Memorandum

To: Director

From: Acting Regional Director

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

September 13, 1963

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 & Wildlife Service

Mr. Leroy S. Augden - National Park Service, Western Region

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

The Salt River is located in east central Arizona. The stretch of river which appears worthy of wild river status is approximately 80 miles in length situated between Roosevelt Lake 55 miles east of Phoenix and its point of inception where the White and Black rivers converge to form the Salt. It lies in a mountainous area characterized by an extremely rough and broken terrain.

With the exception of a minor amount of private land near Roosevelt Lake, the entire study area is Tonto National Forest
Land or is in the San Carlos or Apache Indian Reservation.

The river is undeveloped, unpolluted and in its natural free-flowing condition. The scene as viewed from the river is primitive in nature. The multi-colored rock formations, and variety of fauna and flora, including a desert, chapparal and coniferous complex offers esthetic values of an outstanding quality. Saline springs flowing into the Salt which have given it its name are unique and of special public interest.

Present use of the river and setting is considered extremely light. This is due principally to the lack of public access and rugged physical terrain. A significant increase of use could be accommodated without destroying the resource or the quality of the experience.

Perhaps the most important feature of this river is its size and quality in a semi-arid setting. It would appear that this would be an attraction in itself and would outweigh other uses of the river which at this time is limited to grazing. Although present use is primarily local an active influx of retired citizens and winter vacationists will result in a significant out-of-state use.

There are no proposed plans for development that would impair the natural setting of the river, nor are there any existing water resource based developments within the study area.

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 roughly to the first ridge top which in most instances is less than one mile in distance. In addition there is need to determine and define the types of management and development which should, or should not be allowed within the setting.

No specific problems were identified which would tend to prevent a wild river classification, however, no contact with the Bureau of Indian Affairs or tribal councils was made regarding Indian reservation lands.

(Sgd) Floyd A. Henderson

Acting Regional Director
A. General information

1. Name of river

Salt River

2. Location of study unit

East-central Arizona. The stretch of river included in this study is approximately 80 miles in length situated between Roosevelt Lake 55 miles east of Phoenix and its point of inception where the White and Black Rivers converge.

3. State

Arizona

4. County

Gila

5. Major drainage basin

Colorado River Basin

6. Population within 50 miles-38,000; 150 miles- 1,295,000

250 miles- 2,378,000

7. Weather characteristics

The maximum use season is from October to June when the temperatures are moderate to warm. The remaining months are extremely hot. At Roosevelt Lake, which forms one boundary of the study area, the yearly mean average temperature is 67°. Precipitation varies with elevation from 7 inches in the lower portion to
20 inches at the upper limit of the study area. Maximum precipitation occurs from July to September and December to February.

Source: "Climate of Arizona", Bureau of Land Management

B. Description and characteristics of river

1. Number of miles in study unit
200 miles

2. Width characteristics

The width is generally 40-100 feet, fluctuating with the precipitation and snow melt.

Source: Observation, Bureau of Land Management

3. Depth characteristics and
4. Flow characteristics

Depth and flow vary with spring runoff and summer rain. The river can generally be described as fast and shallow and incapable of being crossed by foot. Stream gradient averages approximately 30 feet per mile.

Source: Forest Service; Bureau of Land management

5. Course characteristics and stability

The river is confined to a narrow flood plain extending outward from the river up to approximately 1/2 mile. Although flooding occurs with maximum runoff this period is very short and controlled by the rugged terrain.

Source: Observation; Forest Service
6. Bed material

The bed material is composed of sand, clay, gravel and bedrock. Decomposed granite makes up a large portion of the finer bed materials.

Source: Bureau of Land Management; Forest Service

7. Water quality

Although the water is of a fairly good quality, intensive saline springs flow into the river giving it a minor salt content, and its "Salt" name. During the maximum runoff season the river becomes very muddy, otherwise it has a light silty appearance. There is no pollution in the river. The water is safe for swimming.

Source: "Arizona Highways"; Bureau of Land Management

8. Type of fishery

Warm water species which include channel cats, bluegill, crappie, bass and carp occur at the lower elevations, while minor trout populations inhabit the upper portion.

Source: Bureau of Land Management; "Arizona Highways"

C. Description and characteristics of setting

1. Nature of topography

The topography is mountainous and characterized by an extremely rough and broken terrain. Elevations vary from 2100 feet to almost 6000 feet. Several intermittent and perennial Streams flow into the Salt River as it meanders westerly through
a series of deep box canyons.

Source: Observation; topograph maps

2. Ecological type

The ecological type varies with elevation. Below the 4000 foot elevation which includes over half of the river the setting is typical desert. From 4000-5000 feet the vegetative cover is associated with sparse grasses, shrubs, and minor amounts of oaks and junipers. From 5,000 feet upward a coniferous complex occurs with ponderosa pine being the principal species.

Source: "Arizona Highways"; observation

3. Important species of wildlife and status

White tailed deer
Desert Mule Deer
Quail
Dove
Rabbit
Mountain Lion
Wild pig

The delicate balance of forage cover and water tends to keep wildlife in a stabilized status.

