LOGGING ADJACENT TO WALNUT CANYON AND SUNSET CRATER VOLCANO NATIONAL MONUMENTS

Compiled by Jeri DeYoung

This document has been prepared as an overview and does not represent an exhaustive search of the lumber industry activities as they developed over the past century in and around Flagstaff, Arizona. This document does represent a search of documents available at the Cline Library Special Collections including the Arizona Lumber and Timber Company and the Saginaw and Manistee Lumber Company records and maps. Documents surveyed for this project also include recent timber atlases (1950s-1970s) of the Coconino National Forest held by Forester Dick Stephens, and historic timber atlases (1910-20s) held by Forest Archeologist Peter Pilles. Pat Stein's *Logging Railroads of the Coconino and Kaibab National Forests* and Platt Cline's *They Came to the Mountain* were also consulted. More recent atlases for the Peaks Ranger District could not be located; consequently, timber harvesting and thinning projects from the 1980s forward are not included in this survey.

Logging has always played a significant role in Flagstaff's economy employing at times half of the town's population (Stein 1993). Intensive logging began in northern Arizona in the 1880s, coinciding with the development of the transcontinental railway (Stein 1993). The railway created an enormous market for lumber locally and nationally that lasted well into the 1930s. By 1940 the majority of "good" timber had been harvested from the Coconino and Kaibab National Forests and the industry was in decline.

Several logging companies were in operation during Flagstaff's formative years, but the Arizona Lumber and Timber Company (AL&T) owned and operated by the Riordan family conducted the majority of logging around Walnut Canyon and Sunset Crater Volcano National Monuments. By the latter part of the nineteenth century the AL&T negotiated rights to almost all of the timber owned near Flagstaff by the Atlantic and Pacific Railroad (868 alternating sections) (Stein 1993). In 1897 the AL&T purchased the Greenlaw Lumber Company, located near the present Flagstaff Mall (the mill had been in operation since 1886) (Cline 1976). The AL&T used the Greenlaw mill for cutting areas north, northeast and south of the mill (this includes the areas adjacent to the monuments). It's probably safe to assume that the Greenlaw brothers were cutting in areas near Walnut Canyon prior to the purchase of the company by the AL&T. A 1912 timber atlas identifies an area near the monument as being "cutover several years before".

The AL&T also operated the Central Arizona Railway (CAR) from 1889-1937. The railway was used to access stands of timber quickly and cost effectively. Stands that were difficult to access were passed over. Figures 11 and 12 show the CAR grades adjacent to Sunset Crater Volcano and Walnut Canyon National Monuments. The AL&T logged the area around Walnut Canyon using the railway between 1922 and 1923. The AL&T logged Lenox Crater and adjoining areas of Sunset Crater Volcano using the railway in 1916 and 1917.

Prior to 1910 the Forest Service provided no management of timber stands and it can probably be assumed that timbered areas were clear-cut. By 1910 forest management practices dictated that at least two mature trees per acre be left to promote forest regeneration. These areas are described in the timber atlases as "cutover".

It appears that no logging occurred around the monuments in the 1930s and 1940s. Timber sales conducted in the 1950s and 1960s on Coconino National Forest lands adjacent to or near the monuments were primarily salvage logging operations or timber sales that focused on dead or dying trees (Dick Stephens, Personal Communication). Several sales were conducted around the monuments and within the boundaries identified by the vegetation mapping study between the 1950s and the 1970s. Timber from the Burnt Fire (1974) south, west, north and northwest of Sunset Crater Volcano was also salvaged as part of a sale, but is not mapped here.

It's interesting to note that between the 1970s and 1980s the Coconino National Forest was harvesting well over 100 million board feet of timber annually. Today the forest practices ecosystem management and is harvesting approximately 20 million board feet annually.

Reference Cited

Cline, Platt
1976 They Came to the Mountain. Northern Arizona University with Northland Publishing, Flagstaff.

Stein, Pat
1993 Logging Railroads of the Coconino and Kaibab National Forests: Supplemental Report to a National Register of Historic Places Multiple Property Documentation Form. SWCA Archaeology Report No. 93-16. Contract No. 43-8167-2-0373. Ms on file Flagstaff Area National Monuments Headquarters Library, Flagstaff.

Timber Atlases

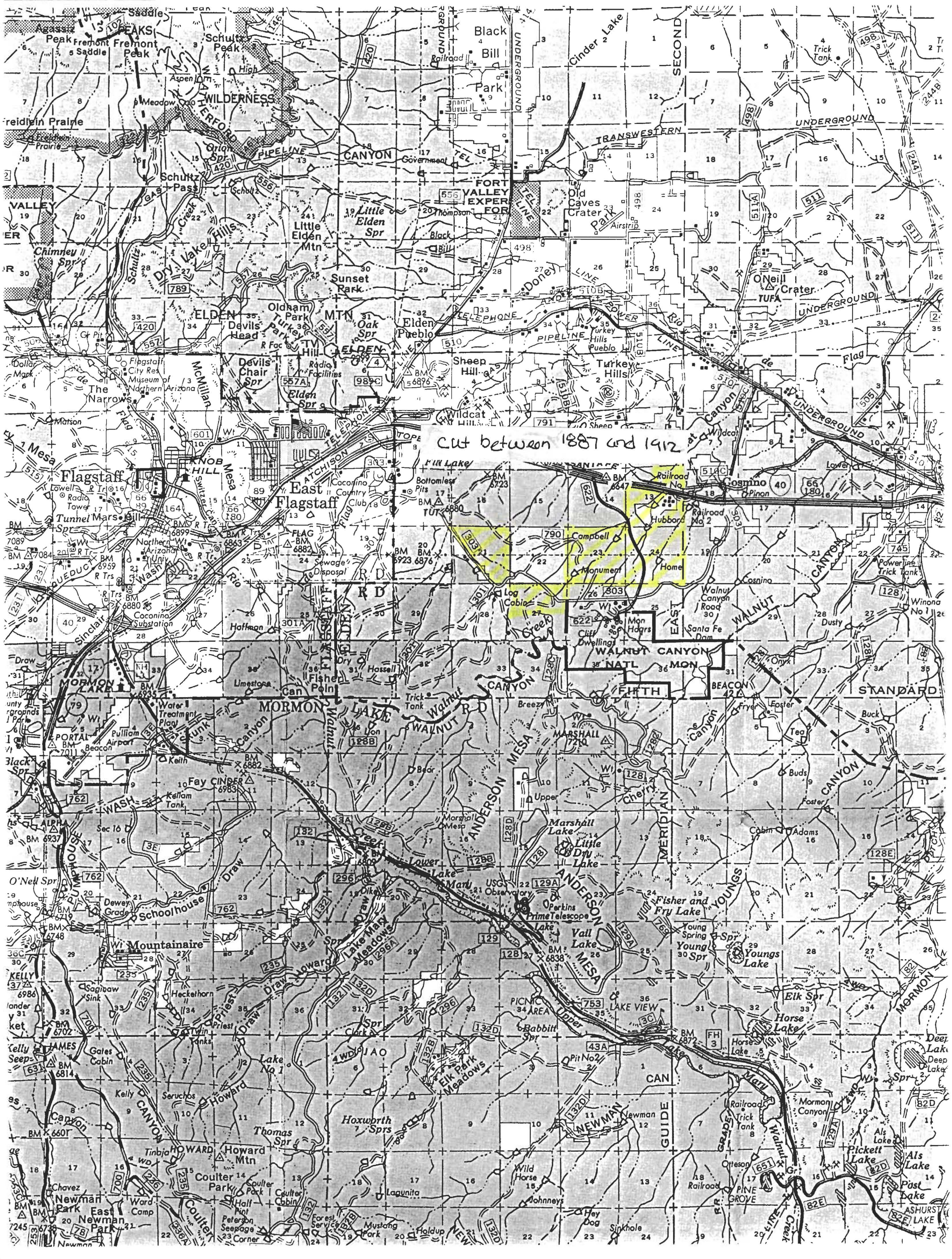
Cline Library Special Collections: Arizona Lumber and Timber Company and the Saginaw and Manistee Lumber Company records and maps.

Coconino National Forest timber atlases: 1910s-1920s (on file in the Archeology Office) and 1950s-1970s (on file in the Foresters Office).

