PRELIMINARY WILD RIVER STUDY

GILA RIVER

Prepared by the Pacific Southwest
Regional Task Force Team

(FOR GOVERNMENT USE ONLY)

DY35

GILA RIVER 3rd Priority

Location - Eastern Arizona and western New Mexico. Two counties in each state.

Length of study area - 170 miles.

Quality of recreation - Excellent fishing in upper river and good hunting throughout. Elk, deer, bear, and turkey present. Access limited. Gila Wilderness Area and Gila Cliff Dwellings in study area.

Ownership - Largely publically owned.

Summary of findings - Upper 30 miles in National Forest. Lower 150 miles BLM and privately owned. Isolated but spectacular gorges occur in lower desert portion. Downstream portion capable of supporting large increase in use, but upper portion cannot support an increase without altering quality of experience in wilderness setting. Proposed Hooker Dam will impair wild river status.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION
PACIFIC SOUTHWEST REGION
180 New Montgomery Street
San Francisco, California 94105

September 13, 1963

Memorandum

To: Director

From: Acting Regional Director

Subject: Transmittal of Preliminary Wild River Survey of the Gila River

This report is submitted in accordance with your instructions, dated July 23, 1963. It should be recognized that the report is the result of a cooperative effort of the following individuals and their respective agencies:

Department of Agriculture

Mr. Craig A. Giffen - Forest Service, Region 5

Department of Interior

Mr. David J. Lenhart - Bureau of Sport Fisheries & Wildlife
U. S. Fish & Wildlife Service
Mr. Jack M.Shelton - Bureau of Commercial Fisheries
U. S. Fish and Wildlife Service
Mr. Leroy S. Augden - National Park Service, Western Region

Mr. Paul J. Leach - Bureau of Outdoor Recreation, Chairman

That portion of the Gila River selected as a study unit extends from the agricultural area near Safford, Arizona, to the confluence of the South Fork in the Gila National Forest, New Mexico. This stretch comprises about 170 miles of river. The lower end of the study area lies 170 miles by road east of Phoenix, Arizona, and 130 miles by road northeast of Tucson, Arizona. The upper end of the study area (Gila Wilderness Area) lies 190 miles by road northwest of El Paso, Texas, and 250 miles by road southwest of Albuquerque, New Mexico.

Topography is variable, ranging from rough canyons and gorges to rolling countryside. On the whole, the setting is an arid one. Pastoral characteristics occur only where water from the river has been put to use for irrigation along occasional stretches of the river or where livestock grazing occurs.

The upper 30 miles of the study area passes through the Gila National Forest where land ownership is 95 per cent public. The lower 150 miles of study area traverses private and public domain lands and in this section a considerable portion is in public ownership.

The Gila River is fairly clear; however, during the summer muddy conditions prevail. The fact that it exists at all in such an arid region is perhaps its greatest asset. The upper reaches of the study area are within the rugged Gila Wilderness Area of the Gila National Forest. Isolated but spectacular gorges occur within the lower desert portion of the study area. Approximately 50 per cent of the land is rough and broken while the remainder is generally flat to rolling.

The downstream portion of the study area below the town of Gila, New Mexico, is capable of supporting a large increase in use. The upper portion which has more attractive qualities cannot support a substantial increase in use without altering the quality of the experience of a wilderness setting.

The unique archeological features within and adjacent to the upper portion of the study unit attract visitors from out of state as does the wilderness area which encompasses the headwaters of the river. Unique features in the lower river area are limited.

The proposed Hooker Dam planned for construction in 1970 would permanently impair the natural free-flowing conditions of the river. Water would be backed up for six miles upstream from the National Forest boundary northeast of Gila, New Mexico. This proposed dam enjoys strong regional support, even among some supporters of the adjacent Gila Wilderness Area. This is explained by the fact that the Pacific Southwest survives on developed water and the reclamation program has deep roots in this area.

The proposed Alum Dam further upstream would be unnecessary if the Hooker Dam were constructed. The Alum Dam would be detrimental. Impressions gained from local people indicate that the proposal was a dead issue.

To effectively protect the qualities of this river, it would be desirable to include as its setting all of the land that may be witnessed from the river, or to the first ridge top which, in most

cases, is less than one mile in distance. In addition, there is a need to determine and define the types of management and development which should or should not be allowed within the setting.

