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November 19, 1990

Acting

Regional Director, FWS, Atlanta, GA (ARW/RE)

Preliminary Project Proposal for the expansion of Hillside National Wildlife Refuge

Director, FWS, Washington, DC (RE)

PD-Mississippi  
Hillside NWR  
Reports

RECEIVED

DEC 8 1990

Yazoo National Wildlife Refuge

The Preliminary Project Proposal (PPP) for the expansion of Hillside National Wildlife Refuge, Holmes County, Mississippi, is attached for your review. We recommend the expansion as proposed in the PPP, and will proceed with the detailed planning pending your approval. If you have any questions concerning this proposal, please contact Patricia Podriznik at FTS 841-3543.

*Dan B. Allen*

Attachment

Approved:

\_\_\_\_\_  
DATE

Associate Manager, RF-II, Refuges and Wildlife

PPP Notebook

Paul Charette, Chief, Land Acquisition Branch

Mike Dawson, Project Development Biologist, Jackson, MS

Cal Garnett, Region 4, LAPS Coordinator

Marilyn Lawal, Division of Realty, Washington, D.C

Mr. Pulliam, Regional Director, FWS, Region 4

Joint Venture Coordinator

Refuge Manager, Yazoo NWR

Lynn Willhite, Chief, Appraisal Branch

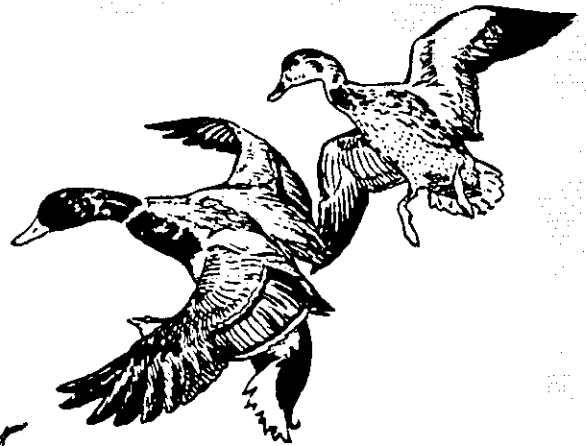
Rodney Beneke, Supervisory Land Surveyor

# Hillside

## National Wildlife Refuge

(Proposed Expansion)

Holmes County, Mississippi



### Preliminary Project Proposal

November 1990

**Preliminary Project Proposal**  
**for the Expansion of**  
**Hillside National Wildlife Refuge**  
**Holmes County, Mississippi**

**Prepared by: U.S. Fish and Wildlife Service**  
**Southeast Region**  
**Atlanta, Georgia**  
**November 1990**

## Introduction

The Fish and Wildlife Service (Service) is proposing an approximate 700-acre addition to the existing acquisition boundary at Hillside National Wildlife Refuge (refuge) for public access, administrative control and habitat management values.

Hillside refuge occupies 15,406 acres in the Mississippi/Yazoo River alluvial floodplain 13 miles north of Yazoo City, Mississippi. The refuge is situated at the base of the loess bluff between the hills and the U.S. Army, Corps of Engineers' (COE) Hillside Floodway Levee in Holmes and Yazoo Counties.

Refuge lands were purchased by the COE under the Hillside Floodway, Yazoo Basin Project and transferred to the Service in 1975 for operation as a national wildlife refuge. The refuge serves as a silt collection sump via a cutoff levee containing the altered channels of Black and Fannegusha Creeks.

When the COE acquired this property, land was purchased on a contour basis rather than using natural management features such as roads, streams, levees, etc.,. Fortunately most of the boundary conforms to natural features except for a scattering of tracts which amounts to approximately 700 acres involving 16 landowners.

Although only one tract is presently for sale, there may be other opportunities to acquire the remaining tracts in the future which would greatly facilitate refuge management. Current private ownership denies public access at some locations and increases waterfowl disturbance in other cases. Public acquisition would increase the refuge's ability to grow certain crops, such as corn, for waterfowl.

## Location and Size

Hillside refuge is located in Holmes and Yazoo Counties on the eastern edge of the Mississippi River delta in west-central Mississippi (Figures 1 and 2). The refuge lies about 15 miles north of Yazoo City, Mississippi, and east of the community of Thornton, Mississippi.