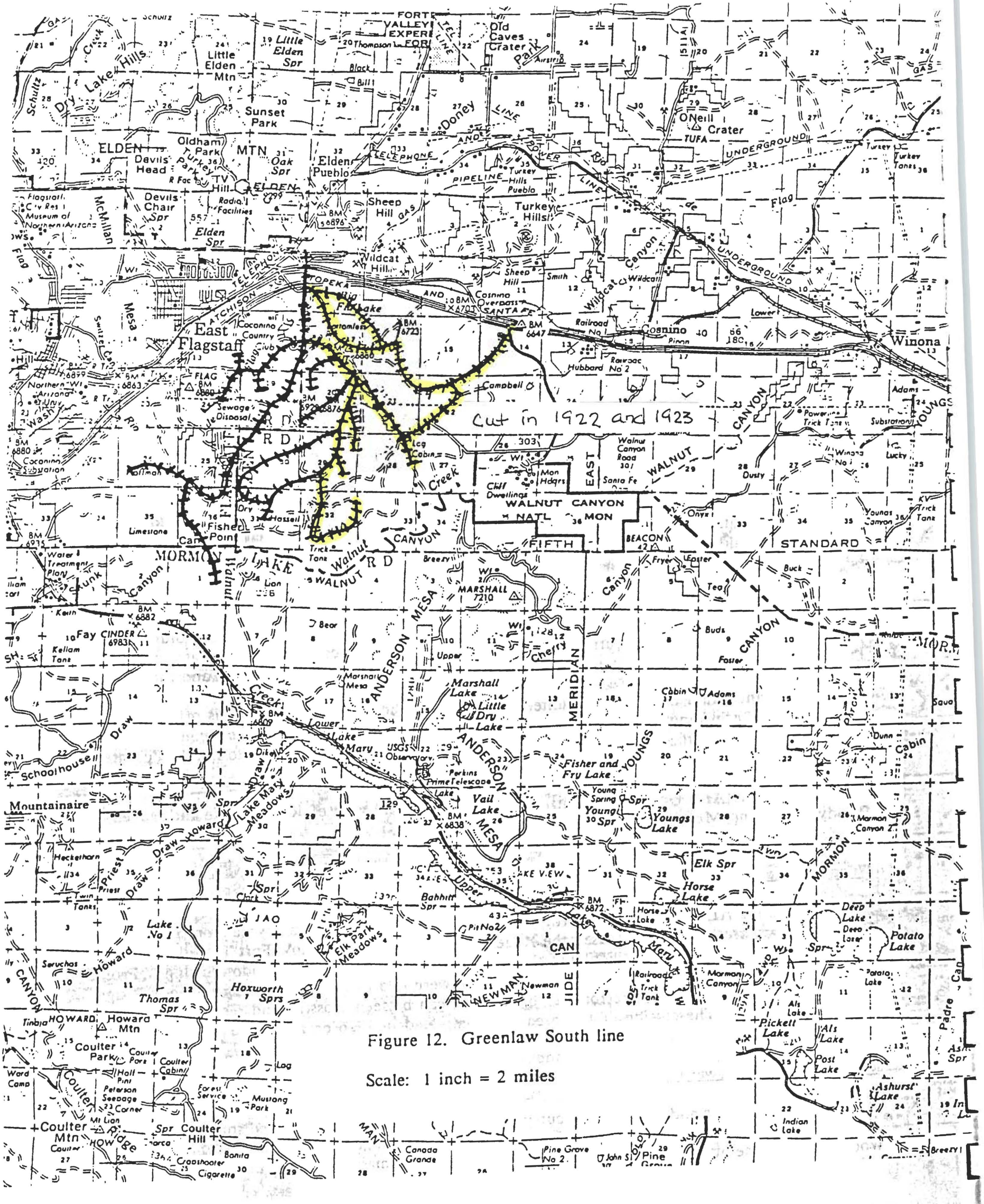
Personal Communication

Dick Stephens, Forester, Coconino National Forest, Supervisor's Office.

Mike Bathen, Marking Foreman, Mormon Lake District, Coconino National Forest.