(Sgd.) Floyd A. Henderson
Acting Regional Director

GILA RIVER INVENTORY FORM

A. General information

1. Name of river

Gila River

2. Location of study unit

From point where river enters agricultural area in vicinity of Safford, Arizona, to confluence of the south fork in the Gila National Forest in New Mexico.

3. States

Arizona and New Mexico

4. Counties

Arizona: Graham and Greenlee; New Mexico: Hidalgo and Grant

5. Major drainage basin

Colorado River basin

6. Population within 50 miles - 23,000; 150 miles - 1,111,000; 250 miles - 2,420,000

7. Weather characteristics

Temperature variation is extreme even within maximum use season which is June through September - and during hunting season in November. Frost may be expected at any time during the year in the mountainous portion of study area above Cliff, New Mexico. The lower portion is typified by hot dry summers.

Precipitation averages 30" yearly at higher elevations, 5" to 10" at lower elevations. Thunderstorms and flash floods occur in late summer.

Source: Gila National Forest personnel.

B. Description and characteristics of river

1. Number of miles in study unit

Approximately 170 miles.

2. Width characteristics

Width is generally 40' - 100' with isolated areas in the lower portions much wider.

Source: Observation.

3. Depth characteristics

Depth is two feet in shallower places to 10 feet in gorges. Holes are deeper.

Source: Impressions.

4. Flow characteristics

Rapid flow in mountainous reaches above Cliff, New Mexico. Slower through agricultural and desert reaches between Cliff and Safford, Arizona.

Source: Observation.

5. Course characteristics and stability

A stable stream throughout the length of study area.

6. Bed material

The bed material is variable, sand to rock, with the extreme lower portions very silty.

7. Water quality

Muddy during maximum use season (summer) because of seasonal rainfall and runoff during this period. There is minor mining pollution near Clifton, Arizona. On the whole, river is relatively unpolluted.

Source: Gila National Forest personnel.

8. Type of fishery

Upper reaches: Rainbow and cutthroat trout, suckers, whitefish. (Cold water species.)

Lower reaches: Water becomes warmer and catfish, bluegill and bass replace the cold water fishes.

Source: Gila National Forest personnel.

C. Description and characteristics of setting

1. Nature of topography

Varies from steep canyons and gorge characteristics in upper stretches to rolling hills and flatlands downstream; however, there are isolated spectacular gorges in the downstream portion.

Source: Gila National Forest personnel, observation.

2. Ecological type

Upper reaches: Spruce, fir, ponderosa pine, walnut, sycamore, aspen, alder, cottonwood.

Lower area: Desert species, salt, cedar and willow.

Source: Gila National Forest personnel.

3. Important species of wildlife and status

Elk - increasing

Mule deer and whitetail deer - stable

Turkey, bear, wild pig, antelope, dove (very good hunting)

Minor species: Bobcat; squirrel; beaver; rabbit; quail.

Source: Gila National Forest personnel.

D. River access

1. Types and locations of public access (see map)

Six major highways cross the lower portion of the study area. In addition, several minor roads cross and runs parallel to the river, but significant stretches are accessible only by foot. The upper portion of the study area is physically accessible by jeep, but is within the Gila Wilderness Area where vehicular travel is prohibited.

Source: Maps.

2. Factors limiting public access

Topography is rough along many stretches of the river both in the mountain and desert sections. Vehicular travel is prohibited in the Gila Wilderness Area by regulation of Secretary of Agriculture. Private lands block access in some areas.

Source: Gila National Forest personnel, observation.

E. Special scientific, educational and esthetic values

1. Geologic

Precipitous vertical gorges in upper reaches are caused by a broken cap of basalt layed on top of river dissected Gila Conglomerate.

Source: Gila National Forest personnel, observation.

2. Biotic

Gila trout, a variation of rainbow, is located in this drainage.

Source: Gila National Forest personnel.

3. Historic

Old cavalry outpost located near town of Gila. Familar personalities of the old west frequented the study area--Geronimo; Apache Kid; Billy-the-Kid (killed his first man in Silver City).

Source: Gila National Forest personnel.

