ESTABLISHMENT REPORT

Casner Canyon Research Natural Area

Coconino National Forest

Coconino County, Arizona

July 29, 1969

NARRATIVE REPORT

a. Principal Distinguishing Features

The Casner Canyon Research Natural Area contains an almost pure stand of Arizona cypress. The trees vary in size from relatively small poles on the higher, steeper slopes to large in the canyon bottom. The area is used very little because of the lack of water and severe topography.

b. Location

The area is described as parts of secs. 3 and 4, T. 17 N., R. 6 E., G&SRBM. It is some 2½ miles northeast of Sedona, Arizona, within the Sedona Ranger District of the Coconino National Forest.

c. Area By Cover Types

The overall cover type is Arizona cypress (SAF 240). There is a small area of chaparral. The type is most nearly described by K-33 without the adenostoma. Because of the poor site, the manzanita and ceanothus are small and scattered. The types by area are as follows:

Arizona cypress	- 438 acres
chaparral	- 12 acres
Red rock	- 115 acres
Total	- 565 acres

d. Physical and Climatic Conditions

The topography is extremely rough with steep slopes and perpendicular cliffs for the most part. Much of the area has thin soil and rock outcroppings. Elevations range from approximately 4,500 feet to 5,800 feet above sea level. The drainage is all to the north into Casner Canyon which drains into Oak Creek and thence south into the Salt - Gila River complex.

The climate is quite warm with summer temperatures to 105° F. Winter temperatures seldom reach 0° at any point on the unit and snow melts off quickly.

e. Description of Values

The principal values for research are the stands of Arizona cypress which contain both the smooth and rough bark variety, and the red rock formation (G-17) (Supai sandstone). The soils are the reddish brown from the red rocks (S-24). The list of species observed at the time of the examination is attached in the appendix. At the higher elevations the average height and d.b.h. of the cypress and pinyon trees are 20' and 8" - 12", and 20' and 4" - 6", respectively. At the lower elevations, 70' and 24" - 28", and 30' and 8" - 14", respectively. The largest cypress noted was 65' in height and 36" d.b.h. The geology has been discussed to some extent above. As indicated, the soils are thin for the most part, runoff is rapid, and there is considerable erosion. Soil moisture is definitely a limiting factor in the growth of vegetation even though the slope is toward the north.

There are no known minerals. However, the entire Sedona area has been leased for oil and gas. Because of the steep topography, drilling in this area is not likely to occur, and because of the scenic character, the entire area is covered by special law which permits the Forest Supervisor to control exploration and extraction very carefully.

Recreation use is very light because there are no roads or trails within the unit. The Schnebly Hill Road skirts the southeast corner, but the terrain drops away from it sharply, and it is extremely difficult to return to the road if one leaves it.

The trail is located within the Sedona allotment. Grazing by domestic livestock is very light because of the lack of palatable forage and water. There appears to be little chance that this condition will change because of soil and moisture.

All the water from the area is surface runoff and has been obligated down stream for many years. This condition is not likely to change.

There are no special uses or other foreseen conflicts with the proposed establishment.

/s/ Don D. Seaman
Coconino Forest Supervisor

/s/ Wm. D. Hurst
Regional Forester

Director, Rocky Mountain Station

Director, Div. of R&L WO

Deputy Chief, Research

ORDER

By virtue of the authority vested in me by Regulation U-4 of the Regulations of the Secretary of Agriculture, I hereby designate as the Casner Canyon Research Natural Area the lands described in the preceding report by the Region 3 Research Natural Area Committee dated July 29, 1969; said lands shall hereafter be administered as a Research Natural Area, subject to the said Regulations and instructions thereunder.

