abbreviated
final environmental impact statement
general management plan
july 1980

FES 80-22

CHICKASAW

NATIONAL RECREATION AREA / OKLAHOMA

ERRATA SHEET FOR ALL CHANGES IN TEXT

New Cover

New signature page

Page i - new page inserted

Page v - add new appendix

"Public Comments and National Park Service Response 154 "

Page 8 - B.I.a.#2, add to second paragraph the following sentence:

"In the case of waterfowl hunting, compliance with Federal and State mandates will be provided."

Page 11 - g.#2, change entire paragraph to read:

"#2. Any activities in the NRA in the exercise of rights to oil and gas not owned by the United States will be in accordance with 36 CFR Part 9, Subpart B. These regulations are designed to prevent or minimize damage to the environment and to insure to the extent feasible that all units of the National Park System are left unimpaired for the enjoyment of future generations."

Page 14 - #3, change third paragraph, second sentence to read:

"In the past, camping demand has been managed with a reservation system."

Page 45 - change first two agreements to read:

"3/31/78	Bureau of Reclamation (now the Water and Power Resources Service)	Directs that administration, planning and development of lands and facilities at Arbuckle Recreation Area will not interfere with operation of Arbuckle Reservoir for its primary purposes. Establishes procedure for oil and gas leases."

"8/22/79	Oklahoma Department of Wildlife Conservation	Assigns specific responsibilities for management of the game and fish in Chickasaw National Recreation Area."

Page 47 - 3., change second permit number to read:

"Permit No. 7076-6-0002."

Page 47 - C. 1., change second paragraph, third sentence to read:

"Other year-round structures include four employee residences (one also serves as staff offices), a ranger station, and the maintenance area with office, garage, yard and storage building."

Page 55 - change 500 year flood control contour to read:

"500-year flood control contour 891.2"

add below this:

"100-year flood control contour 885.85"

Page 75 - Table 22, change title to read:

"Quality Data for Chickasaw National Recreation Area"

Page 84 - b., change second paragraph, starting with third sentence to read:

"Northern pike and walleye, nonnative species, were introduced into the Lake of the Arbuckles in the 1950s and 1960s. The northern pike has not been observed since 1975, the walleye is reproducing. Fish in the lake have direct access to the Rock Creek Corridor and Travertine Districts by stream."

Page 84 - b., change fourth paragraph, first sentence to read:

"Pronghorn (antelope) were once common to the area, but are not presently found closer than 200 miles to the northwest."

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http://archive.org/details/abbreviatedfinal00nati

change fourth paragraph, last sentence to read:

"Whitetail deer are present."

Page 85 - c., add the following sentences:

"It is expected that the bald eagle (Haliaeetus leucocephalus) and the peregrine falcon (Falco peregrinus anatum) could occur in the area at least as migrants or transients. Park records show that since 1926 there have been no sightings of the peregrine falcon and three of the bald eagle, (2-14-72, 12-1-78, 12-4-78)."

Page 99 - B., add to the second paragraph, the following sentence:

"Because of limited sightings and the minimal development planned, no effect is expected on threatened or endangered species."

Page 134- insert new page

Page 138- Bibliography, change the citation beginning KERR, ROBERT S. to read:

"1968 Arbuckle Reservoir Monitoring Project, Proposal for 1968 Research (preliminary draft). Ada, Oklahoma: U.S. Department of Interior, Federal Water Pollution Control Administration, Water Quality Research Program, Robert S. Kerr Water Research Center"

Page 154- insert appendix entitled - "Public Comments and National Park Service Response"

Prepared by the Denver Service Center
United States Department of the Interior
National Park Service

Russell E. Dickenson

Russell E. Dickenson

Director, National Park Service

Chickasaw National Recreation Area/Oklahoma
FINAL ENVIRONMENTAL STATEMENT
GENERAL MANAGEMENT PLAN

SUMMARY

( ) Draft (X) Final ENVIRONMENTAL STATEMENT

Department of the Interior, National Park Service, Southwest Region

1. Type of Action: (X) Administrative ( ) Legislative

2. Brief Description of Action: The National Park Service proposes coordinated facility development, visitor use programs, and resources management actions for Chickasaw National Recreation Area through a general management plan. This Recreation Area was established in 1976 by joining the former Platt National Park with the former Arbuckle National Recreation Area by means of a connecting corridor of land. New facilities are proposed to realize the recreational opportunities offered by the larger area; these include a visitor center/headquarters adjacent to the city of Sulphur, a 9.5-mile biking/hiking trail, a 6.5-mile hiking trail, a net of 32 additional campsites (adding 59 and deleting 27), three comfort stations, a campground sewage collection system, and 11 small structures for park protection and maintenance. A shallow overflow channel will be constructed to provide a floodwater bypass around Travertine Nature Center. An artesian well will be capped so that its flow may be regulated, decreasing the volume if feasible. Research is proposed into vegetative mosaics, water management, wildlife studies, flood conditions, and visitor use/resource preservation relationships. Carrying capacities are provisionally established for camping use (468 individual and 20 group sites) and for boat use (600 at one time), within the general level of 2 million visitors, to be monitored and adjusted by management as visitor preferences and resources factors are measured.

3. Summary of Environmental Impact and Adverse Environmental Effect:
The proposal will provide visitor experiences of varied character and at differing use intensities in designated parts of the recreation area. Resources will be restored, to the degree research indicates is feasible, to more parklike conditions. Should these situations induce restoration of visitor travel to former numbers, the regional economy could receive added tourist spending. Construction activities will cover 19.05 acres of soil with impervious surfaces, removing the biological resources thereon. In addition, there will be 8.43 acres of undisturbed land converted to camping use, with partial impacts to plants and animals due to increases in visitor use locally. A landscaped overflow channel 250 feet long and 12 feet wide (.07 acres) will be constructed. Animal behavior patterns will be altered by new trails. Local modification of topographic landform--on a maximum scale of 3 feet vertically--will occur along new trails and at building sites.