4. Archeologic

Gila Cliff Dwellings National Monument is near upper end of study area. Also in this vicinity 1,600 acres of National Forest have been identified and recognized as a unique archeologic area. This area is protected by its inclusion in the Gila Wilderness Area.

Source: Gila National Forest personnel.

F. Present quality of recreation and environmental factors limiting quality:

Kinds	Quality: Excellent	Good	Fair	Poor	Environmental Limiting factors
Boating:					
Motor				X	
Non-motor			X		Rafting below town of Gila
Fishing	X(upper river)		X(lower river)		
Hunting					
Big game		X (upper river area, but limited access)			
Small game	X(doves)		X		
Waterfowl				X	
Camping			X (limited access)		
Swimming				X	
Hiking		X	X(good in upper area, but poor in lower area)		
Sightseeing	X(at upper stretches)				
Nature study			X		

Source: Gila National Forest personnel.

G. Classification of study unit

Class III - Natural environment area.

Class IV - Unique natural area.

Class V - Primitive area

H. Status of economic development

1. Economy of the general river area

Mining, agriculture, ranching and tourism.

Source: Gila National Forest personnel

2. Status of economy

Mining and agriculture are declining slightly while tourism is expanding. The proposed Central Arizona Irrigation Project would alter the agriculture economy.

The Gila Wilderness Area is just beginning to be "discovered" by a significant number of people.

Source: Gila National Forest personnel.

3. Transportation routes to and through the general river area

No transportation routes tap the upper reaches of the study area because motorized travel is prohibited in the Gila Wilderness Area. A Forest Service road crosses at the extreme upper end of the study area.

Outside the wilderness area on the downstream stretch of the study area, six good highways cross the river and several minor roads run parallel to some segments.

Frontier Airlines serves Safford, Arizona, and Silver City, New Mexico.

Santa Fe Railway serves Silver City and Southern Pacific Railway serves Safford, but at present there is no passenger service to Silver City.

Landing strips for small planes are available at scattered locations near the study area.

Source: Maps, Gila National Forest personnel.

I. Present and proposed water resource developments

There are some small irrigation diversions upstream from the study area on private land within the National Forest boundary. There are also numerous larger diversions downstream from the National Forest where agricultural uses become appreciable.

The proposed Hooker Dam to be built by the Bureau of Reclamation would be located near the Gila National Forest boundary about six miles upstream from Cliff, New Mexico. Construction is proposed for 1970.

A Forest Service impact survey shows that this dam and reservoir would not be substantially adverse to the quality of the wilderness area. An arm of the reservoir would reach a short way into the wilderness area. Forest Service plans are to treat this segment as wilderness with access to the shore by non-motor boat only. The proposed Hooker Dam Reservoir may flood some archeological sites. There would be many more sites left unflooded.

Another Bureau of Reclamation dam proposed to be built up river near Alum Mountain would be detrimental to the wilderness setting of the upper Gila River. The Alum Dam proposal does not appear feasible.

Source: Gila National Forest personnel.

J. Detrimental and/or beneficial impacts

1. Agriculture

Past history of overgrazing has had some detrimental affect on quality of the study area. Grazing reductions have been

made on National Forest land. Proper grazing use could be compatible with other uses and no action is now planned to completely eliminate grazing in the wilderness area.

2. Forestry

No timber cutting is planned for the study area.

3. Mining

Prospecting is permitted but is not significant.

4. Transportation

An improved road is now being completed to the upper end of the study area. This road is beneficial from the standpoint of access for recreation but detrimental to the extent that it will encourage heavier use of the adjacent wilderness area with consequent danger of too much wilderness use.

5. Industry

None

6. Recreation

Four Forest Service campgrounds exist near the upper reaches of the study unit with several more planned. The nearby Cliff Dwellers National Monument attracts a number of visitors. Additional developments are planned there. Limited additional use can be made of the river area without significant adverse affect.

7. Residential - Community

Residential development is increasing, but is not of significance.

Source: Gila National Forest personnel.

K. Condition of watershed

The watershed is in fair condition. Some measures that could be taken to improve conditions of the watershed are not now being applied within the wilderness area because such treatment would call for methods and procedures incompatible with wilderness management.

L. Land ownership

That portion of the study area within Gila National Forest is 95 per cent publically owned. The lower portion has a considerable amount of public domain land.