_____ Date

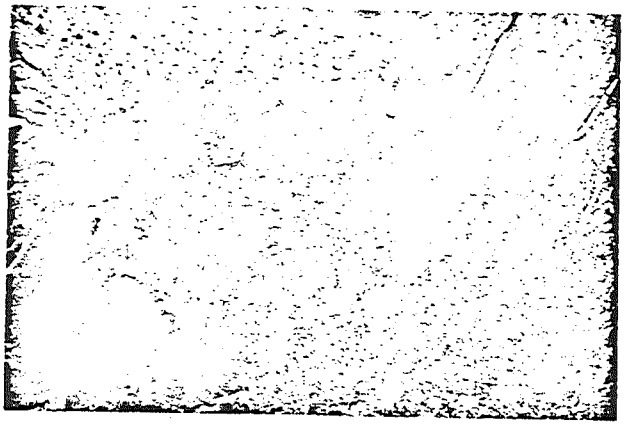
_____ Chief, Forest Service

CASNER CANYON RESEARCH NATURAL AREA

Appendix

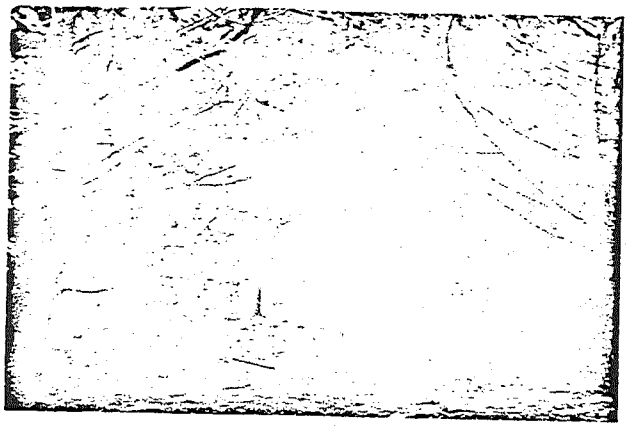
Arizona cypress - Cupressus arizonica
pinyon - Pinus edulis
walnut - Juglaus major
cottonwood - Populus fremontii
willowleaf cottonwood - Populus angustifolia
gray oak - Quercus grisea
turbinella oak - Quercus turbinella
Gambel oak - Quercus gambelii
ash - Fraxinus lowellii
willow - Salix lutea
locust - Robinia neomexicana
alligator juniper - Juniperus deppeana
wafer ash - Ptelea trifoliata
Garrya - Garrya flavescens
Laurel - Rhus ovata
desertwillow - Chilopsis linearis
mountain mahogany - Cercocarpus montanus
mistletoe - Phoradendron bolleanum
hawthorne - Crataegus erythropoda
manzanita - Arctostaphylos patula
ceanothus - Ceanothus greggii (probably)
Apache plume - Fallugia paradoxa
agave - Agave palmeri (probably)
brittle brush - Encelia farinosa
Oregon grape - Mahonia repens
pricklypear - Opuntia engelmannii
squawberry - Rhus trilobata
Spanish-dagger - Yucca angustissima
beargrass - Nolina microcarpa
Seneico - Seneico sp.
pea - Lathyrus arzonica
snakeweed - Gutierregia sarothrae
red penstemon - Penstemon barbatus
muhly - Muhlenbergia torreyi
sideoats grama - Bouteloua curtipendula
beardless bunchgrass - Blepharoneuron tricholepis

Casner Canyon cypress

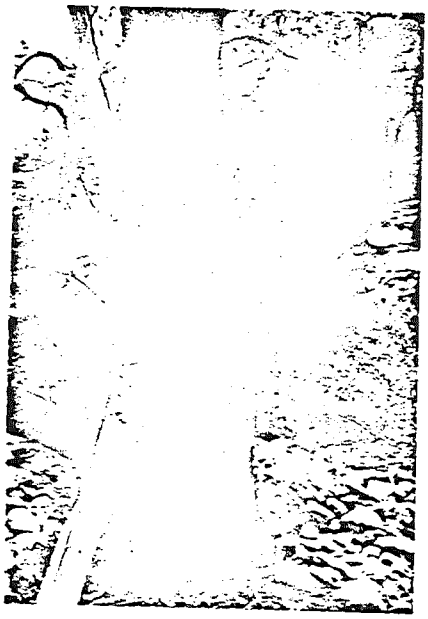


Casner Canyon - Looking east along Canyon bottom.

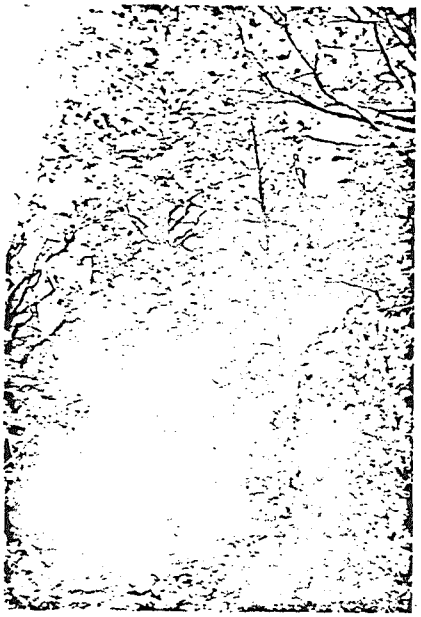
Casner Canyon - Looking west toward Oak Creek.