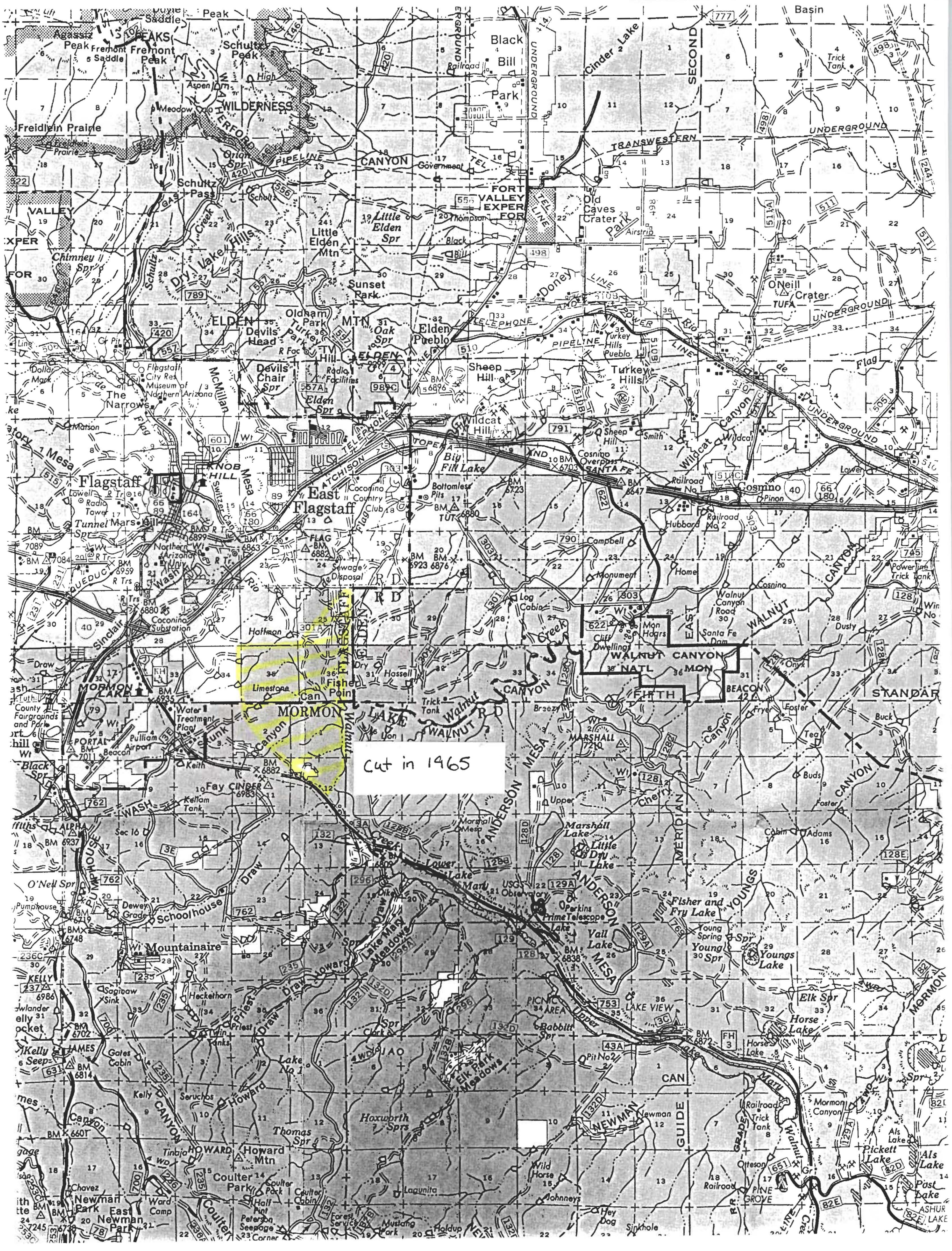
Cut between 1887 and 1912



Cut in 1922 and 1923

Figure 12. Greenlaw South line

Scale: 1 inch = 2 miles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PEAKS
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Freidlein Prairie
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Cinder Lake
UNDERGROUND
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FORT VALLEY EXPER FOR
Old Caves Crater Park
Airstrip
Little Elden Spr
Little Elden Mtn
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Chimney Spr
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TELEPHONE
POWER LINE
ELDEN
Devils Head
Oldham Park
Turkey Park
TV Hill
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Oak Spr
Elden Pueblo
Turkey Hills Pueblo
Turkey Hills
Sheep Hill
Devils Chair Spr
Radio Facilities
Elden Spr
Flagstaff City Res
Museum of Northern Arizona
McMillan Mesa
The Narrows
Dollar Mark
Wildcat Hill
Wildcat Canyon
Smith
ATCHISON
TOPEKA
AND
SANTA FE
Cosnino Overpass
Big Fill Lake
Bottomless Pits
Flagstaff
KNOB HILL
Lowell
Radio Tower
Mars Hill
Tunnel Spr
Northern Arizona Univ
Switzer Canyon
East Flagstaff
Coconino Country Club
Railroad No 2
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Sewage Disposal
Log Cabin
Walnut Canyon Road
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County Fairgrounds and Park
Water Treatment Plant
PORTAL
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Rio de Flag
Trick Tank
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PUMPHOUSE
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Cherry
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Lower Lake Mary