Source: Maps.

M. Actions that have been taken or are planned to protect the natural qualities of the river and its environment

1. The designated Gila Wilderness Area is by regulation of the Secretary of Agriculture.

2. Multiple use plans for Gila National Forest provide for protection of asthetic values along all sectors of the river within the study area. These plans call for a "Streamside Zone" of varying width in order to protect asthetic qualities. The "Streamside Zone" averages from 200 to 300 feet in width, but may be narrower or wider as determined by topography and the field of view.

N. Other

None.

O. Sources of reference and information

Gila National Forest personnel
Bureau of Land Management personnel
Maps - topographic, highway, Forest Service, Bureau of Land Management
Observation
Forest Service Multiple Use Plans

P. Photographs

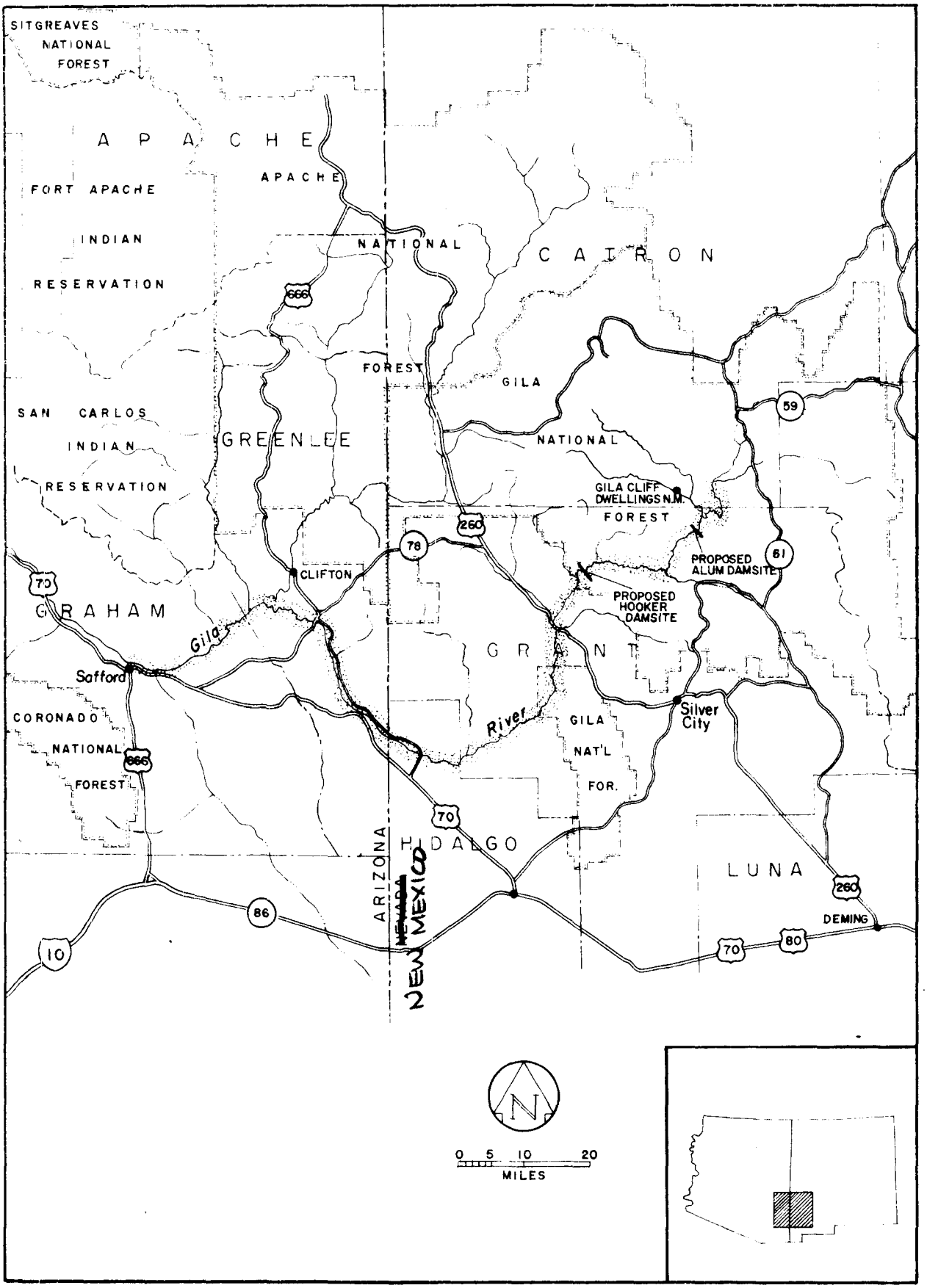
(See attachments.)