## Description of Habitat

Habitat within the proposed expansion area consists of converted wetlands now in agriculture; cropland and bottomland hardwoods. Refuge habitat is dominated by bottomland hardwoods interspersed with bald cypress/tupelo sloughs in the wetter areas and button-bush, water elm, swamp privet, and willow in the more shallow depressions especially the north one-half of the refuge. Prior to Service ownership, 3,573 acres of bottomland hardwoods were cleared and placed in agricultural production. These converted wetlands are now in a refuge cooperative farming program. Land use types include 10,709 acres of bottomland hardwoods, 374 acres of rivers and streams, 2,951 acres of croplands, 534 acres of grasslands, and 838 acres of administrative land.

U. S. FISH & WILDLIFE SERVICE

NATIONAL WILDLIFE REFUGES

MISSISSIPPI

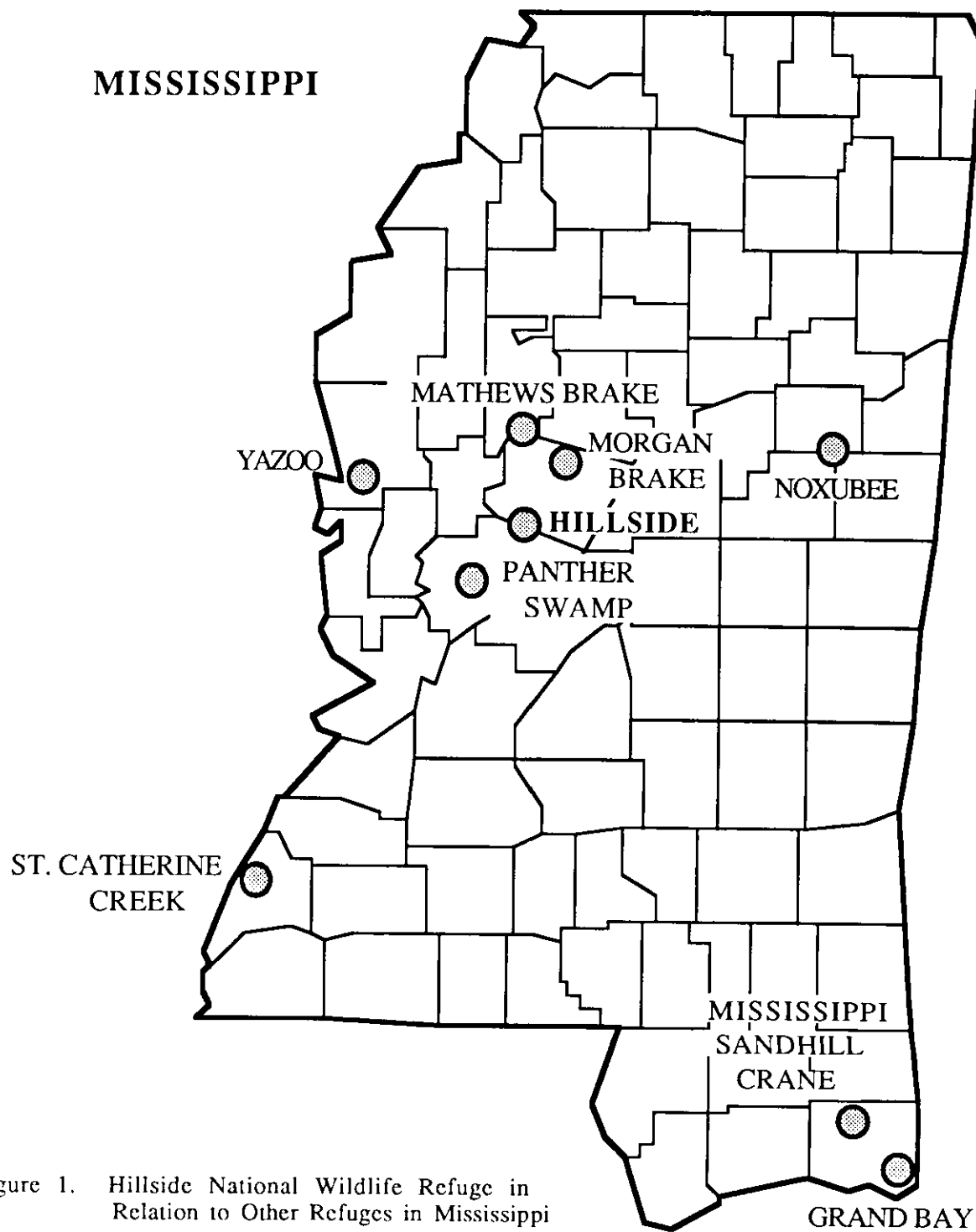


Figure 1. Hillside National Wildlife Refuge in Relation to Other Refuges in Mississippi