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Prime Telescope
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YOUNGS CANYON
O'Neil Spr
Pumphouse
Dewey Grade
Schoolhouse Draw
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Lake Mary Meadows
Howard Draw
Vail Lake
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Priest
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Elk Spr
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Kelly Seep
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Elk Park Meadows
Pit No 2
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GUIDE
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James Canyon
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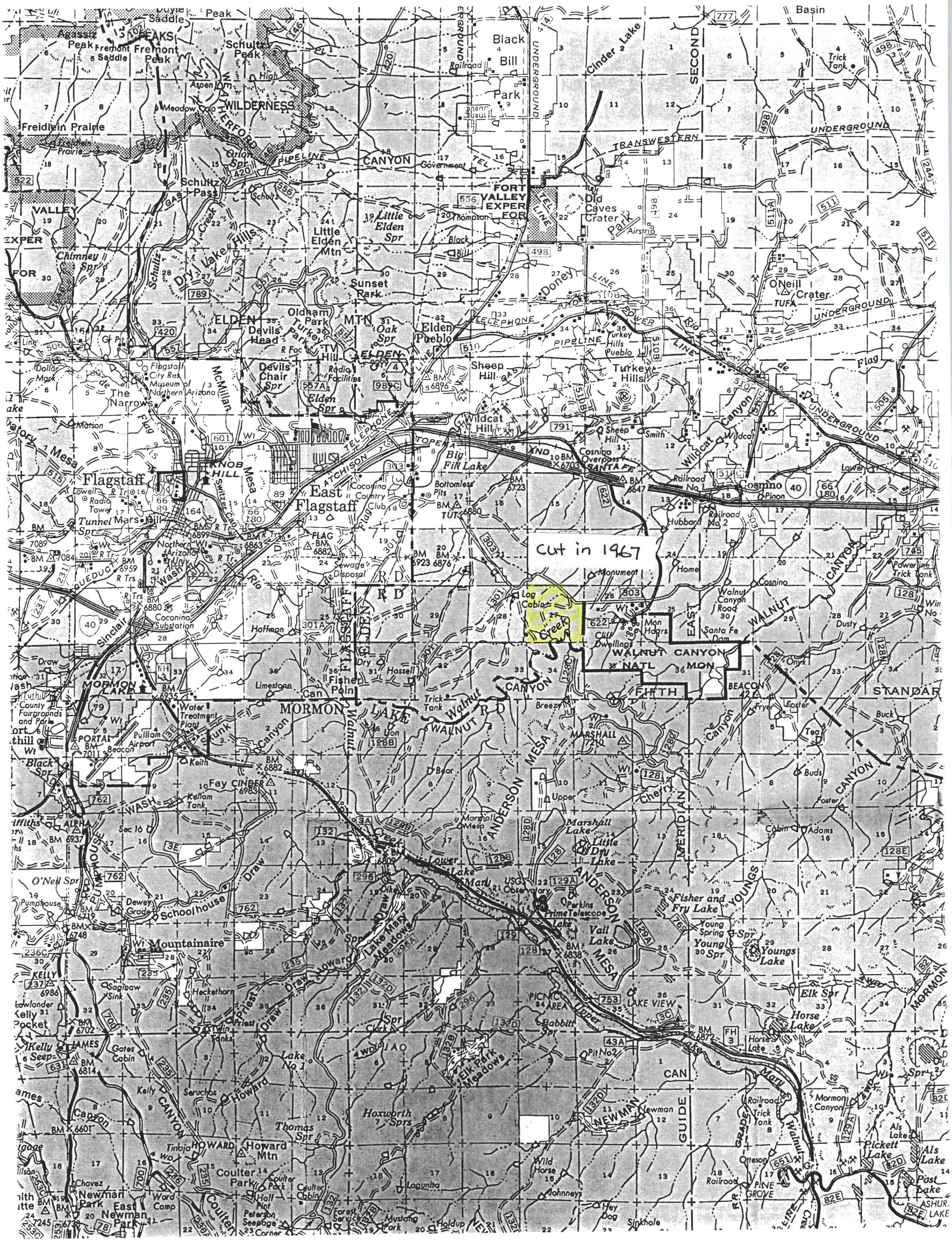
Seruchos
Howard
Hoxworth Sprs
Thomas Spr
Railroad Trick Tank
Pickett Lake
Post Lake
ASHURST LAKE
HOWARD CANYON
Howard Mtn
Tinaja
Coulter Park
Coulter Cabin
Half Pint
Lagunita
Wild Horse
Johnneys
Otteson
Railroad
GRADE
PINE GROVE
R.R.
Chavez
Newman Park
East Newman Park
Ward Camp
Coulter
Peterson Seepage
Forest Service
Mustang Park
Holdup
Hey Dog
Sinkhole

Cut in 1965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Perkins Prime Telescope
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Coulter Park
Coulter Cabin
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Wild Horse
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East Newman Park
Ward Camp
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Forest Service
Mustang Park
Holdup
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Hey Dog
Sinkhole
Railroad
LINE
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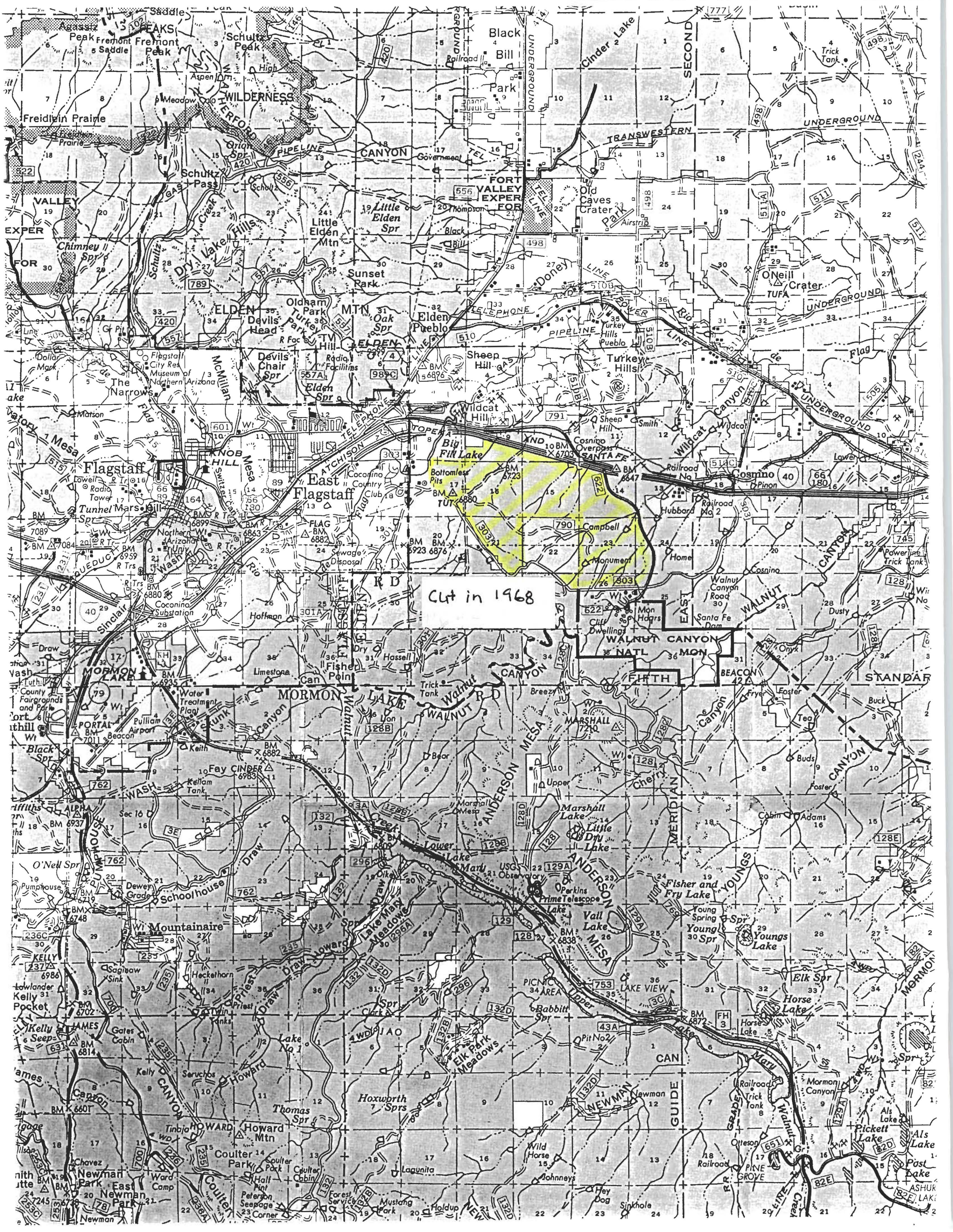