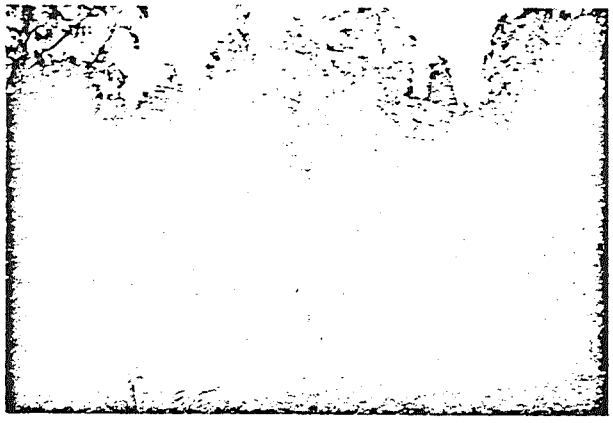
Casner Canyon - Young stand of Arizona cypress.



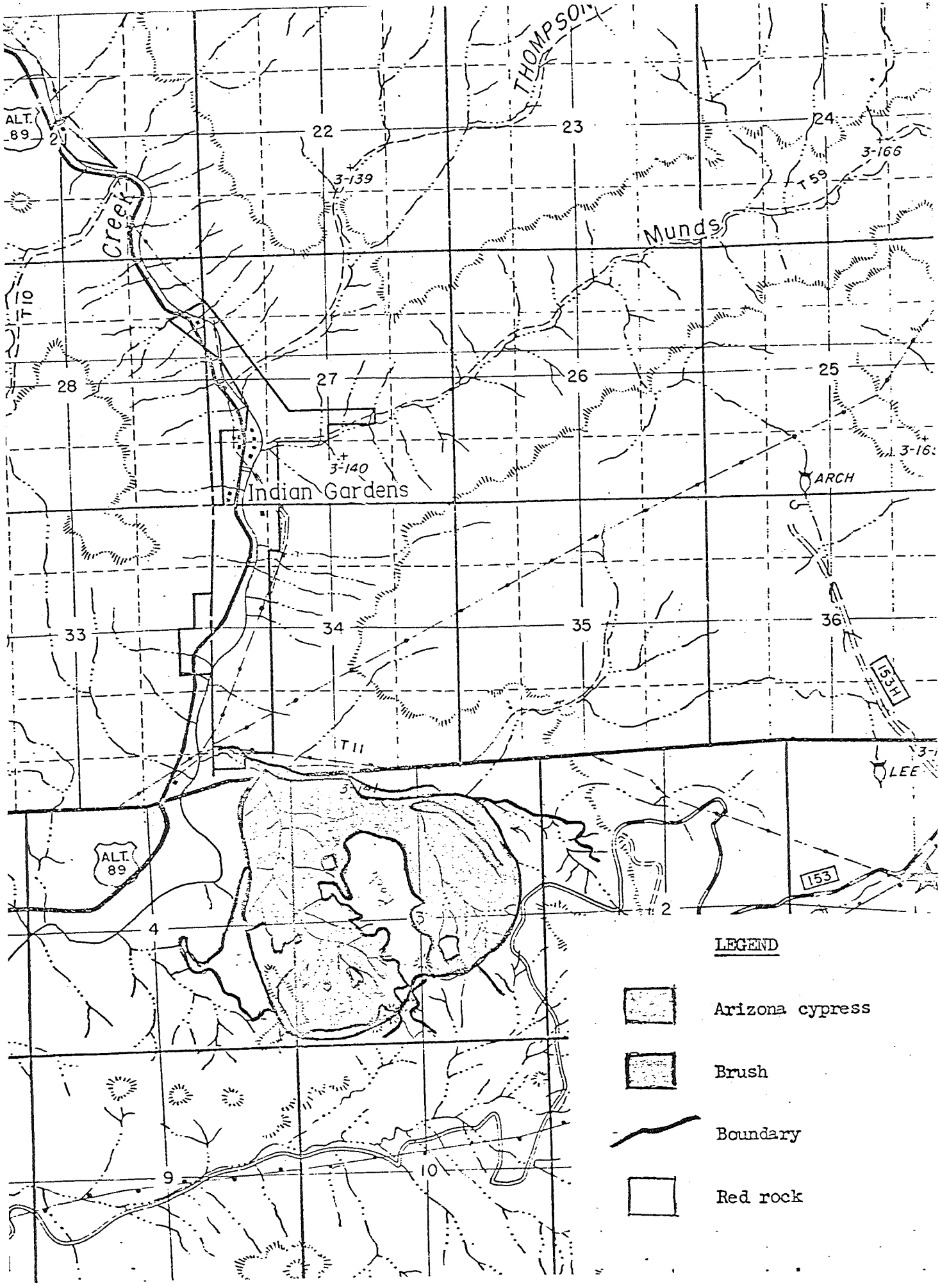
Casner Canyon - Old cypress in Canyon bottom.