Figure 2. Proposed Expansion Area

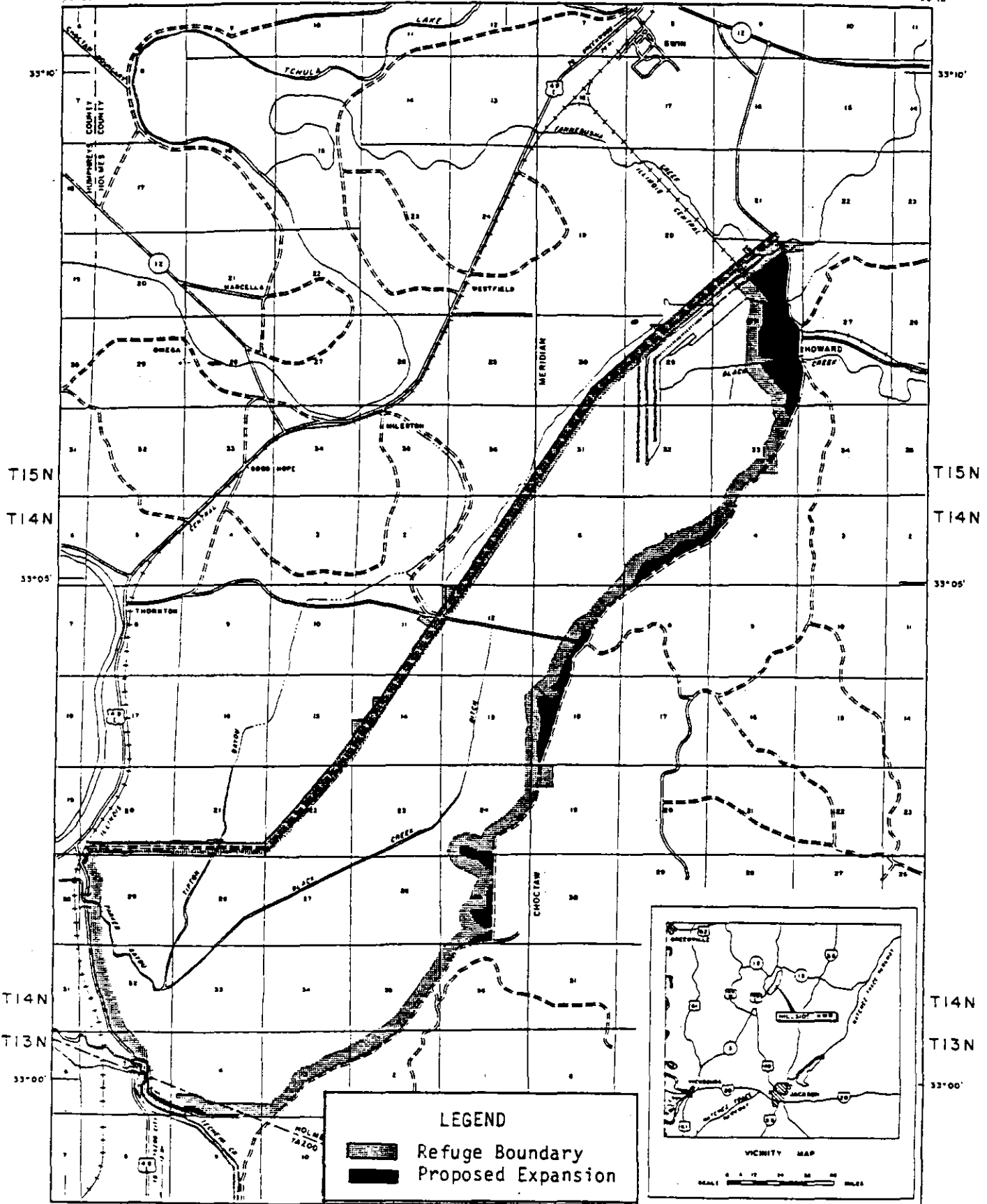
# HILLSIDE NATIONAL WILDLIFE REFUGE

HOLMES AND YAZOO COUNTIES, MISSISSIPPI

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
90°20'