4. Alternatives Considered: Five (2 related to capacity and 3 to development) alternatives were considered: No Action, Increase Facility Capacity to Terrain Capacity, Develop Bicycle Trail from Travertine District to The Point, Relocate U.S. Highway 177 and Redesign Circulation in Travertine District, and No Visitor Center.

5. Comments have been requested from the following: (see following page)

6. Date draft and final statements made available to EPA and the public:
Draft - November 6, 1979
Final - AUG 2 2 1980

B. Coordination in the Review of the Draft Environmental Statement

Availability of the draft environmental statement was published in the November 13, 1979 Federal Register: Copies were sent to and comments requested from the following, those starred (*) commented and are appended:

Federal Agencies
Advisory Council on Historic Preservation
Department of Agriculture
*Soil Conservation Service
Forest Service
Department of Defense
Army Corps of Engineers
*Department of Housing and Urban Development
Department of the Interior
Bureau of Indian Affairs
*Bureau of Land Management
*Bureau of Mines
*Fish and Wildlife Service
Geological Survey
Heritage Conservation and Recreation Service
*Water and Power Resources Service (formerly Bureau of Reclamation)
Department of Transportation
*Federal Highway Administration
*Environmental Protection Agency

State and Local Agencies
State Historic Preservation Officer
*Oklahoma Department of Transportation
*Oklahoma Department of Wildlife Conservation
*Oklahoma Tourism and Recreation Department
Office of Community Affairs and Planning
*State Grant-in Aid Clearinghouse (State Clearinghouse)
Southern Oklahoma Development Association (Areawide Clearinghouse)
Arbuckle Master Conservancy District
Chickasaw Indian Nation

Informational copies were sent to the following:

Interested Agencies and Organizations
National Audubon Society
National Parks and Conservation Association
National Recreation and Park Association
The Nature Conservancy
Oklahoma Recreation and Park Association
Sierra Club
University of Oklahoma at Norman
*Oklahoma Archeological Survey
*Hicks Service Incorporated (concessionaire)

*A number of copies were distributed, upon request, to interested individuals.

Public Comments and National Park Service Response

United States
Department of
Agriculture

Soil
Conservation
Service

Agricultural Center Building
Stillwater, Oklahoma
74074

December 13, 1979

Superintendent
Chickasaw National Recreation Area
Post Office Box 201
Sulphur, Oklahoma 73086

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 14 1979

Dear Sir:

The draft environmental statement for the general management plan of the Chickasaw National Recreation Area has been referred to us for review by the Coordinator of Environmental Quality Activities of the U.S. Department of Agriculture.

In reviewing the management plan, it is apparent that the selected action involving coordination of facility development, visitor use groups and resources management actions will result in more efficient use of the recreational resources present and in proportionally greater benefits to the public being served. Based upon the evaluation of the five alternatives considered, the selected plan appears to have few environmental objections and to provide opportunity for the greatest development of recreational potential in the Chickasaw National Recreation Area.

The draft environmental impact statement clearly sets forth anticipated effects of the plan and adequately reflects the magnitude of potential impacts. The impacts upon prime farmland and other agricultural interests will be insignificant.

We concur in the proposals and findings of the management plan and draft EIS and appreciate the opportunity to review the documents.

Sincerely,

Roland R. Willis
State Conservationist

cc:
Regional Director, NPS, SW Region, Santa Fe, New Mexico
Administrator, SCS, Washington, D.C.

I

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FORT WORTH REGIONAL OFFICE
221 WEST LANCASTER AVENUE
P.O. BOX 2905
FORT WORTH, TEXAS 76113

REGION VI

IN REPLY REFER TO:

December 18, 1979

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 20 1979

Superintendent
Chickasaw National Recreation Area
P.O. Box 201
Sulphur, Oklahoma 73089

Dear Sir:

The Draft Environmental Impact Statement - General Management Plan for the Chickasaw National Recreation Area in Oklahoma has been reviewed in the Department of Housing and Urban Development's Oklahoma City Area Office and Fort Worth Regional Office and it has been determined that the Department will not have comments on this statement.

Victor J. Hancock
Environmental Clearance Officer

II

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
NEW MEXICO STATE OFFICE
P.O. BOX 1449
SANTA FE, NEW MEXICO 87501

IN REPLY REFER TO
1793 (911)

DEC 5 1979

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED
DEC 1979

Superintendent
Chickasaw National Recreation Area
Post Office Box 201
Sulphur, Oklahoma 73086

Dear Sir:

Public lands or programs administered by the Bureau will not be affected by this project. We do not have comments on the environmental statement and the general management plan for the Chickasaw National Recreation Area.

Sincerely yours

Van Manning
Chief, Division of Planning
and Environmental Coordination

III A

OFFICE OF THE DIRECTOR

United States Department of the Interior

BUREAU OF MINES
2401 E STREET, NW.
WASHINGTON, D.C. 20241

December 19, 1979

DES 79-59

CHICKASAW NATIONAL RECREATION AREA RECEIVED

DEC 31 1979

Memorandum

To: Superintendent, Chickasaw National Recreational Area, Sulphur, Oklahoma

From: Director, Bureau of Mines

Subject: Draft environmental statement and general management plan, Chickasaw National Recreation Area, Oklahoma

Thank you for the opportunity to review the draft environmental statement and general management plan for the Chickasaw National Recreation Area.