Source: Bureau of Land Management; Forest Service

D. River access

1. Types and locations of public access

Public access is limited to one primary paved highway
US #60 and one secondary improved gravel road, State #288. The paved road traverses the river midway in the study area while the gravel road provides access to the westernmost boundary. Source: State Highway map

2. Factors limiting public access

The rugged physical terrain limits public access. In addition, the majority of land is within Indian reservations.

E. Special scientific, educational and esthetic values

1. Geologic

Spectacular stratified, multi-colored cliffs offer outstanding and unique views. Saline springs flow into the river giving it its "Salt" nomenclature.

Source: Observation; "Arizona Highways"

2. Biotic

The desert complex adjoining the lower portion of the river has a wide variety of cacti and native shrubs and grasses.

3. Historic

Roosevelt Dam which adjoins the study area is often referred to as the "Granddaddy" of western reclamation. It was constructed in 1903-1911 and was the first dam built under reclamation law. Although no special historic events are known for this stretch of the river, this entire region is closely connected with early Spanish exploration and Indian-Cavalry warfare.

4. Archeologic

Although no specific Indian cliff dwellings were mentioned
to the study team, this entire region is noted for its
inhabitance by cliff dwelling Indian tribes.

5. Other

It is felt that a river the size and quality of the Salt
in this semi-arid region is unique in itself.

F. Present quality of recreation and environmental factors

limiting quality:

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Note: The intense summer heat, lack of palatable water and muddy
water conditions during high runoff periods limit the
quality of all of the recreational activities. Also,
access is so restricted that very little use is
now made of the area.
G. **Classification of study unit**

Class III - Natural Environment Areas
Class IV - Unique Natural Areas
Class V - Primitive Areas

H. **Status of economic development**

1. Economy of the general river area

   Livestock and recreation form the backbone of the local river economy. It should be noted however that this is a very sparsely populated area and the economy is not significant at present.

   **Source:** Forest Service; Bureau of Land Management

2. Status of economy

   The livestock industry is stabilized. Tourism and recreation are increasing slowly due principally to the lack of access to the river and its setting.

   **Source:** Forest Service; Bureau of Land Management

3. Transportation routes to and through the general river area

   Two roads traverse the area, State #288 and US #60. Phoenix 55 air miles to the west provides the closest commercial air transportation. Several small airfields are situated in smaller towns in the vicinity of the study area. Southern Pacific Railway services the Phoenix area with several spur railroad connections to the smaller towns in the vicinity.

   **Source:** Highway maps
I. Present and proposed water resource developments

There are no existing water resource developments or proposed developments along this stretch of the river. Roosevelt Lake, downstream from the study area has only been filled three times since 1911. Thus it would appear that the water supply cannot support additional water retention structures. Much of the land adjoining the river is within a power site withdrawal or power site classification.

J. Detrimental and/or beneficial impacts

1. Agriculture
   None

2. Forestry
   None

3. Mining
   The Colorado Fuel and Iron Co is exploring iron ore possibilities in the area that could possibly have a detrimental affect to the qualities of the area through industrial pollution and diversion of tributary water supplies.

4. Transportation
   The Forest Service proposes to construct two roads in the Tonto National Forest which will provide access to the river area. These roads will be beneficial as they will provide needed access.

5. Industry
   None
6. Recreation

A proposed recreation development at Horshoe Bend would be beneficial to recreational use. It is understood that this would be a joint effort by the Bureau of Indian Affairs, Forest Service and Gila County.

7. Residential - community

None

K. Condition of watershed

The present condition is fair to poor. Trends in management will result in improved watershed conditions.

L. Land ownership

With the exception of a minor amount of private land near Roosevelt Lake the entire ownership is Tonto National Forest Land or is within Indian reservations. Approximately 45% of the land is Forest Service land and 55% is within the Fort Apache and San Carlos Indian Reservations.

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

The Forest Service has established a streamside zone to protect the natural qualities of the river.

N. Other

None
O. Sources of reference and information

- Forest Service personnel
- Bureau of Land Management personnel
- "Arizona Highways"
- "Climate of Arizona" - University of Arizona Agricultural Experimental Station
- Observation
- Maps - topographic, highway, Forest Service, Bureau of Land Management

P. Photographs

(see attachments)

Q. Method of study

Aerial reconnaissance of the entire river was conducted. Contacts with Bureau of Land Management and Forest Service personnel were made. Review of plans and maps.

R. Period of study

Flight over river - August 26, 1963

Contacts with Forest Service and Bureau of Land Management - August 27, 1963
THE OWNERSHIP ON THE SALT IS ALMOST ENTIRELY PUBLIC AND FORT APACHE AND SAN CARLOS INDIAN RESERVATION

NATIONAL FOREST LAND ADJOINS THE SALT

US #60 IS THE ONLY MAJOR ACCESS POINT
THE SALT RIVER FLOWS THROUGH A ROUGH, ARID, INACCESSIBLE, AND SPARSELY VEGETATED ENVIRONMENT