Casner Canyon - A large, healthy cypress.



Casner Canyon - Manzanita and cypress on higher, rocky site.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LEGEND
Arizona cypress
Brush
Boundary
Red rock

4060
(5400)

MULTIPLE USE SURVEY REPORT

CASNER CANYON
RESEARCH NATURAL AREA

COCONINO NATIONAL FOREST
SEDONA RANGER DISTRICT
REGION THREE

STAGE TWO

Prepared by _____ Date 11/10/70
Jay W. Eby, District Ranger

Approval Recommended by _____ Date 3/9/71

Approval Recommended by _____ Date _____

Approved by _____ Date _____

1. Introduction and Description of Project

The proposal is to designate 565 acres of the Sedona Ranger District in Casner Canyon as a research natural area.

The area is described as parts of Sections 3 and 4, Township 17 North, Range 6 East. It is about 2½ miles northeast of the community of Sedona. It lies within the Travel Influence Zone for the Schnebly Hill Road and Management Unit W-8 (Back Drop) in the Woodland Zone.

The entire area is National Forest System lands and is covered by the Oak Creek Canyon Scenic Area Withdrawal.

The area, as explained in the Establishment Report, is principally steep, rough, cypress-covered slopes. Because of its multiple use zoning, its extreme slopes, and almost complete absence of on-site use, this report may seem brief, although it is complete.

The maps and photographs that accompany the Establishment Report are quite accurate and descriptive.

2. Summary

Since this entire area is non-range, steep, thickly timbered, and within the Travel Influence Zone and Management Unit W-8 (Back Drop), there are no major impacts. Designation should only enhance the multiple use decisions for this area.

3. Evaluation of Proposal on Related Forest Resources, Uses, and Activities

a. Air

No foreseeable impact.

b. Minerals

There is no known mineralization due to the Oak Creek Canyon Scenic Area Withdrawal; although the minerals would be located, the land could not be patented. There have been two separate claimants file on two series of claims below the area. Both claims were for common varieties and were successfully contested.

Oil and gas leasing is common in the area. Section 4 shows oil and gas lease application A-3096, and Section 3 shows lease

application A-3093. Both applications were withdrawn; however, at present they are again listed as available.

c. Natural Beauty

Natural beauty is the dominant resource in both the Travel Influence Zone and the Management Unit W-8. Designation should only strengthen the protection of this management direction.

d. Outdoor Recreation

There are no inventoried recreation sites within the area. Viewing the outstanding scenery is the prime activity and this use is off-site. The proposal would only strengthen this activity.

e. Range

The Establishment Report is in error--in that this area is within the Indian Gardens Allotment not the Sedona Allotment. Because of the steepness of slopes and dense timber, it is typed entirely as non-range types 7 and 8. There are no range facilities and no foreseeable potential for development.

f. Soils

The soils on the area are shallow. There is considerable erosion present. The steepness of the slopes precludes any major control work. Lack of disturbance should maintain the present condition.

g. Timber

The cover is primarily Arizona cypress. There is little demand for these trees and stands are extensive on the District. There has been no cutting within this stand for a number of years.