Two 8-inch crude oil pipelines owned by the Cherokee Pipeline Company may cross the natural recreation area south of Sulphur. If so, we suggest that the situation be clarified in the final statement and plan. Otherwise, we have no objection to either document.

Assistant Director
L. D. Norman, Jr.

III B

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Austin Area Office
Federal Bldg., Room G-121
Austin, Texas 78701

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED
DEC 31 1979

Memorandum

To: Superintendent, Chickasaw National Recreation Area, Sulphur, Oklahoma

From: Area Manager, FWS, Austin, Texas

Subject: Review of Draft Environmental Statement and General Management Plan for Chickasaw National Recreation Area, Oklahoma

This is in response to Acting Regional Director Hassebrock's memorandum of November 19, 1979, which requested our agency's review of the subject documents. Our comments and suggestions follow. Since the Draft Environmental Statement (DES) includes all information provided in the General Management Plan (GMP) and a similar format, our comments are referenced to the former document, but apply to both where appropriate.

General Comments

The DES seems well written and concise. Its treatment of the faunal resource may be a bit brief in some areas although it probably is in keeping with the level of impacts expected to result from the proposed action.

Care should be taken in any attempts to reintroduce endemic animal species which have been extirpated through past human activities. The pronghorn (*Antilocapra americana*) is cited as an example of one such species. Although we wholeheartedly support the concept of re-establishing natural ecosystems, experience has taught that many times considerable time and effort are expended with poor or even adverse results. Before such a venture we would suggest consultation with the Oklahoma Department of Wildlife Conservation (ODWC), the U. S. Fish and Wildlife Service (FWS), and other entities which may have expertise in this area. Other species formerly found in the project area include elk (*Cervus canadensis*), black bear (*Ursus americanus*), gray wolf (*Canis lupus*), and river otter (*Lutras canadensis*).

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

III C

From a statement on page 57 regarding the "normal flow" of Travertine Creek, it appears that work on the proposed flood diversion channel at the Travertine Nature Center may come under the jurisdiction of the U. S. Army Corps of Engineers'(CE) dredge and fill permit program (404). The CE is authorized under Section 404 of the Clean Water Act of 1977 (P.L. 95-217) to regulate the discharge of dredge and fill activities in or adjacent to waters of the United States, generally on streams with five cubic feet per second (cfs) or greater average annual flow. Should five to six million gallons per day (mgd) in fact constitute the average annual flow (equal to eight+ cfs), Travertine Creek could well be subject to the 404 permit program. We would urge you to contact the Tulsa District of the CE for a determination of this possible requirement.

In its report of November 20, 1959, on the Arbuckle Project, the Fish and Wildlife Service recommended that 660 acres of project land on the Big Sandy Creek arm, plus 615 acres of adjacent land to be acquired specifically to replace wildlife habitat inundated by Arbuckle Reservoir, be made available to the ODWC for wildlife management purposes in accordance with the terms of a General Plan as provided for in the Fish and Wildlife Coordination Act. Following project land acquisition, a General Plan for Use of Lands for Wildlife Conservation and Management-Arbuckle Reservoir, Oklahoma was executed between the Department of the Interior and the ODWC on April 13, 1967, and amended on March 17, 1969. It is our contention that the lands designated in the General Plan were set aside specifically to mitigate the loss of wildlife habitat and hunting losses resulting from the Arbuckle Project. It is unclear whether the General Plan and related use of Arbuckle Project lands legally is still in effect or whether it was rendered void along with the former management agreement between the Bureau of Reclamation and the ODWC by legislation establishing the Chickasaw NRA. The DES should address this issue and attempt to clear up the possible conflict in land management.

We noted on several pages in Section II, DESCRIPTION OF THE ENVIRONMENT, an inconsistency in the inclusion of scientific names of flora and fauna along with common names.

Specific Comments

I DESCRIPTION OF THE PROPOSAL

Page 8, I.B.1.a.#2. The last sentence under #2 regarding fish and wildlife statutes should include provision for compliance with Federal as well as State mandates if waterfowl hunting is to be allowed.

Page 9, I.B.1.b.#3. Before the use of wildlife food plots is discontinued, consideration should be given to the history of the Arbuckle Project and the original purpose for which lands were set aside as specified in the General Plan for Use of Lands for Wildlife Conservation and Management-Arbuckle Reservoir, dated April 13, 1967, and amended on March 17, 1969.

Page 11, I.B.1.g.#3. We suggest that a #3 be added to this list of requirements for mineral exploitation inside the boundaries of the Chickasaw NRA to require the restoration of lands as nearly as possible to their pre-exploration conditions of contour and vegetation.

Page 19, I.D.2.c.#4. Determination of a desirable number of hunters would depend to a large extent on the species being sought and probably should be coordinated with the ODWC.

Pages 20 and 25, I.D.4.a. The proposed flood diversion channel at the Travertine Nature Center could provide opportunities for fish and wildlife enhancement. Possibilities include the development of a controlled marsh environment and/or a small pond fishery. At any rate, we suggest that care be taken to disturb the least practicable amount of vegetation in the excavation. In revegetating the channel, consideration should be given to plant species of value to fish and wildlife including native grasses, forbs, legumes, and shrubs. Since the flood diversion channel is mentioned at several places in the DES, the applicability of the 404 permit program was discussed under General Comments.

Page 25, I.D.4.b. Alteration of wildlife habitat will be minimized by routing the proposed bicycle and hiking trails along the ridges. We suggest, however, that valuable habitat components such as den or nest trees, burrows, rock outcroppings, and established game trails be avoided.