Q. Method of study

Air reconnaissance of study area and watershed above study area. On-the-ground investigation at isolated sections of the river by car. Contact with local agency personnel and review of available literature.

R. Period of study

August 26 and 27, 1963.


SITGREAVES NATIONAL FOREST
APACHE
FORT APACHE INDIAN RESERVATION
APACHE NATIONAL FOREST
CAIRON
GILA NATIONAL FOREST
SAN CARLOS INDIAN RESERVATION
GREENLEE
GILA CLIFF DWELLINGS N.M.
PROPOSED ALUM DAMSITE
PROPOSED HOOKER DAMSITE
CLIFTON
GRAHAM
Gila River
Safford
GRANT
Silver City
GILA NAT'L FOR.
CORONADO NATIONAL FOREST
HIDALGO
LUNA
DEMING
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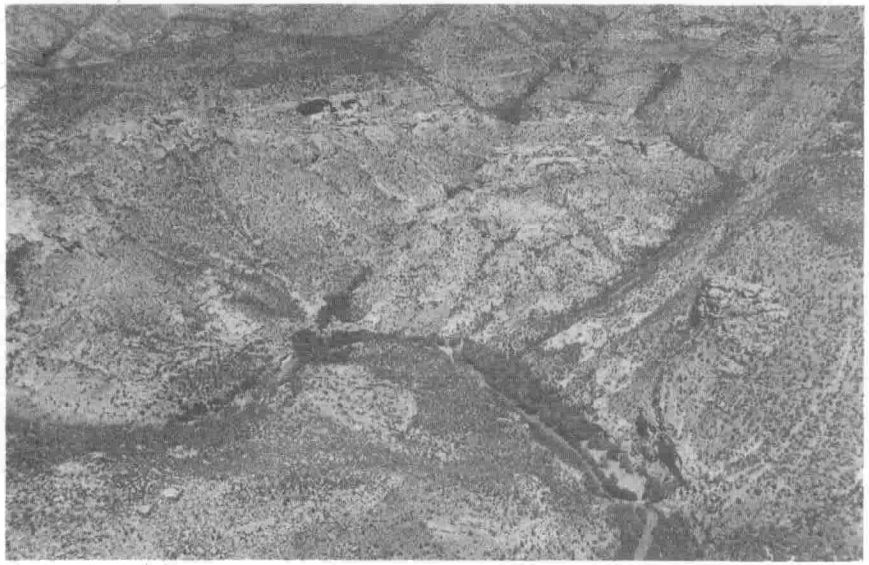