h. Water

All water on the unit is surface run-off and all this unit is within the Verde drainage. Due to the terrain and low potential for yield improvement, the designation would have no foreseeable affect on this resource.

i. Wilderness

No foreseeable effect.

j. Wildlife

There is little use of the area by wildlife except for cover. Due to the terrain and zoning, it is not likely that any improvement work would be planned.

k. Fire and Air

No foreseeable effect.

l. Insects and Disease

No foreseeable effect.

m. Landownership Adjustments

There is no base-for-exchange within the proposed area.

n. Land Uses

There are no permits presently within the area. None should be issued.

o. Transportation

The Schnebly Hill Road skirts the upper edge of the proposed area. This road may be widened or improved. Drainage from this road might affect the erosion pattern if not properly designed.

p. I&E

The local attitude is quite strong in favor of preservation of the area. There is little need for advanced publicity. A full explanation, upon signing, should be made to the press.

4. Recommendations

a. It is recommended that this Stage Two Multiple Use Survey Report be approved; that the Establishment Report be revised, accepted, and that Casner Canyon be designated a Research Natural Area.

b. This area should be removed from the list of lands available for oil and gas leasing, and any outstanding application should be recommended against leasing.

c. Continue to disallow cutting of timber within this area.

d. Disallow any special-use permits.

Research Natural Areas

USDA Forest Service, Rocky Mountain, Intermountain, Southwestern and Great Plains States

SEARCH RNAs BY

County

GO

ABOUT RNAs

HOME
ABOUT
USING
OPPORTUNITES
REFERENCES
CONTACT US
RELATED SITES
CREDITS

A
cooperative project
of the

USDA Forest Service
Northern Region,
Rocky Mountain Region,
Southwestern Region,
Intermountain Region,-
Rocky Mountain Research
Station,
and the
Montana Natural Heritage
Program

CASNER CANYON

General Information S.USNAHP*81

- Created: 1973
- Size: 565 (acres)
- Elevation Range: 4500 - 5800ft
- Location: *Casner Canyon RNA is located about 3 miles northeast of Sedona, Arizona.*

Site Description

Topography is extremely rough with steep slopes and rock outcrops. Arizona cypress (Cupressus arizonica) of various ages form an almost pure stand across the RNA. Both smooth and rough bark varieties of the Arizona cypress are present. The area is underlain by the reddish brown Supai sandstone.

Climate and Enviromental Information

Data not Available

Vegetation - Casner Canyon

Arizona Cypress (SAF 240) Chaparral (K 29)

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/s/ Don D. Seaman
Coconino Forest Supervisor

/s/ Carl M. Gentzen
for Director, Rocky Mountain Station

/s/ D. Hurd
Regional Forester

Director, Div. of Recreation

Deputy Chief, Research

ORDER

By virtue of the authority vested in me by the Regulations posted in 36 CFR 251.23, I hereby designate as the Casner Canyon Research Natural Area the lands described in the preceding report by the Region 3 Research Natural Area Committee dated July 29, 1969; said lands shall hereafter be administered as a Research Natural Area, subject to the said Regulations and instructions thereunder.