Page 29, I.D.4.c. In removing stumps and debris from swimming areas, be cognizant of the value of these materials as fish habitat.

II DESCRIPTION OF THE ENVIRONMENT

Pages 60-80, II.D.1.c. We applaud your efforts at documenting water pollution sources and effecting corrective measures.

Page 84, II.D.2.b. The timber rattlesnake (*Crotalus horridus*) probably should be added to the list of poisonous snakes occurring on the area.

Page 85, II.D.2.c. We expect that both the bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus anatum*) could occur in the area at least as migrants or transients.

III THE ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

Page 99, III.A.2. Mention is made of transporting sewage effluent out of the watershed. Although not impacting the Arbuckle Lake watershed, will this action adversely affect other areas? At least a sentence or so should be added to adequately treat this potential concern.

Page 99, III.B. More detailed and specific information is needed concerning impacts on both aquatic and terrestrial habitats and resources associated with construction of the Travertine Creek overflow channel.

The last paragraph on this page indicates that no endangered or threatened species are known in the area. As mentioned previously, we believe the bald eagle and peregrine falcon could occur in the area occasionally.

BIBLIOGRAPHY, page 138. In scanning the bibliography of the DES, we questioned the citation crediting authoriship of a research proposal to Robert S. Kerr.

Summary Comments

We find the DES and accompanying GMP to be with only limited exceptions, well-written and informative documents. Primary areas which may require attention include clarification of the General Plan issue, threatened and endangered species, applicable permits and ecological effects of the reintroduction of extirpated faunal species.

We previously mentioned that the proposed channel work on Travertine Creek may require a permit from the Corps of Engineers (Section 404 of P.L. 95-217) to conduct the dredge and fill activities associated with this project. The environmental statement does not provide adequate information concerning the design of the channel or its affect on fish and wildlife resources.

Accordingly, the comments in this statement do not in any way preclude additional and separate evaluation and comments by the Fish and Wildlife Service, pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), if the proposed channel requires a permit from the Corps of Engineers.

In review of the application for such a permit, the Fish and Wildlife Service may concur, with or without stipulations, or object to the proposed work depending on the project's impact on fish and wildlife resources. It would appear that the Fish and Wildlife Service, as a minimum, will probably recommend that the Corps of Engineers when

issuing the permit, require (1) measures to protect the aquatic ecosystem of the creek, (2) features to reduce turbidity, (3) restoration of stream habitat following construction, and (4) such other measures as would be apparent and appropriate from the information available at that time.

cc: Regional Director, FWS, Alb., NM (ES)
FWS/OEC, Washington, D. C.
Director, Oklahoma Department of Wildlife Conservation, Oklahoma City, OK
Field Supervisor, FWS, ES, Tulsa, OK

United States Department of the Interior
~~BUREAU OF RECLAMATION~~
WATER AND POWER RESOURCES SERVICE
SOUTHWEST REGION
714 S. TYLER
AMARILLO, TEXAS 79101

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED
DEC 26 1979

IN REPLY
REFER TO: 150
120.1

DEC 21 1979

Memorandum

To: Superintendent, Chickasaw National Recreation Area, National Park Service, Post Office Box 201, Sulphur, Oklahoma 73086

From: Regional Director

Subject: Review of Draft Environmental Statement and General Management Plan for Chickasaw National Recreation Area, Oklahoma (DES 79-59)

As requested, the Water and Power Resources Service (WPRS), formerly the Bureau of Reclamation, Southwest Regional office has reviewed the subject environmental statement and management plan. The following comments are submitted for your consideration:

Environmental Statement

General

In compliance with the new Council on Environmental Quality Regulation (40 CFR, Parts 1500-1508, November 29, 1978), it appears that the revised format for environmental statements should be considered in organizing the statement.

Specific

Page 15.--Regarding the parking congestion problem, we suggest this be further clarified. It appears that it would be appropriate to proceed with developing studies to resolve the parking problem instead of waiting for the problem to reoccur.

Pages 15, 23, 32, 33, 50, and throughout.--The proper name of the lake is the Lake of the Arbuckles and should be used in lieu of Arbuckle Lake or Arbuckle Reservoir.

Pages 17-18.--We suggest the boating carrying capacity calculations should be reevaluated. (See detailed comments regarding same subject in the land management plan.)

Page 17.--The agency "Bureau of Outdoor Recreation" should be changed to read "Heritage Conservation and Recreation Service."

Page 18 and throughout.--References to the Bureau of Reclamation should be changed to read "Water and Power Resources Service."

III D

Page 92.--It is suggested that visitor-use statistics be rechecked for accuracy. (See detailed comments regarding same subject concerning the land use plan.)

Page 45.--The date of the cooperative agreement with WPRS (Bureau of Reclamation) should be March 31, 1978.

General Management Plan

General

Water and Power Resources Service is in agreement with the concepts and plans outlined as related to Arbuckle Reservoir and associated lands.

Specific

Page 14.--The date of the cooperative agreement with WPRS (Bureau of Reclamation) should be March 31, 1978.

Page 59.--Reference paragraph 2, we suggest the text concerning parking congestion be clarified. It appears that it would be appropriate to proceed with developing studies to resolve the parking problem instead of waiting for the problem to reoccur.

Page 62 and throughout.--References to the Bureau of Reclamation should be changed to read "Water and Power Resources Service."

Page 38.--Regarding use statistics, we suggest they be rechecked. Visitation figures reported to us by National Park Service on annual WPRS recreation inventories differ significantly (at least for 1975-1978) from those appearing on page 38:

WPRS Summary	Year	Visitor days*
	1975	206,026
	1976	200,271
	1977	183,382
	1978	147,569

*One person participating in one or more activities at a site during all or any portion of one calendar day.