Agassiz Peak
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ANDERSON MESA
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Lake Mary Meadows
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Elk Spr
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Gates Cabin
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Twin Tanks
Seruchos
James Canyon
HOWARD CANYON
Howard Mtn
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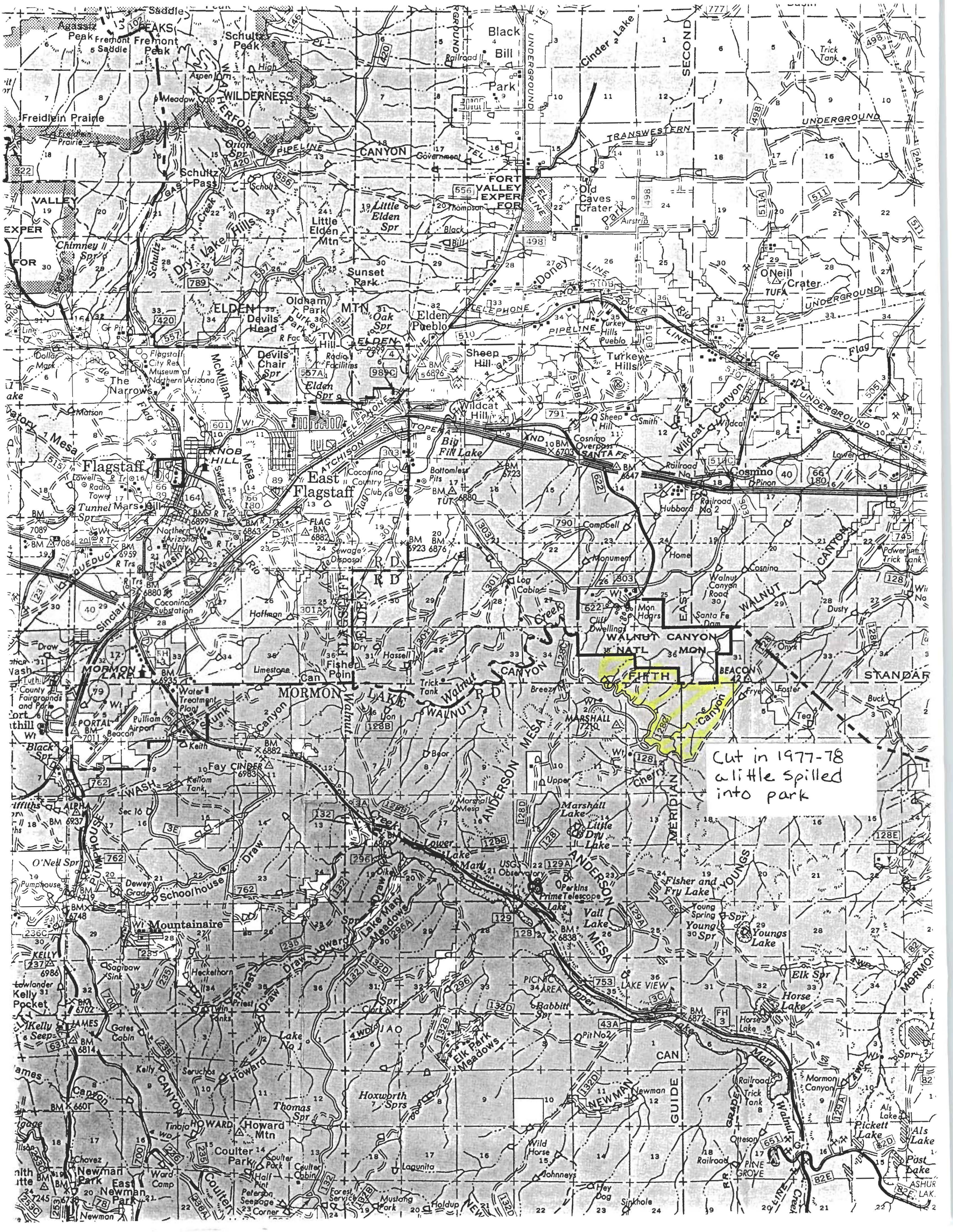
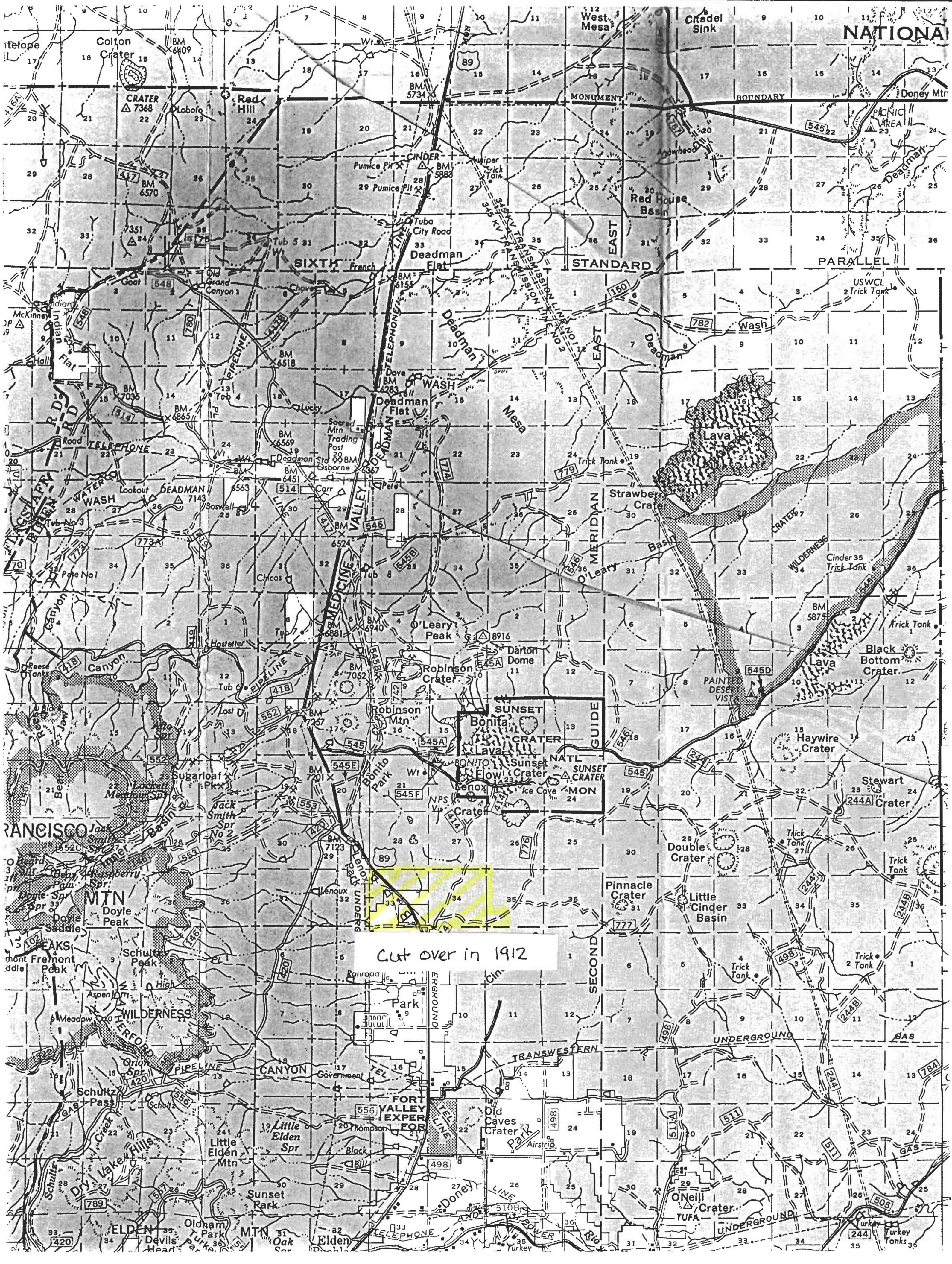
Coulter Park
Thomas Spr
Hoxworth Sprs
NEWMAN CAN
GUIDE
Railroad Trick Tank
Mormon Canyon
Pickett Lake
Als Lake
Past Lake
ASHURST LAKE
Wild Horse
Johnneys
Hey Dog
Sinkhole
PINE GROVE
Lagunita
Coulter Cabin
Forest Service
Mustang Park
Holdup
Chavez
Newman Park
East Newman Park
Ward Camp
Half Pint
Peterson Seepage
Corner