_____ _____

Date Chief, Forest Service

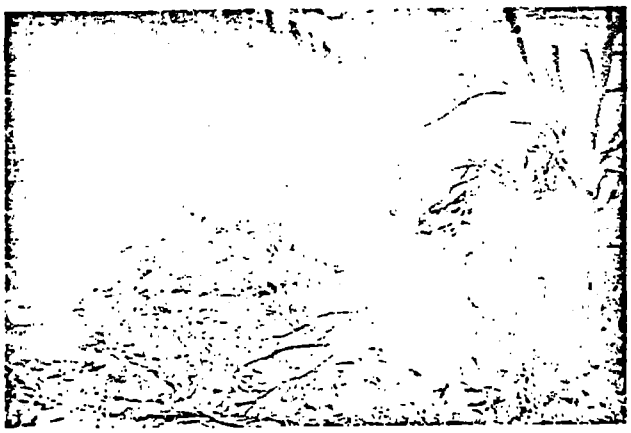
CASNER CANYON RESEARCH NATURAL AREA

Appendix

Arizona cypress	Cupressus arizonica
Pinyon	Pinus edulis
Arizona walnut	Juglans major
Fremont cottonwood	Populus fremontii
Narrowleaf cottonwood	Populus angustifolia
Gray oak	Quercus grisea
Shrub live oak	Quercus turbinella
Gambel oak	Quercus gambelii
Lowell ash	Fraxinus lowellii
Yellow willow	Salix lutea
New-Mexican locust	Robinia neomexicana
Alligator juniper	Juniperus deppeana
Narrowleaf hoptree	Ptelea angustifolia
Yellowleaf silktassel	Garrya flavescens
Sugar sumac	Rhus ovata
Desertwillow	Chilopsis linearis
True mountainmahogany	Cercocarpus montanus
Mistletoe	Phoradendron bolleanum
Cerro hawthorn	Crataegus erythropoda
Greenleaf manzanita	Arctostaphylos patula
Desert ceanothus	Ceanothus greggii
Apache-plume	Fallugia paradoxa
Palmer agave	Agave palmeri
White brittlebush	Encelia farinosa
Creeping mahonia	Mahonia repens
Engelmann pricklypear	Opuntia engelmannii
Skunkbush sumac	Rhus trilobata
Fineleaf yucca	Yucca angustissima
Sacahuista	Nolina microcarpa
Groundsel	Senecio spp.
Arizona peavine	Lathyrus arizonica
Broom snakeweed	Gutierrezia sarothrae
Beardlip penstemon	Penstemon barbatus
Ring muhly	Muhlenbergia torreyi
Side-oats grama	Bouteloua curtipendula
Beardless bunchgrass	Blepharoneuron tricholepis

Casner Canyon cypress

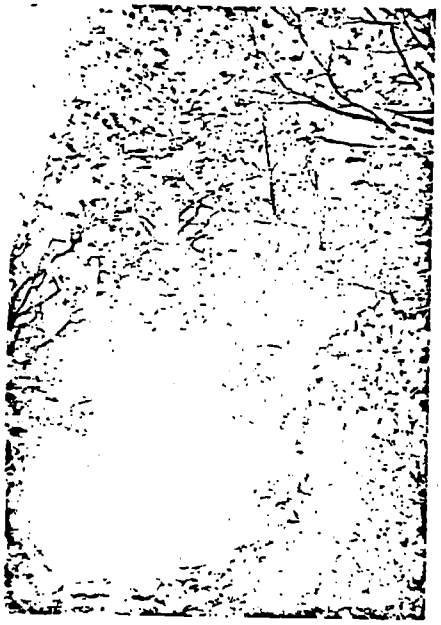
Casner Canyon - Looking east along Canyon bottom.



Casner Canyon - Looking west toward Oak Creek.

Casner Canyon - Young stand of Arizona cypress.

Casner Canyon - Old cypress in Canyon bottom.