UNITED STATES  
FISH AND WILDLIFE SERVICE  
90°10'

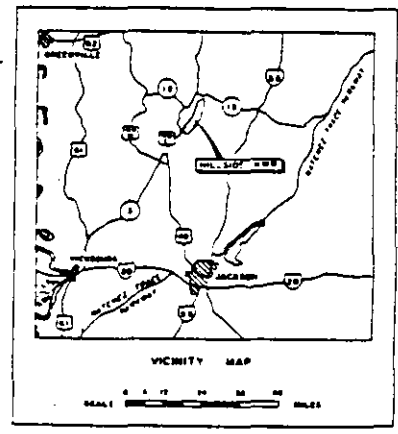
RIW RIE



**LEGEND**

Refuge Boundary

Proposed Expansion



90°20'  
COMPILED IN THE DIVISION OF REALTY  
FROM SURVEYS BY USGS, CORPS OF  
ENGINEERS, AND AERIAL PHOTOGRAPHS

ATLANTA, GEORGIA JANUARY, 1975



MEAN  
DECLINATION  
1975

4R-MISS-901-404

The only difference between the expansion area croplands and refuge land is that cotton, which is a heavy pesticide use crop, is planted on some of the land in the expansion area. Residue from these tracts drain directly into the refuge. If these lands were acquired, they would be converted to a more compatible use.

#### Major Wildlife Values

In previous years, refuge wetlands attracted large wintering waterfowl populations. Mallards are the dominant species with wigeon, pintail, green-winged teal, and wood ducks being common. The refuge has wintered as many as 2,500 Canada geese and a few snow geese.

Over 200 species of shorebirds and other migratory passerine birds utilize the refuge.

Some of the mammals present on the refuge are white-tailed deer, gray and fox squirrel, swamp and cottontail rabbit, coyote, and armadillo. Furbearing species include nutria, beaver, bobcat, mink, raccoon, muskrat, otter, opossum, weasel, and both striped and spotted skunk. Small mammals include common mole, shrew, eastern chipmunk, several species of bats, cotton rats, wood rats, meadow mouse, and several other species of mice and rats. The wild turkey is becoming increasingly common on the refuge.

Most species of reptiles and amphibians indigenous to the refuge are also present on the expansion area. The American alligator is a common resident and the endangered bald eagle is a frequent visitor. Occasional sightings are made of peregrine falcons.

#### Fishery Resource Values

The waterbodies on the refuge support populations of bass, bream, catfish, buffalo, gar, bowfin, crappie, and other species of warm water fish. A number of borrow pits are managed by the Service for sport-fishing. The expansion area offers no significant additional fishery resources.

#### Related Resources

Hillside refuge is very popular with outdoor enthusiasts, particularly hunters. Deer hunting, waterfowl hunting, rabbit hunting, and squirrel hunting are very high use recreational activities with many hunters from both the local and Jackson metropolitan areas utilizing the refuge. Much of the upper portion of the refuge, particularly on the east side, has limited public access and recreational opportunity is limited. This situation tends to force crowding at other access points.

Panther Swamp refuge is 25 miles southwest, Morgan Brake refuge is 10 miles north, and Mathews Brake refuge is 25 miles north. These refuges are managed primarily for resident and migratory waterfowl.

### Threats

Since the bulk of the expansion acreage has already been cleared, land clearing is not a threat. Some of the crops (i.e. cotton) grown on these tracts constitute a pesticide threat because of heavy pesticide applications. Aerial drift is unavoidable in some cases. All of the subject property drains onto refuge lands, so the refuge would benefit from any change that would reduce the amount of pesticide runoff.

Camp sites and other human disturbance are a constant threat that could cause further waterfowl disturbance.

### Justification and Funding

Acquisition of the expansion area would facilitate refuge management and provide better public access. It is simply a case of restoring what should have been considered in the original acquisition. The 120 acres currently for sale should be acquired as soon as possible and other property as it is available in the future. Both habitat management and law enforcement would benefit greatly from this acquisition.