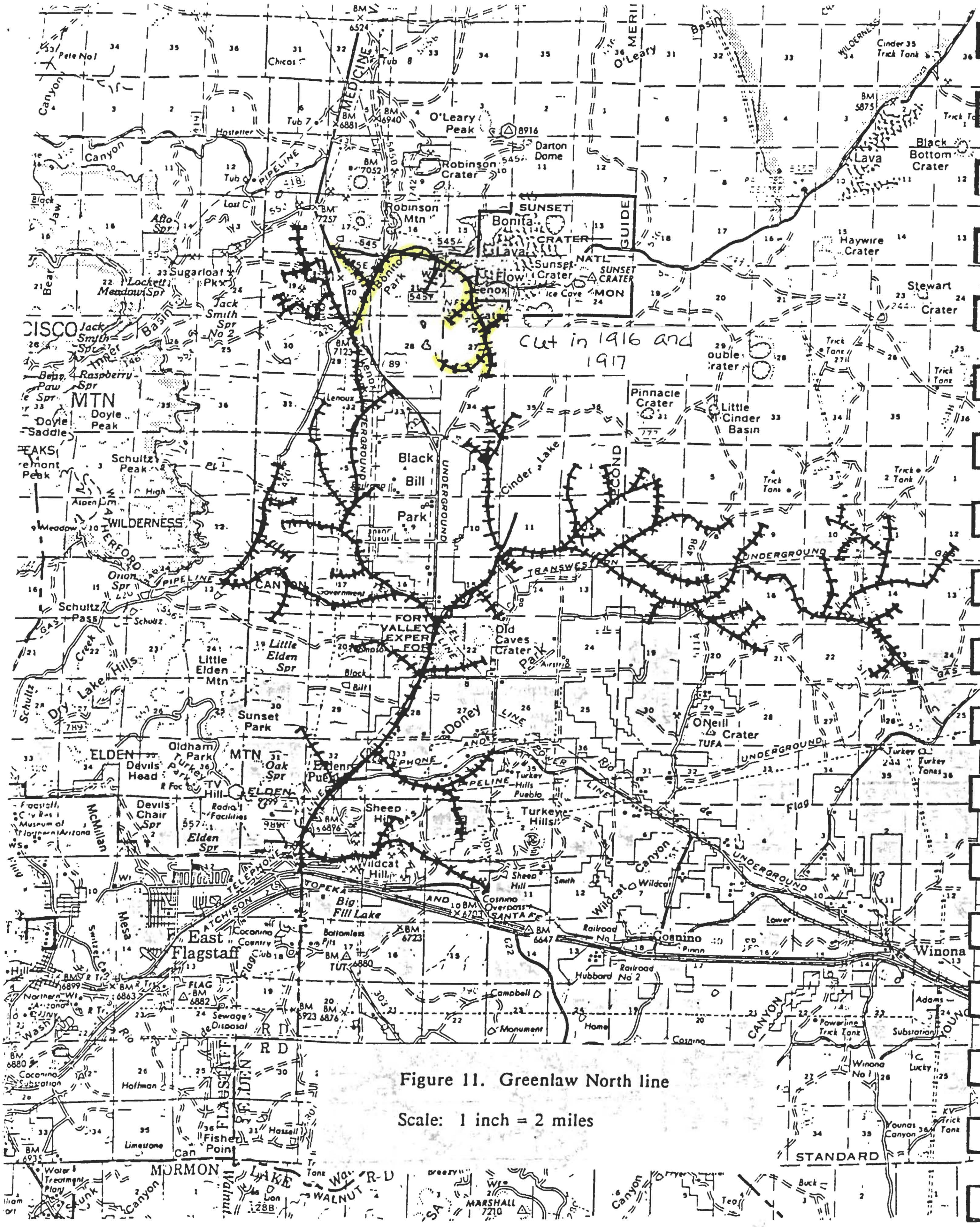
Cut in 1968



Cut in 1977-78
a little spilled
into park



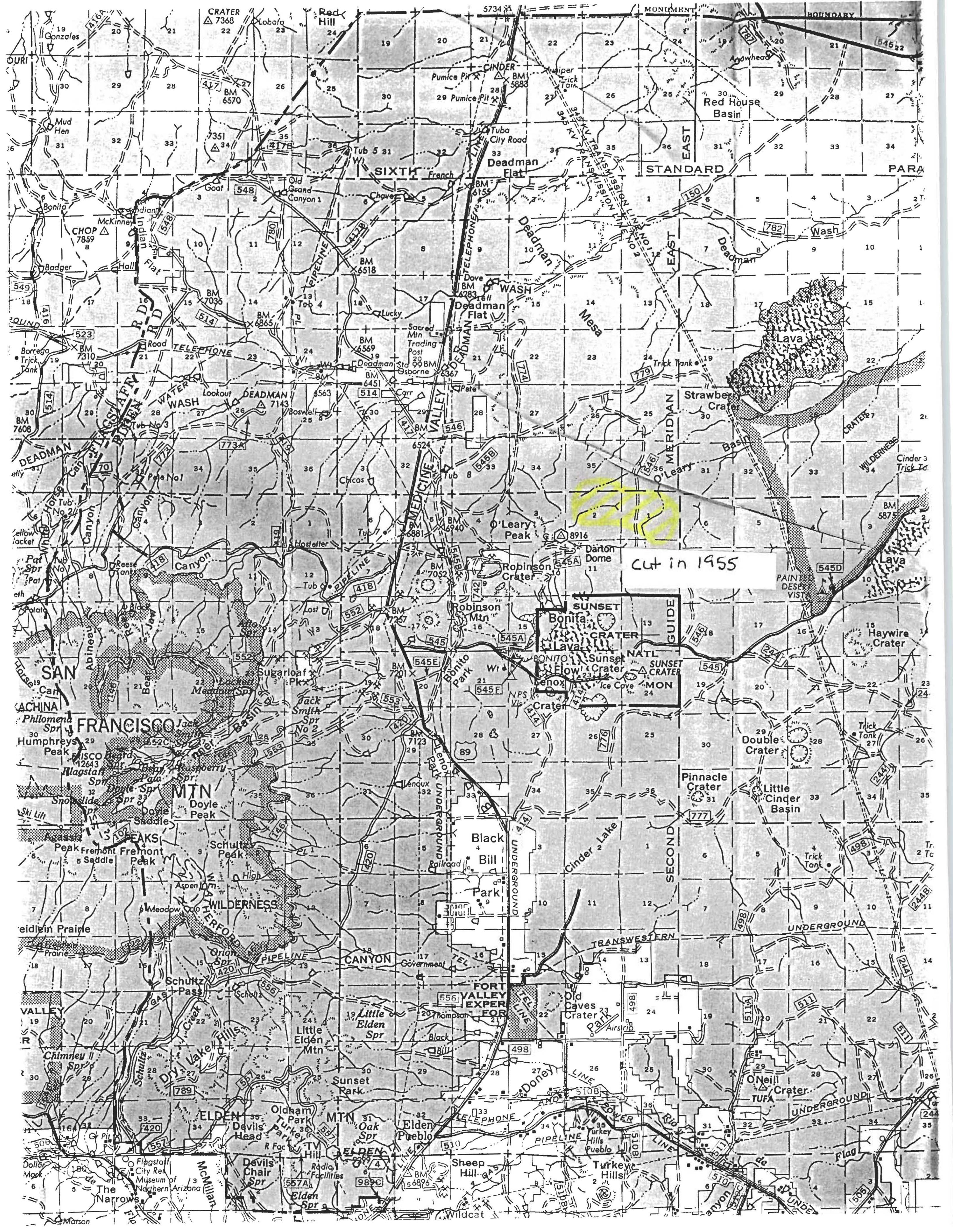
Cut over in 1912



Cut in 1916 and 1917

Figure 11. Greenlaw North line

Scale: 1 inch = 2 miles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Gonzales
Lobato
CINDER
Pumice Pit
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Mud Hen
Tuba City Road
SIXTH
STANDARD
PARA
EAST
Deadman Flat
French
Old Grand Canyon
Chavez
Bonita
McKinney
CHOP 7859
Indian Flat
Badger
Hall
PIPELINE
TELEPHONE LINE
345 KV TRANSMISSION LINE No 2
345 KV TRANSMISSION LINE No 1
Deadman
Deadman Mesa
Deadman Wash
Lucky
Dove
WASH
Sacred Mtn Trading Post
Borrego Trick Tank
Road
TELEPHONE
Lookout
DEADMAN 7143
WATER
WASH
Tub No 3
Boswell
Carr
Osborne
Pete
VALLEY
DEADMAN
MERIDIAN
Strawberry Crater
Lava
Trick Tank
O'Leary
Basin
WILDERNESS
CRATER
Cinder Trick Tank
FLAGSTAFF
RIDER
RD
Horse
Canyon
White Horse
Pete No 1
Chicos
MEDICINE
Tub
O'Leary Peak 8916
Darton Dome
Robinson Crater
Robinson Mtn
Hostetter
Canyon
Reese Tanks
PIPELINE
Lost
Pat Spr
Potato
Black Jaw
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Lenox Crater
Ice Cave
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Bonito Park
Sugarloaf Pk
Jack Smith Spr No 2
Lockett Meadow Spr
Inner Basin
Painted Desert Vista
Haywire Crater
SAN
KACHINA
Philomena Spr
FRANCISCO
Humphreys Peak
FRISCO 12643
Flagstaff Spr
Beard Spr
Bear Paw Spr
Doyle Spr
Raspberry Spr
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PEAKS
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Flagstaff City Res
Museum of Northern Arizona
McMillan
The Narrows
Devils Chair Spr
TV Hill
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Sheep Hill
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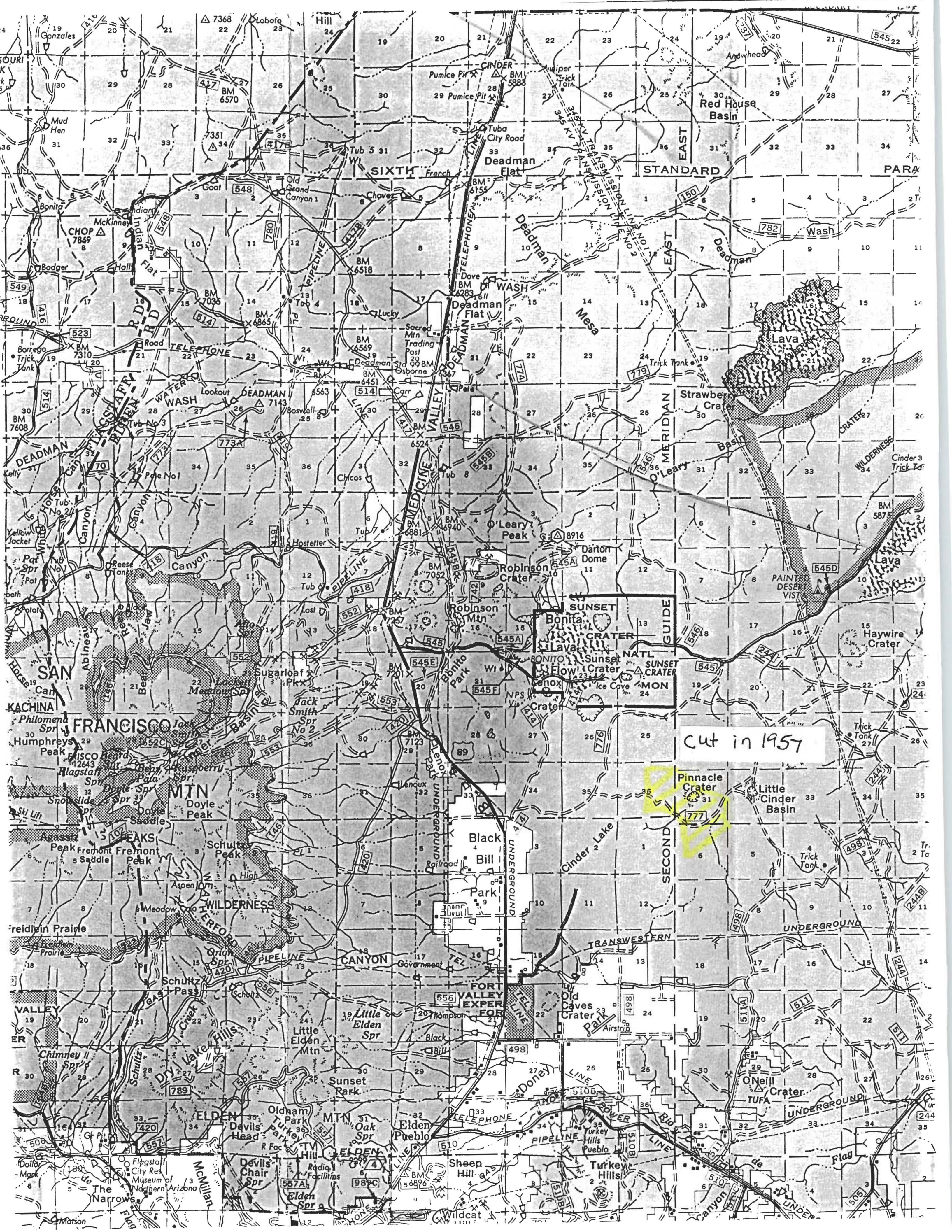
Turkey Hills
Wildcat
Canyon
Rio de Flag
Matson
Dollar Mark
Flag
cut in 1955