Page 55.--The listing of data on this page has 500-year flood control contour of elevation 885.85. We are not aware of where the elevation was acquired, but this should be checked since it is above top of flood pool elevation.

The average annual minimum pool elevation for the past 11 years of operation has been about elevation 870. This should be considered for use instead of 860.0.

Pages 62-63.--We believe the boating capacity analysis should be reexamined in several respects. We do not agree that the lake surface should be arbitrarily divided equally among the three types of boating use. This is not only inconsistent with the varying "areas per boat" standards cited, but it also fails to consider the varying "turnover" rates and relative activity distribution for the three activities.

While turnover rate was considered in determining daily boat launching capacity, this capacity was erroneously based on parking spaces instead of boat launching lanes. It is true that inadequate parking areas would prevent full boat ramp capacity from being used; however, actual boat access to a lake is governed by the number of boat launching lanes. Two daily launch standards are widely accepted. Based on a "12-hour" day, a maximum of 36 boats could be launched and retrieved per lane (based on 10 minutes per launch and retrieval) or a maximum of 40 launches (based on 9 minutes). These maximum standards are not affected by turnover rate. A secondary consideration, when relating boat launching capacity to lake surface capacity, is docking space. If docking space is available, boat launching capacity would have to be reduced accordingly:

Boats accessing lake from docks + boats accessing lake from launch lanes = total boats on lake

It appears that no adjustment factor was included in the analysis to reflect what portion of the lake surface is "suitable" for the three boating activities. Normally, the entire lake surface is not suitable for each of these three activities because of size, wind and wave action, water depth, proximity to the shoreline, obstructions, shoreline configuration, etc.

Another adjustment factor which apparently was not considered relates to daily use patterns by activity. Boat fishing activity normally is high in the early morning and evening, while boating and water-skiing generally peak out during mid-afternoon. As a result, all of the available lake surface is not used to capacity by each activity during each hour of the assumed "12-hour" recreation day.

As was alluded to in the plan, another important adjustment factor is often required because the "summer pool" of a lake/reservoir is less than the normal "conservation pool." However, the reduced boating capacity that would be associated with a reduced lake surface area would not be directly proportional, as is stated in the narrative, due to the change in the "suitability factor" at lower elevations. For example, under a severe drawdown situation, an elevation would eventually be reached where power boating and water-skiing would no longer be safe because of inadequate water depth even though there still might be several hundred surface acres of water. Nevertheless, since the Lake of the Arbuckles has historically been near conservation pool elevation 872.0 between May 1 and September 1, the "conservation pool" adjustment factor is not applicable.

We suggest that in view of the above concerns, this analysis be reexamined. Should you have any questions regarding this concern, please contact Mr. Fred Landefeld of this office at (806) 378-5400, extension 612.

We appreciate the opportunity to review the subject statement and management plan.

Robert H. Weimer

cc: Commissioner, Attention: 150
Director, Office of Environmental Project Review

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Oklahoma City, Oklahoma 73102
December 3, 1979

REGION 6

IN REPLY REFER TO HEC-OK

General Management Plan and
Draft Environmental Impact Statement for
Chickasaw National Recreation Area
Murray County, Oklahoma

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 04 1979

Superintendent
Chickasaw National Recreation Area
P. O. Box 201
Sulfur, Oklahoma

Dear Sir:

We are in agreement with the discussion within the Draft Environmental Impact Statement which deals with the possible relocation of US-177 and the concerns which need to be addressed should this action be implemented. We anticipate being involved in the environmental as well as the design considerations should the project involve federal-aid highway funds.

We thank you for giving us the opportunity to review this document.

Sincerely yours

for Frank N. Cunningham
Gordon E. Penney
Division Administrator

IV

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

December 21, 1979

Mr. Earl Hassebrock
Acting Regional Director
National Park Service
P.O. Box 728
Santa Fe, New Mexico 87501

2PHS-Bm

Dear Mr. Hassebrock:

Refer to Chic. 1/1.XII

We have reviewed the Draft Environmental Impact Statement (EIS) for the Chickasaw National Recreation Area, Murray County, Oklahoma. New facilities are proposed to realize the recreational opportunities offered by the area; these include a visitor center/headquarters adjacent to the City of Sulphur, a 9.5 mile biking/hiking trail, a 6.5 mile hiking trail, a net of 32 additional campsites, 3 comfort stations, a campground sewage collection system, and 11 small structures for park protection and maintenance. This proposal will provide visitor experiences of varied character and at differing use intensities in designated parts of the recreation area. Resources will be restored, to the degree research indicates is feasible, to more parklike conditions. Should these situations induce restoration of visitor travel to former numbers, the regional economy could receive added tourist spending.

The following comment is offered for your consideration:

On page 30 of the General Management Plan and page 58 of the Draft Environmental Impact Statement, it is mentioned that there are spring developments where water is pumped and then stored for consumption by visitors to the park. Such an arrangement would be classified as a non-community public water system if it serves an average of at least 25 individuals daily, at least 60 days out of the year. All non-community public water systems were required by the Safe Drinking Water Act and State regulations to begin sampling for coliform bacteria and nitrate prior to June 24, 1979. The supplies may also be required to be sampled daily for turbidity depending on whether the systems are defined as surface or ground water systems. Shallow and subsurface springs and infiltration galleries at or below ground level are considered surface supplies by EPA since surface contamination can render such a system an unsafe source.