Acquisition funding will be sought through the Land and Water Conservation Fund under authority provided by the Emergency Wetland Resources Act of 1986 (P.L. 99-645). Funding could be provided through the Migratory Bird Conservation Fund.



### Ownership and Type of Acquisition

The landowners within the expansion area and their respective acreage are listed below:

J.M. Howard Estate		130.0 acres
Albert Arnold		138.0 acres
Napoleon Moore Estate		17.5 acres
Willie M. Wheeler		19.0 acres
Winkle Moore, Jr.		24.5 acres
Mary Frances Carroll		28.0 acres
* Lester O. Edwards		120.0 acres
James Moore Shanks	approx.	9.0 acres
Eaton Carpenter	approx.	18.0 acres
John Ferrell Carpenter	approx.	12.0 acres
James Aaron Carpenter	approx.	5.0 acres
Mercy Kitchens Estate	approx.	25.0 acres
Lewis Henry	approx.	85.0 acres
Jack Montgomery, Jr.	approx.	80.0 acres (w/shop bldg)
D.H. Dew	approx.	3.0 acres
Larry Shives		1.0 acre (w/dwelling)

\* currently for sale

Acquisition by donation, partial donation, or purchase of conservation easements will be attempted; however, it is anticipated that fee purchase will be the probable means of acquisition.

### Initial and Annual Costs

Estimated acquisition cost is \$800 per acre for a total of \$560,000 if all 700 acres were acquired. Annual refuge revenue sharing payments would be \$4,200 at full entitlement. No additional employees would be required to manage the expansion area. Estimated annual Operation and Maintenance cost would be \$100,000.

### Contaminants

Present crop use on some of this land is cotton farming which requires high chemical (pesticide) use. This residue drains directly into the refuge, however Service acquisition would eliminate this threat. No other contaminant threat is known.

### Public Attitude

Due to public access problems presently in existence, the public would be strongly in favor of this acquisition. No opposition is anticipated.



Property currently for sale - Refuge boundary is the tree-line



Potential public access point



Acquisition of this small field and adjacent strip of hardwoods would bring refuge boundary out to a gravel road



Large agricultural field on northeast end of refuge



Small field adjacent to check station



Acquisition of this field would bring  
refuge boundary to a State Highway

SECOND ACQUISITION PRIORITY SYSTEM  
U.S. FISH AND WILDLIFE SERVICE  
PROJECT FORM

SECTION I: PROJECT SUMMARY  
TARGET: MB

DATE: 11/15/90

PROJECT: HILLSIDE REGION: 4 STATE: MS

Location: west-central Mississippi, in Holmes and Yazoo Counties

Administering Refuge: Hillside NWR

Purpose of Acquisition: To protect prime migratory waterfowl habitat

Acreage when Completed: 16,106 IFWS Number: 901

Date of Project Approval:

Principal Project Authorities:

Endangered Species Act  
Migratory Bird Hunting and Conservation Stamp Act  
X Migratory Bird Conservation Act  
Fish and Wildlife Act  
Fish and Wildlife Coordination Act  
Recreation Use of Conservation Areas Act  
X Emergency Wetlands Resources Act  
Alaska National Interest Lands Conservation Act  
Special Legislation: / /  
(citation) (date)

Project Description:

The refuge is comprised of 15,406 acres in the Mississippi/Yazoo River alluvial floodplain. The Southeast Region is proposing to acquire an additional 700 acres adjacent to the eastern boundary of the refuge. Habitat within the proposed expansion area consists of converted wetlands, croplands and bottomland hardwoods. Acquisition of the proposed expansion lands would enhance refuge operations by providing cropland for growing waterfowl food crops. Additionally, acquisition of these lands would provide better public access, reducing wintering waterfowl disturbance at the few public access points now available.