Cut in 1957

Sixth Standard Parallel
Deadman Flat
Deadman Mesa
Deadman Wash
Red House Basin
Strawberry Crater
Lava
O'Leary Basin
O'Leary Peak
Darton Dome
Robinson Crater
Robinson Mtn
Medicine Valley
Sunset Crater Natl Mon
Bonito Lava Flow
Sunset Crater
Ice Cave
Lenox Crater
Painted Desert Vista
Haywire Crater
Second Guide Meridian East
Pinnacle Crater
Little Cinder Basin
Cinder Lake
Black Bill Park
Fort Valley Exper For
Old Caves Crater
Doney Park
O'Neill Crater
Tufa
San Francisco Mtn
Kachina Peaks Wilderness
Humphreys Peak
Agassiz Peak
Fremont Peak
Doyle Peak
Schultz Peak
Weatherford
Friedlein Prairie
Schultz Pass
Dry Lake Hills
Little Elden Mtn
Elden Mtn
Sunset Park
Elden Pueblo
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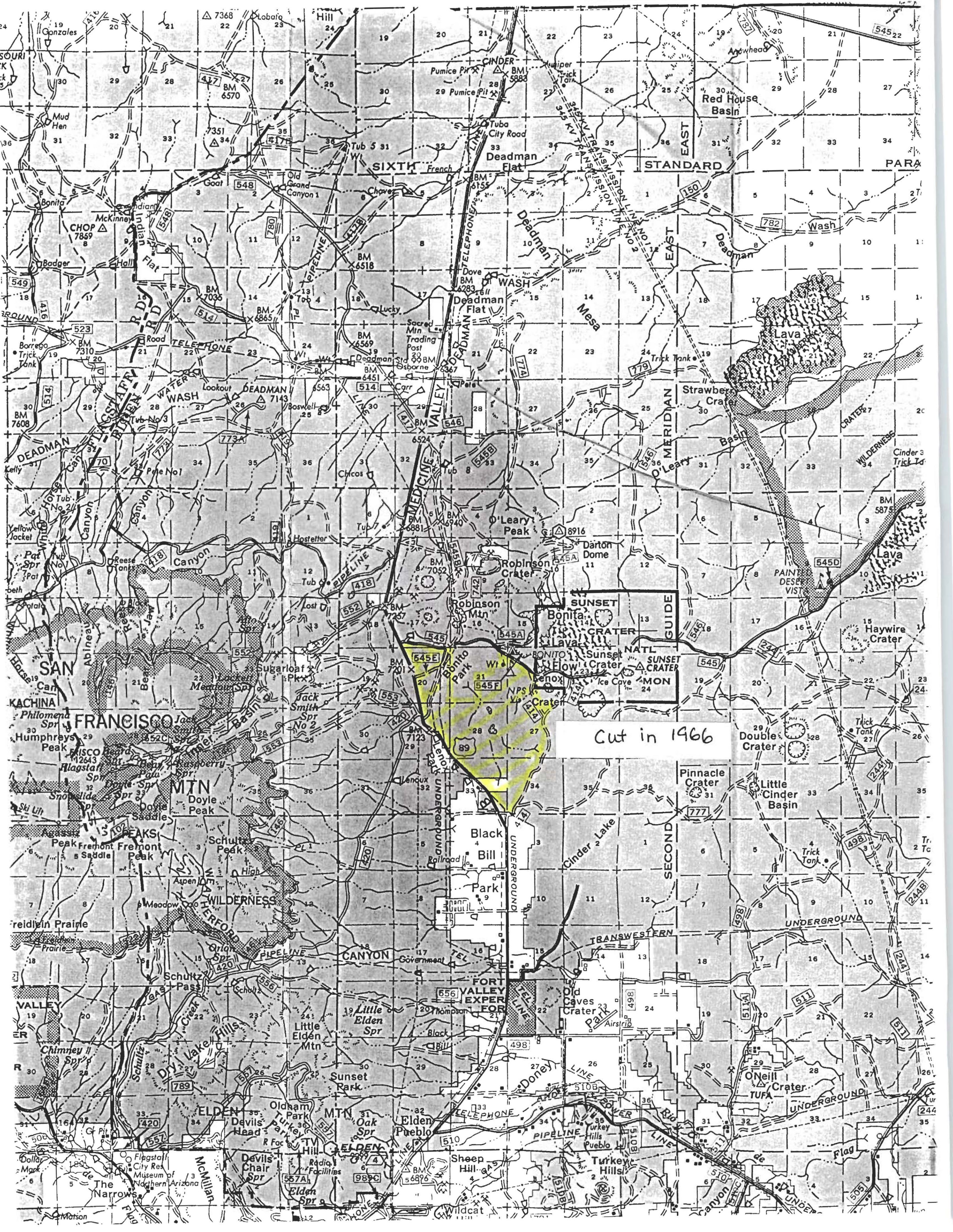
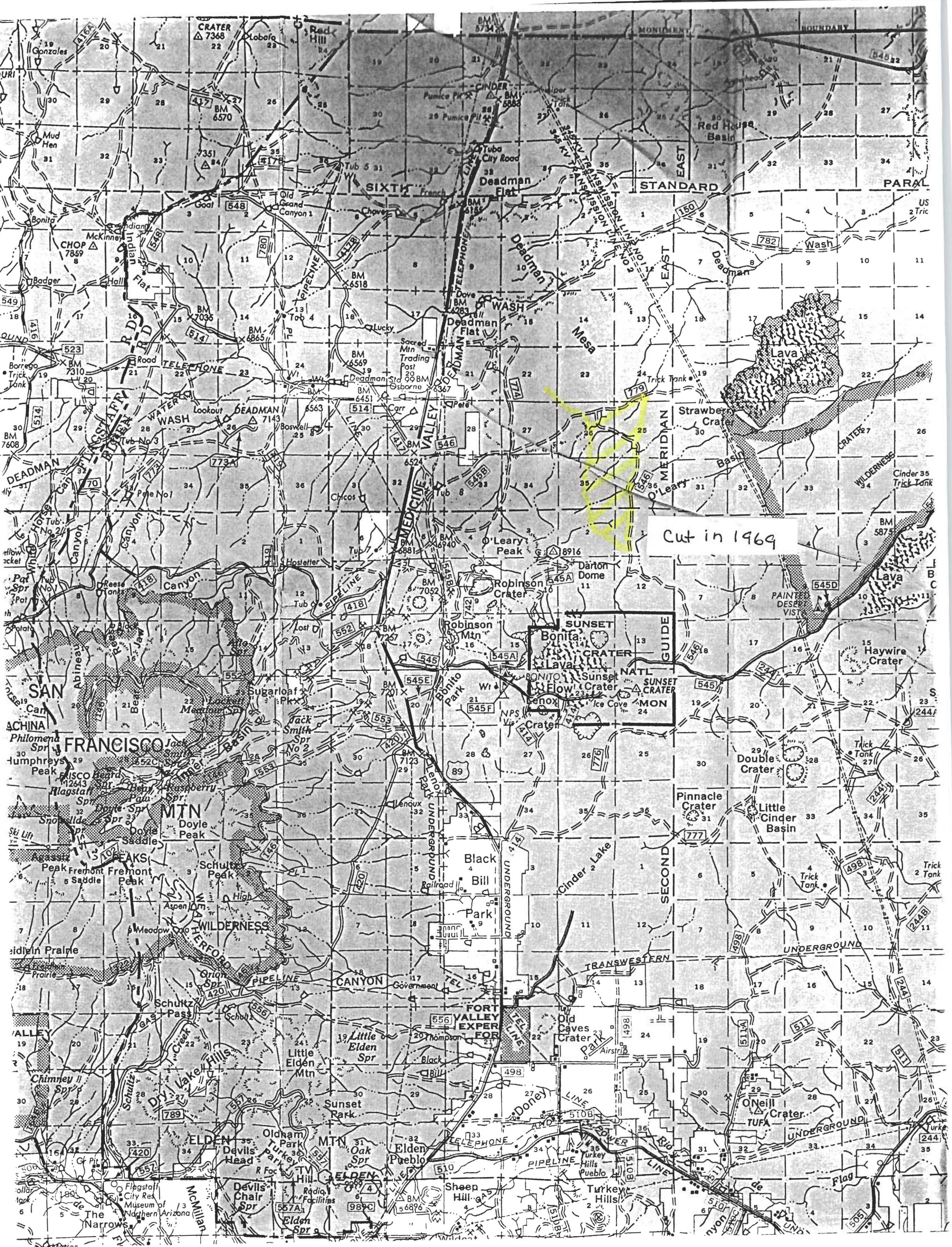
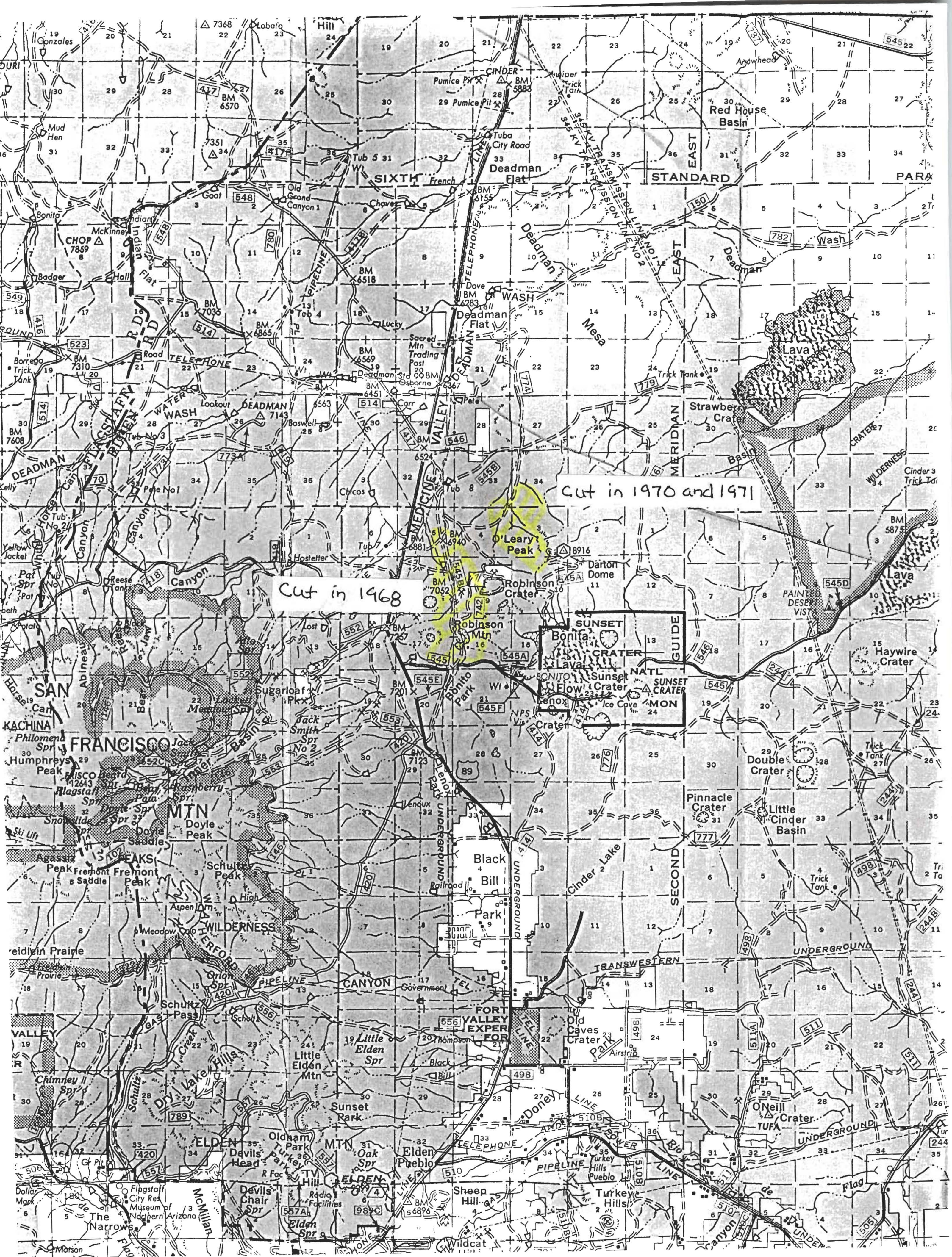
Chop 7859
Indian Flat
Sacred Mtn Trading Post
Hostetter
Cinder