V

We realize that the subject documents were probably written before June 1979, and that the Chickasaw Recreation area supplies are probably already collecting the required samples; however, we believe the above should be mentioned. We would like to see a discussion of the results of sampling in the Final Statement.

We classify your Draft Environmental Impact Statement as LO-2. Specifically, we have no objections to the project as described in the Statement. However, we are requesting additional information regarding the results of water quality sampling as required by the Safe Drinking Water Act. Our classification will be published in the Federal Register according to our responsibility to inform the public of our views on proposed Federal actions, under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the enclosure. Our procedure is to categorize the EIS on both the environmental consequences of the proposed action and on the adequacy of the Impact Statement at the draft stage, whenever possible.

We appreciated the opportunity to review the Draft Environmental Impact Statement. Please send our office five (5) copies of the Final Environmental Impact Statement at the same time it is sent to the Office of Environmental Review, U.S. Environmental Protection Agency, Washington, D.C.

Sincerely,

Frances E. Phillips for

Adlene Harrison
Regional Administrator (6A)

Enclosure

ENVIRONMENTAL IMPACT OF THE ACTION

LO - Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action

ER - Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to re-assess these aspects.

EU - Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this actio The Agency recommends that alternatives to the action be analyzed furth (including the possibility of no action at all).

ADEQUACY OF THE IMPACT STATEMENT

Category 1 - Adequate

The draft impact statement adequately sets forth the environmental impa of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2 - Insufficient Information

EPA believes the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3 - Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement. If a draft statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make a determination.

STATE OF OKLAHOMA
DEPARTMENT OF
TRANSPORTATION
200 N. E. 21st Street
Oklahoma City, Oklahoma 73105

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED
DEC 13 1979

December 10, 1979

Mr. Paul V. Wykert, Superintendent
Chickasaw National Recreation Area
Post Office Box 201
Sulphur, Oklahoma 73086

Dear Mr. Wykert:

re: Review Comments on the Draft Environmental Impact Statement for the General Management Plan, Chickasaw National Recreation Area.

This Department has completed review of the subject Draft EIS (DEIS) and wish to direct our comments to the proposed alternatives associated with US Highway 177, which crosses the Chickasaw National Recreation Area immediately south of the City of Sulphur, Oklahoma, and serves as a primary access route for the park.

The DEIS discusses three possibilities with regard to US 177 in the area studied.

1. US 177 to remain on its present alignment.
2. US 177 to be constructed on a new alignment with an overpass spanning the park area.
3. US 177 to be constructed on new alignment to the east, totally bypassing the park lands.

The DEIS discussed how each of these alternatives may affect the park proper; however, impacts within the park constitute a very small percentage of the total affect of any action associated with US 177 in this area. Other impacts of concern with regard to US 177 would necessarily incorporate such factors as the number of families to be relocated, noise and air quality impacts of routing the highway through residential neighborhoods, the potential isolation of the State Veterans Hospital, excessive indirection for motorists, and the many other social, economic and environmental effects of highway construction which are normal considerations in the EIS process.

Although each of the alternates are discussed in very general terms, final alternate selection must entail a full analysis of all impacts associated with each. This Department has

VI

STATE TRANSPORTATION COMMISSION
CHAIRMAN—WILLIAM R NASH, VICE CHAIRMAN—MRS R L PARKER, SECRETARY—JAMES H GUNGOLL, MEMBERS—JAMES W ALLEN, W E ALLFORD, J E CARTER, JOHNNY M PERRY, H B ATKINSON, DIRECTOR—R A WARD
AN EQUAL OPPORTUNITY EMPLOYER

performed some preliminary analyses necessary for early project planning, but formal project development procedures have not been initiated. We would recommend that each alternate presented in the DEIS be continued so as to not preclude future options with regard to the highway within the broader scope of potential impact analyses required by the National Environmental Policy Act, or other related legislation, and the corresponding implementing regulations.

We realize the burden this places upon long range planning relative to the Chickasaw National Recreation Area, and will lend our assistance, as far as practicable, towards minimizing this problem. However, since we have no active plan for improvement of this segment of US 177, we cannot provide input relative to the final location at this time.

We thank you for the opportunity to review the DEIS and trust these comments will be of some value in preparing the Final EIS.

Sincerely,

J. D. Chambers
Planning Engineer

rs

WILDLIFE CONSERVATION COMMISSION

MERVIN LAWVER, CHAIRMAN
ELLIS HOLLY, MEMBER
JUD LITTLE, VICE CHAIRMAN
JOHN D. GROENDYKE, MEMBER
DOYLE BURKE, SECRETARY
BOB MATTHEWS, MEMBER
H. B. VAN PELT, MEMBER
ROY BOECHER, MEMBER

GEORGE B. WINT, DIRECTOR
GARLAND FLETCHER, ASSISTANT DIRECTOR
STEVEN ALAN LEWIS, ASSISTANT DIRECTOR

DEPARTMENT OF WILDLIFE CONSERVATION

1801 N. LINCOLN P.O. BOX 53465 OKLAHOMA CITY, OK 73152 PH. 521-3851

January 14, 1980

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

JAN 16 1980

Mr. Paul V. Wykert, Superintendent
Chickasaw National Recreation Area
Sulphur, Oklahoma 73086

Dear Mr. Wykert:

The Oklahoma Department of Wildlife Conservation has reviewed the draft environmental statement on the proposed general management plan for the Chickasaw National Recreation Area. In general, we agree with the comments provided by the Fish and Wildlife Service and offer the additional attached comments.

We specifically have a problem with the proposed management plans for the present public hunting area. This area was set up as mitigation for hunting and fishing losses through creation of the reservoir. Without the ability to manipulate the habitat and utilize food plots, the areas mitigation value is lost. Mitigation was a required part of the original project and is still needed.