LAND ACQUISITION PRIORITY SYSTEM  
U.S. FISH AND WILDLIFE SERVICE  
PROJECT FORM

SECTION I: PROJECT SUMMARY  
TARGET: MB

DATE: 11/15/90

Acquisition Status:

	Ownerships	Acres	Cost(*1)
Acquired through FY 1989	1	15,406	\$3,000,000
Planned for Current FY 1990			
Planned for FY 1991			
Planned for FY 1992			
Planned for FY 1993			
Planned for FY 1994			
Remaining	16	700	\$560,000
TOTAL	17	16,106	\$3,560,000

\*1/ Includes incidental acquisition costs

LAND ACQUISITION PRIORITY SYSTEM  
S. FISH AND WILDLIFE SERVICE  
PROJECT FORM

DATE: 11/15/90

SECTION II: MIGRATORY BIRD TARGET INFORMATION

PROJECT: HILLSIDE REGION: 4

North American Waterfowl Habitat Category (1-34): 23a

Species Population/1	Seasonal Habitat/2	Habitat Import./3	Project Cont./4	Habitat Priority	Species Priority Score
MALL	W, MI	2	C		
WODU	B, W	2	C		

Justification for Habitat Rankings:

Acquisition of the proposed lands will not provide an abundance of prime waterfowl habitat. However, the lands being acquired will contribute significantly to the enhancement of existing refuge migratory waterfowl habitat management programs.

Importance to Migratory Birds Not Listed Above:

The expansion lands have value for both mourning dove and woodcock. When the cleared lands hold seasonal water, wading birds and shorebirds are present.

Completed By: Dawson

(Person/Office)

Date: 06/01/90

1/ Use Name Abbreviations given in Figure 6.

2/ Seasonal Habitat= B-breeding; W-wintering; MI-migration; MO-molting.  
If a project provides more than 1 seasonal habitat for a species  
score the Habitat Priority for the best habitat and list it first.

3/ Habitat Importance - 1, 2, or 3

4/ Project Contribution - A, B, or C

LAND ACQUISITION PRIORITY SYSTEM  
S. FISH AND WILDLIFE SERVICE  
PROJECT FORM

SECTION III: PROJECT COMMON FACTORS  
TARGET: MB

DATE: 11/15/90

PROJECT: HILLSIDE REGION: 4 STATE: MS

1. Contribution to National Service Goals - check other Service Goals that are supported by the project [3

Endangered Species  
Wildlife Goals  
1 Habitat Goals  
Fishery Goals  
1 Goals of North American Waterfowl Management Plan

\* supported by Target selection - only 1 (# check/4) x 35 = Score 1

Justification:

Some of the expansion lands are bottomland hardwoods and shrub swamps. Overall, the proposed expansion will contribute to meeting the habitat goal of the North American Waterfowl Management Plan.

2. Threat to Habitat Quality (Maximum of 2) [25%]

Principal Threat: (Type of Physical Impact) Water Quality

Specific threat: chemical contamination

Degree of Permanency:

0 Permanent 1 Semi-permanent 0 Temporary

Expected Timeframe: 1 < 3 years 0 > 3 years

Percent of Project affected: (increments of 10%) 80

Secondary Threat: (Type of Physical Impact) Human Disturbance

Specific threat: hunting camps

Degree of Permanency:

0 Permanent 0 Semi-permanent 1 Temporary

Expected Timeframe: 1 < 3 years 0 > 3 years

Percent of Project affected: (increments of 10%) 20

((Principal Threat + Secondary Threat)/12) \* 25 = Score 15.00

Justification:

Some of the agricultural lands in the expansion area are used to produce cotton. The currently acceptable methods for cotton production include use of heavy pesticide applications of some of the more persistent pesticides.

The development of hunting camps is always rumored and is a real possibility since public access is limited to the existing refuge. Acquisition of the proposed expansion lands will alleviate this source of disturbance.



AND ACQUISITION PRIORITY SYSTEM  
U.S. FISH AND WILDLIFE SERVICE  
PROJECT FORM

SECTION III: PROJECT COMMON FACTORS  
TARGET: MB

DATE: 11/15/90

PROJECT: HILLSIDE      REGION: 4      STATE: MS

3. Public Use [10%]

Project is within 50 miles of a Metropolitan Statistical Area  
Project is within 50 miles of a tourist area receiving more than  
100,000 visitors per year

5 both choices marked (10 pts.)  
0 either choice marked ( 5 pts.)

SCORE      5

Justification:

The proposed expansion is within 50 miles of the Jackson (MS) Metropolitan  
Statistical Area.

SUBTOTAL      37.50

4. Additional [30%]

30.00

TOTAL SCORE      67.50

Completed by: Dawson

(Person/Office)

Date: 06/01/