Cut in 1966
SAN FRANCISCO MTN
Humphreys Peak
Agassiz Peak
Fremont Peak
Doyle Peak
Schultz Peak
KACHINA
PEAKS
WEATHERFORD
WILDERNESS
Schultz Pass
Dry Lake Hills
ELDEN MTN
Little Elden Mtn
Sunset Park
Oldham Park
Elden Pueblo
Sheep Hill
Turkey Hills
Turkey Hills Pueblo
The Narrows
Museum of Northern Arizona
Flagstaff City Res
McMillan
Devils Head
Devils Chair Spr
FORT VALLEY EXPER FOR
Old Caves Crater
Doney Park
Airstrip
Black Bill Park
Cinder Lake
Bonito Park
Lenox Park
Lenox Crater
Sugarloaf Pk
Robinson Mtn
Robinson Crater
O'Leary Peak
Darton Dome
SUNSET CRATER NATL MON
Bonito Lava Flow
Sunset Crater
Ice Cave
Pinnacle Crater
Double Crater
Little Cinder Basin
Haywire Crater
O'Neill Crater
Strawberry Crater
Lava
PAINTED DESERT VIST
MEDICINE VALLEY
DEADMAN WASH
Deadman Flat
Deadman Mesa
Sacred Mtn Trading Post
Red House Basin
SIXTH STANDARD PARA
EAST GUIDE MERIDIAN
SECOND
345 KV TRANSMISSION LINE NO 2
Indian Flat
CHOP 7869
Gonzales
Lobato
Mud Hen
Bonita
Badger
Borrego Trick Tank
Jack Smith Spr No 2
Lockett Meadow Spr
Friedlein Prairie
Chimney Spr
TRANSWESTERN
UNDERGROUND
TELEPHONE
PIPELINE
Rio de Flag
89

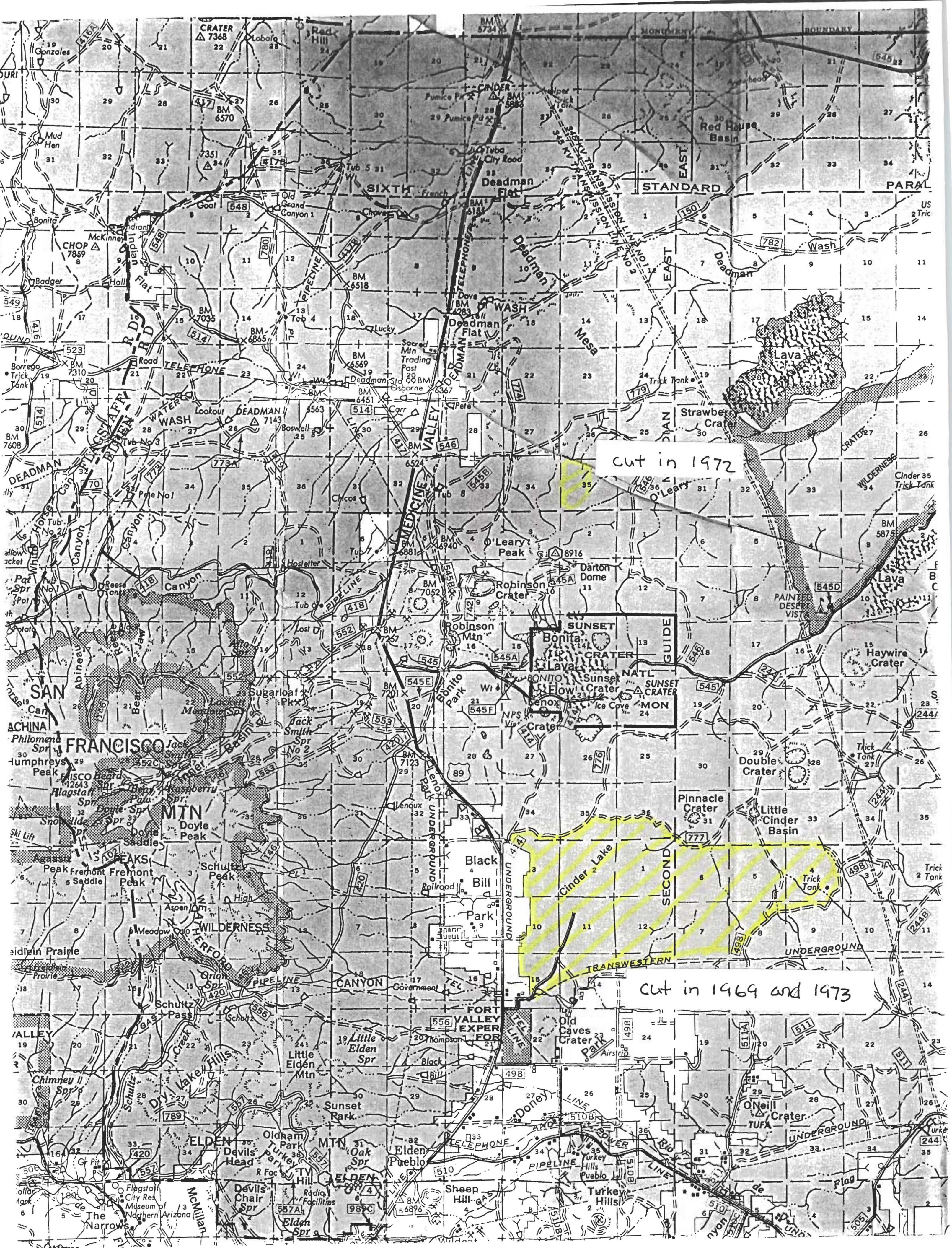

CRATER 7368
Lobofo
Red Hill
MONUMENT
BOUNDARY
Gonzales
Mud Hen
Pumice Pit
CINDER
BM 6883
BM 6570
7351
Tuba City Road
Deadman Flat
Red House Basin
SIXTH
STANDARD
PARAL
French
Old Grand Canyon
Goat
Chaves
BM 6157
Bonita
Indian
McKinney
CHOP 7859
Indian Flat
Hall
Badger
BM 6518
TELEPHONE LINE
PIPELINE
TRANSMISSION LINE NO 2
345 KV TRANSMISSION LINE
Deadman
Deadman Wash
EAST
Dove
BM 6283
WASH
Deadman Flat
Mesa
BM 7035
BM 6865
Lucky
Sacred Mtn Trading Post
Borrego Trick Tank
BM 7310
Road
TELEPHONE
BM 6569
Deadman Sta 99 BM
Osborne 6367
BM 6451
6563
Pete
Carr
Trick Tank
Lava
Strawberry
Strawberry Crater
MERIDIAN
WATER WASH
Lookout
DEADMAN 7143
Tub No 3
Boswell
BM 6524
VALLEY
MEDICINE
BM 7608
DEADMAN
FLAGSTAFF BURDEN RD
Basin
O'Leary
CRATER
WILDERNESS
Cinder Trick Tank
Pete No 1
Chicos
Tub 8
Horse
Canyon
Tub No 2
Tub 7
BM 6881
BM 6940
O'Leary Peak
8916
BM 5875
Hostetler
Darton Dome
Pat Spr
Reese Tanks
Canyon
Tub
BM 7052
Robinson Crater
PAINTED DESERT VISTA
Lava
Potato
Lost
BM 7267
Robinson Mtn
SUNSET
Bonita
CRATER
Lava
NATL
GUIDE
Haywire Crater
Abineau
Sugarloaf Pk
BM 7201
Bonito Park
BONITO
Flow
Sunset Crater
SUNSET CRATER
MON
Lenox Crater
Ice Cave
NPS Vis
SAN
Jack Smith Spr No 2
Lockett Meadow Spr
Inner Basin
FRANCISCO
Jack Smith Spr
Humphreys Peak
FRISCO 12643
Flagstaff Spr
Raspberry Spr
BM 7123
Lenox Park
Double Crater
Trick Tank
MTN
Doyle Saddle
Doyle Peak
Lenox
UNDERGROUND
Pinnacle Crater
Little Cinder Basin
Snowslide Spr
Ski Lift
Agassiz Peak
PEAKS
Fremont Saddle
Fremont Peak
Schultz Peak
Black Bill Park
Railroad
Cinder Lake
SECOND
Trick Tank
Aspen
High
Meadow
WEATHERFORD
WILDERNESS
Weidlein Prairie
Orion Spr
PIPELINE
CANYON
Government
TEL
TRANSWESTERN
UNDERGROUND
Schultz Pass
Schultz
GAS
FORT VALLEY EXPER FOR
Old Caves Crater
Park
Airstrip
Thompson
Little Elden Spr
Little Elden Mtn
Black Bill
Chimney Spr
Dry Lake Hills
Creek
Doney
LINE
O'Neill Crater
TUFA
UNDERGROUND
Sunset Park
ELDEN
Devils Head
Oldham Park
Turkey Park
MTN
Oak Spr
Elden Pueblo
TELEPHONE
POWER
LINE
PIPELINE
Turkey Hills Pueblo
Turkey Hills
TV Hill
ELDEN
Radio Facilities
BM 6896
Sheep Hill
Flagstaff City Res
Museum of Northern Arizona
The Narrows
McMillan
Devils Chair Spr
Elden Spr
Rio de Flag
Canyon

Cut in 1969



Cut in 1970 and 1971

Cut in 1968



cut in 1972

cut in 1969 and 1973