The Game Division would be happy to meet with you to explain what management practices are essential to provide mitigation in keeping with the creation of the area.

Sincerely,

George B. Wint
Director

GBW:SAL:bkh
cc: Byron Moser
Ric Gomez
Fish and Wildlife Service

VII

AN EQUAL OPPORTUNITY EMPLOYER

SPECIFIC COMMENTS:

Page 8, B. RESOURCE MANAGEMENT, 1.a. Proposals Related to Hunting and Fishing Management

Although the legislation of 1976 cancelled the management agreement between the Water and Power Resource Service (formerly the Bureau of Reclamation) and the Oklahoma Department of Wildlife Conservation, we feel the General Plan (of 4-13-67 and amended 3-17-69) which provided approximately 1,275 acres to mitigate wildlife losses resulting from the construction of the dam and reservoir should be in effect for the life of the project, which construction was made possible by the agreement drafted in accordance with the Fish and Wildlife Coordination Act. (Page 19, #4 addresses small game and deer hunting plan, involving approximately 1,000 acres.)

Page 8, B.1.a.#3

This item appears to be contradictory as it seeks to "keep exotic fish species from moving upstream....." but, at the same time, provides for the introduction of "new species" (top of page 9) which, in our vocabulary, means exotic fish. Exotic fish are present in the Lake of the Arbuckles, including such species as walleye, Northern pike, spotted bass, carp, and red ear sunfish. Any goals for fishery management will be difficult to attain, as long as water quality problems persist as described on pages 60-62.

Page 9,b. Proposals Related to Vegetation Management

In the pursuit of the restoration and preservation of a "natural environment", the lake itself is the most obvious extraneous influence, as it is a man-made impoundment which has drastically changed the ecology of the area, both in the terrestrial and aquatic ecosystems.

The following terms should be clearly defined:

"natural" as used on page 9,b,1.
"historical" as used on page 9,b.2.
"natural setting" as used on page 9,c.1.
"natural mosaics" as used on page 99, second paragraph from bottom of page.

Page 9,b.#3.

Phasing out of cropping intended for optimizing wild game populations will result in an overall decline in productivity at various trophic levels, affecting both game and nongame organisms, because food availability is one of the limiting factors. This objective seems aimed at phasing out hunting by phasing out game species dependent on food plots.

Page 9,c.#1. Proposals Related to Faunal Management

We concur in this philosophy but the small size of the project and the extensive ecological changes which have taken place would make it difficult, if not impossible, to determine what a "natural setting" is (at least, one free of human influence).

Page 9,c.#3.

The ecology of the area has undergone a gradual but drastic change in the past 200 years. It has been transformed from a mixed grass prairie interspersed with forested stream courses to an agrarian dominated community (see page 68). Settlers erected fences, plowed fields, planted crops, built roads, railways and highways, dammed streams, etc. Prior to such development, the prehistoric prairie supported roaming herds of the American bison, American elk and pronghorn antelope. These large herbivores maintained an equilibrium between themselves and their natural predators. Their migration movements were the result of seasonal climatic changes and range conditions. The habitat that supported these ungulates no longer exists; without it, reintroduction of the proghorn antelope or any other former range animal would be a fruitless and futile effort.

Page 19,#4. Proposals Related to Rock Creek Corridor Carrying Capacity

We do not recommend concentrating hunters to a density of 10 acres per hunter. This not only degrades the quality of the hunting experience but it could be hazardous. We recommend on our Game Management Areas a density of 1 hunter per 80 acres of habitat for big game and 40 acres for small game, which may vary with type of terrain and cover.

Page 60,c. Water Quality

The presentation on Water Quality is excellent. The problems outlined will be a major obstacle in the implementation of fishery management proposals and, once again, provide evidence of human impacts on the aquatic environment.

Page 75, Table 22

Title should read "Water Quality Data....." instead of "Quality date....."

Page 84,c. Fauna (Biologic Resources)

The list of species is incomplete, vague and the use of scientific names is inconsistent. For example: lists "catfish" and

"bullhead" which is also a catfish. It lists unwanted fish such as carp and carpsucker, while omitting important sport species such as the walleye and spotted bass. Scientific names should be used for all species or none.

The nearest known self-supporting pronghorn antelope herd in the state is more than 200 miles northwest of Sulphur, in Ellis County.

Is "Louisiana whitetail deer" a distinct variety of deer in the project area? We are not aware of this particular sub-species occurring in Oklahoma.

Page 85,c. Threatened and Endangered Species

Bald eagles have been sighted in central Oklahoma on various occasions. Whooping cranes migrate through central Oklahoma, making brief stops in the state.

Page 99,b. Impacts on Biologic Resources, 3rd paragraph

This objective seems aimed at phasing out hunting by phasing out game species dependent on food plots. As the animals dependent on those crops are expected to decline, so will hunting opportunities decline, resulting in a degradation of the outdoor experience and a certain decline in visitation to the area during a time (fall and winter) when there is virtually no other outdoor recreation activity.

GEORGE NIGH · GOVERNOR
SPENCER BERNARD · LT. GOV. · CHAIRMAN

Oklahoma Tourism and Recreation Department

500 WILL ROGERS BUILDING
OKLAHOMA CITY 73105

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 10 1979

December 4, 1979

Mr. Paul V. Wykert, Superintendent
Chickasaw National Recreation Area
P. O. Box 201
Sulphur, Oklahoma 73086

Dear Mr. Wykert:

Chickasaw National Recreation Area has long been a favorite destination for many of Oklahoma's residents and visitors. Because of its unique beauty, varied resource features and relative proximity to many Oklahomans, Chickasaw National Recreation Area has an important role to play in providing quality outdoor opportunities for our people.