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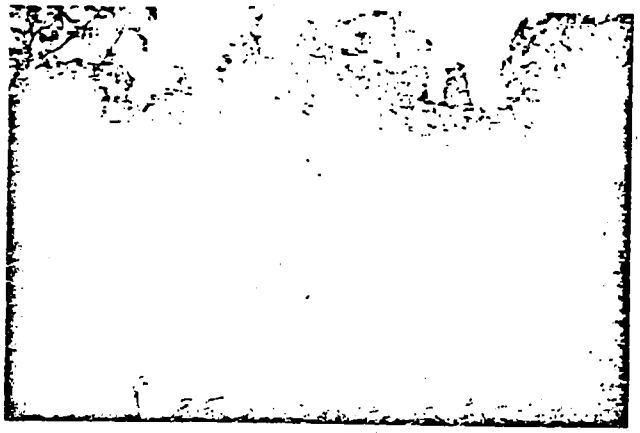
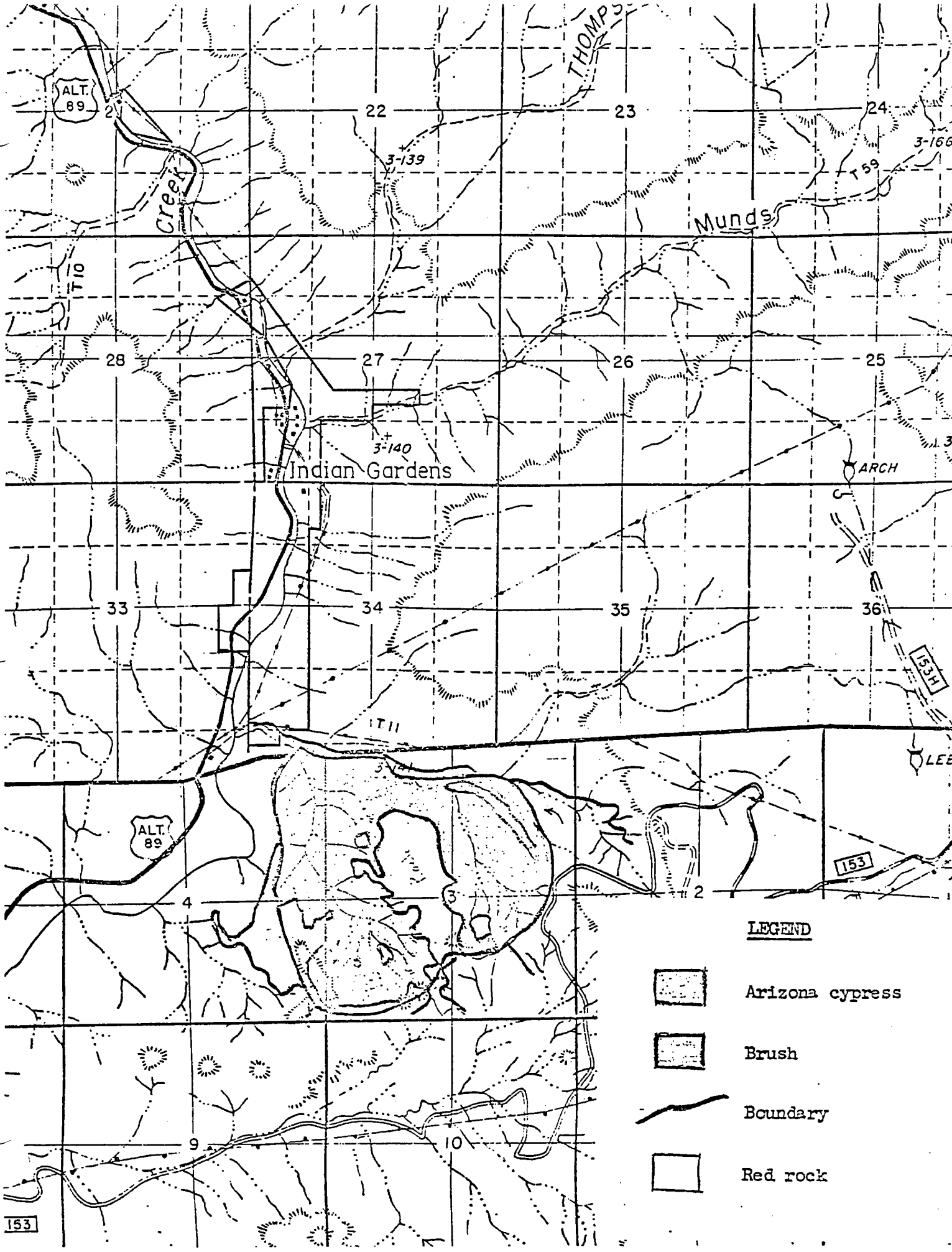


Casner Canyon - Manzanita and cypress on higher, rocky site.


ALT. 89
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LEGEND
Arizona cypress
Brush
Boundary
Red rock

Society of American Foresters
Committee on Natural Areas

Proposed Natural Area

Name of Proposed Natural Area Casner Canyon

Location: State Arizona County Coconino

Nearest Town Sedona

Nearest Federal, State or county highway US 89 A

Permanence Afforded Through What Means Regulation
(law, regulation, will, endowment, Board of Directors, etc.)

Name of Administration Unit Coconino NF, Flagstaff, Arizona
(National forest, national park, national wildlife refuge, State, university, etc.)

Listing of Timber Types on Area:

S.A.F. Type No.	Acres	Average Age
240	438	125
K33	12	
Barren, water, buffer zone, etc.	115	
Total	565	

Range in Elevation: Low 4500 Feet High 5800 Feet

Topography Steep and broken canyon
(Level, rolling steep, broken, etc.)

Geology Sedimentary rock
(Volcanic, alluvial, moraine, etc.)