RUGGED TERRAIN IN GILA WILDERNESS AREA

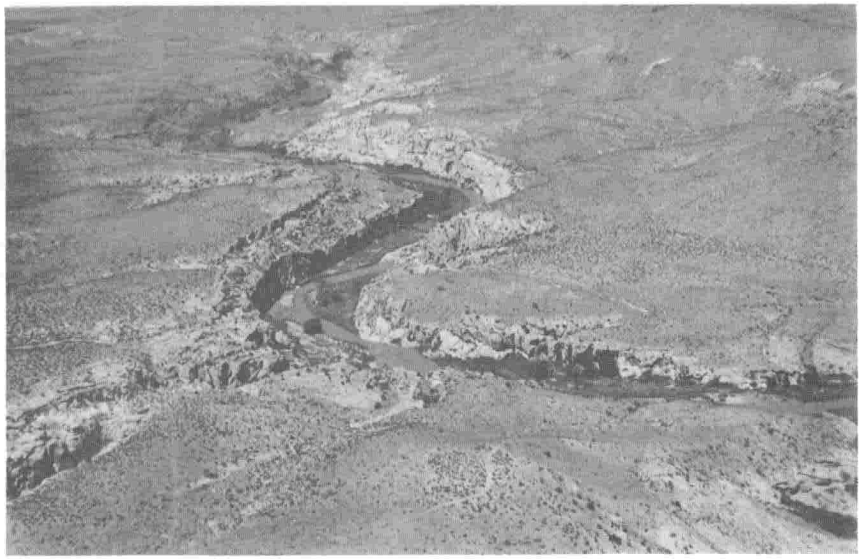
GILA IRRIGATED LAND IN NEW MEXICO

BOUNDARY OF GILA NATIONAL FOREST

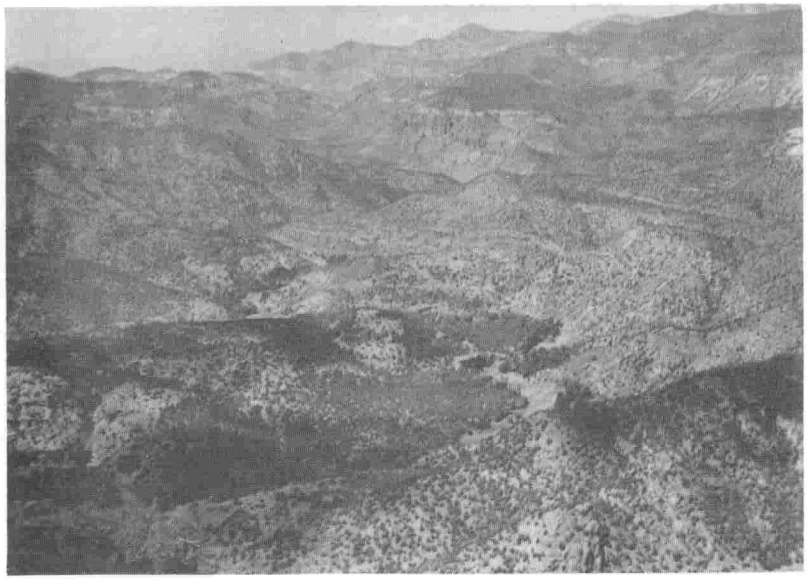
PRIVATE INHOLDING IN NATIONAL FOREST

MUDDY CONDITIONS NEAR SAFFORD

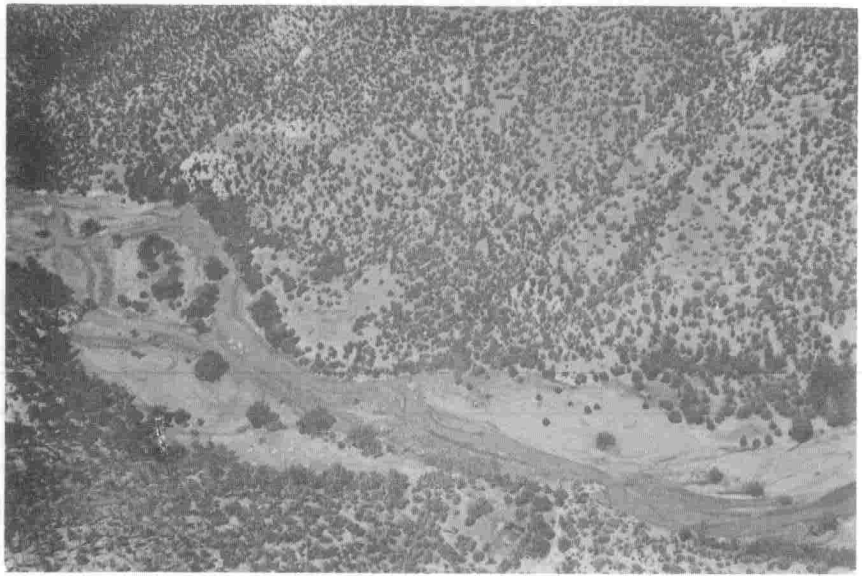
GILA CLIFF DWELLINGS NATIONAL MONUMENT AREA



GORGE IN DESERT AREA



INACCESSIBLE GILA WILDERNESS AREA



FLOOD PLAIN

AGRICULTURAL DEVELOPMENT
IN ARIZONA

UNDEVELOPED
DESERT LAND