land without permission, and that people separately hired by you to do the logging, already underway, had set up a very noisy camp on our property and had scattered litter and garbage throughout the area. Of greater concern, however, was the evidence of a regular fly head open line, in spite of extreme fire danger in the area. This fly head line was undoubtedly scattered around the camp.

We wish to request, at this time, that you cease using any path or roadway across our land until we have a chance to meet and discuss your plans. We also urge you to have the existing camp removed and cleaned up as soon as possible. We would sincerely appreciate your immediate compliance with these requests.

Please let us know when you would like to meet with us. We suggest a meeting at the ... in question which would necessitate a week-end meeting time, as it is impossible for us to set up camp during the week.

Thank you for your prompt attention to these matters.

Sincerely,

Richard W. Harper

Richard A. Harper

cc: Mr. ...  
Attorney at Law





Colorado State University  
Fort Collins, Colorado  
80523

Colorado State Forest Service

July 14, 1977

Mr. Warren C. Hoflich, Jr.  
6901 Tall Spruce Drive  
Anchorage, Alaska 99502

Dear Mr. Hoflich:

Thank you for the response to my letter requesting access across your property. I can assure you that if we use the old road, it will be during the winter. The ground will be frozen, resulting in little, if any, disturbance. If there is any disturbance, I will personally reseed that area to grass.

Thank you once again for your cooperation.

Sincerely,

*Mark B. Horvat, Jr.*

Mark B. Horvat, Jr.  
District Forester

MBH/js