Average Height and Diameter of each major species:

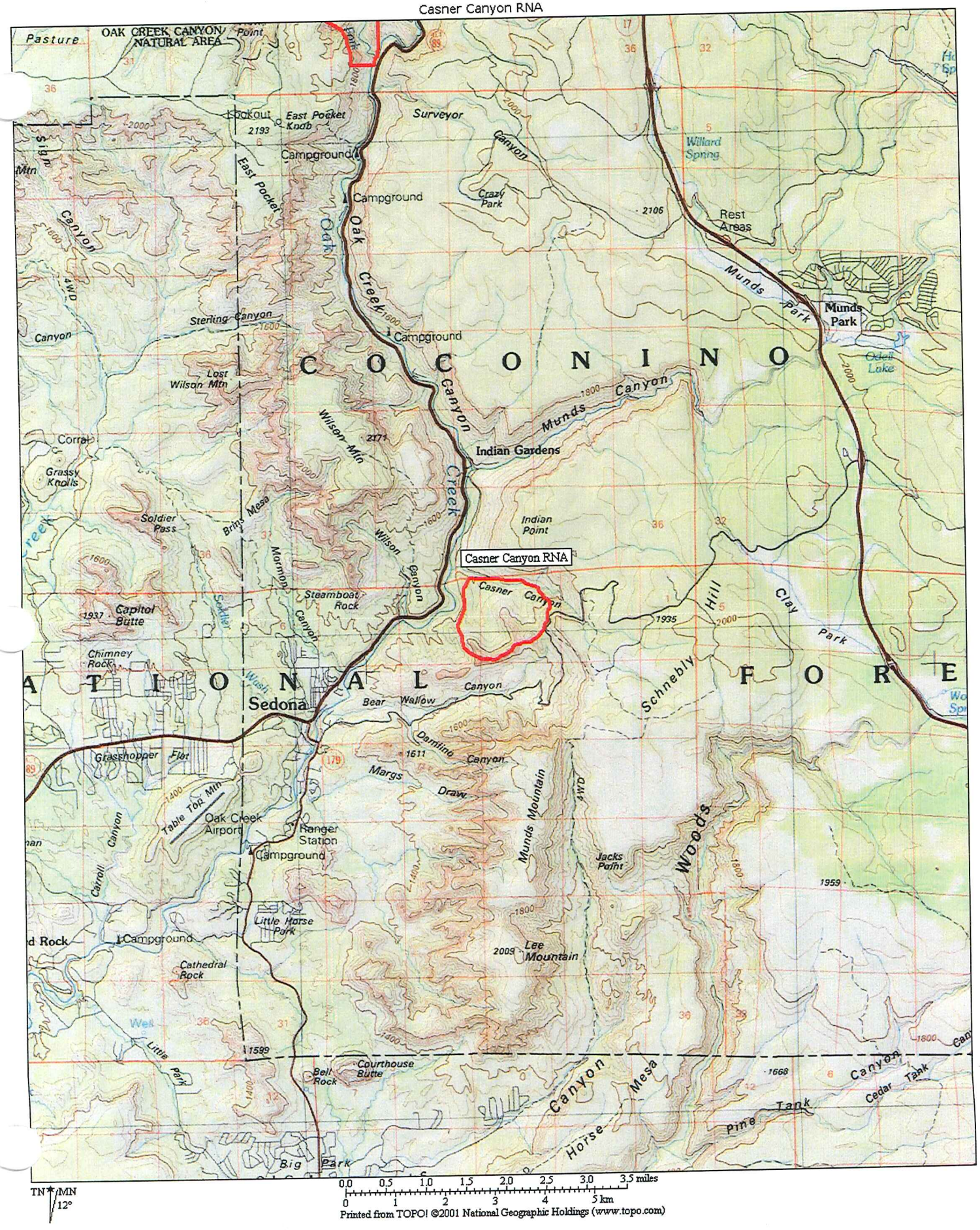
Species	Average Height	Average Diameter
Arizona cypress	45'	18"
Pinon pine	25'	8"

Submitted by Earl F. Aldon Title Project Leader

Mailing Address Rocky Mtn. Forest & Range Exp. Sta.
5423 Federal Bldg., 517 Gold Ave., SW
Albuquerque, New Mexico 87101

Date June 2, 1969

Casner Canyon RNA



TN 12° MN

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0 1 2 3 4 5 km

Casner Canyon RNA