Needless to say, I am most pleased that your agency plans to expand the facilities available at Chickasaw. The development concepts presented in the draft environmental statement are sound and thorough and I wish you every success in achieving full implementation of the program.

Thank you for providing me this opportunity to review this management proposal.

Sincerely yours,

Abe L. Hesser
Executive Director

ALH:be

VIII

OKLAHOMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

State Grant-In-Aid-Clearinghouse

5500 N. WESTERN OKLAHOMA CITY, OKLAHOMA 73118 (405) 840-2811

December 19, 1979

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 20 1979

Superintendent
Chickasaw National
Recreational Area
Post Office Box 201
Sulphur, Oklahoma 73086

RE: 27K903 - Chickasaw National Recreational Area - (SAI#91219003) Direct Federal

Dear Superintendent:

The state clearinghouse has completed the review of a project proposal and the environmental assessment recently submitted by your office. Any future communication regarding this proposal should be accompanied by the SAI number referenced above.

Based on the information received by the state clearinghouse and the response of reviewing agencies, the proposed project is, as of this date, consistent with and contributes to existing state plans and goals in the State of Oklahoma. A review of the environmental assessment, as of this date, shows no adverse environmental impact is anticipated. This letter and comments from your areawide clearinghouse must be attached to your application as you apply for federal assistance.

This project application is subject to review at the time of annual renewal or when a continuation is requested. Any application not submitted to or acted upon by the federal funding agency within one year of the date of this letter is subject to re-review by the State Clearinghouse.

This letter is not a commitment of funds for your project from any state or federal agency. You should now proceed with your application to the National Park Service for funding consideration.

Sincerely,

Don N. Strain
Director

DNS:mt

cc: SODA

IX

The
University of Oklahoma at Norman

Oklahoma Archaeological Survey

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

JAN 17 1980

January 15, 1980

Mary Schuitt
State Clearinghouse
5500 N. Western
Oklahoma City, OK 73118

Re: A-95 #27K903, Chickasaw National Recreational Area, Murray County.

Dear Ms. Schuitt:

I have evaluated the referenced project for its potential impact upon Oklahoma's archeological resources. The project does not take place on a known archeological site nor does it appear to be in a location likely to contain such a site. Consequently, I recommend that the project be allowed to proceed.

However, should any archeological remains be exposed during the course of construction, I request that my office be notified at once so that we may evaluate the possible site. Thank you for this opportunity to comment upon this project.

Sincerely,

Larry Neal
Assistant State Archeologist

cc: Chickasaw National Recreational Area

LN:jah

X

1335 South Asp Avenue, Norman, Oklahoma 73019 (405) 325-1028

Oklahoma State University

School of Health, Physical Education and Leisure Services

STILLWATER, OKLAHOMA, 74074
COLVIN PHYSICAL EDUCATION CENTER
(405) 624-5493

12/18/79

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 20 1979

Mr. Paul Wykert, Superintendent
Chickasaw National Recreation Area
P.O. Box 201
Sulpher, Ok. 73086

RE: Comments: Draft Environmental Statement
General Management Plan
Chickasaw National Recreation ARea

Dear Mr. Wykert:

The following comments regarding the above mentioned plan are submitted for your consideration:

1. Page 7, paragraph (4). A mention of conditions of some sections of trails in the park seems to be in order. For example, the trail from the Bromide Springs area to the overlook is in a deteriorated condition in places. Switch backs have been cut across and erosion is evident. (this may be in the state of environment statement)

2. Page 8, B.1.a. #3. To the casual reader this is unclear. Park managers certainly will understand what is meant, but if there were situations where others would be reading this it needs to be clarified. It seems to read that exotics will be kept from their natural environments and that certainly is not the intent I am sure.

3. Page 9, b. Yes, the proposal for increased research needs strong backing and the determination of the natural resource base is of vital importance to the park manager.

4. Page 10, e. All proposals should be vigorously pursued. Both point and non-point pollution sources need to be identified and researched to determine what directions the N.P.S. management should take.
An aggressive thrust to move the Sulpher dumping grounds is in order. As well as working with the City of Sulpher to eliminate other pollu tion sources. Proper control of upstream watershed is a long documented and necessary practice for proper park management.

5. Page 11, g. The National Park Service should take all steps to insure mineral extraction does not detract from preservation of the natural, scenic and recreational values of Chickasaw National Recreation Area.

6. Page 13, C.2. The inclusion of Environmental Education as a proper function of Travertine Nature Center is strongly supported. My recommendation is to further the develoment of Environmental Education programs in addition to the normal park interpretive functions.

7. Page 13, C.4. The collection of fees for the Travertine District is supported. Even with the realization that the local residents have viewed what was Platt National Park as their "own park" the continuance of existing user fees and the institution of new entrance fees is supported.

8. Page 13, D. #2. The concept of greater activity numbers within present use levels is generall supported. However, the concept of greater utilization of existing parks as opposed to expansion of park opportunities by the provision of increased parklands is opposed. Greater utilization of existing parks will inevitably lead to many more management problems.

9. Page 15, 2.a. #3. It is my recommendation that in the Cold Springs campground the campsites that lie directly adjacent to the access road to Travertine Nature Center be eliminated. I personally have camped there and have seen a problem of transition from the campground walker to the road traffic. Also the campsites adjacent to the Travertine access road receive a relatively high volumn of traffic noise that is not evident in hte campsites further away from this road.

There is no doubt that the camping facilities in the Travertine District of Chickasaw N.R.A. are the finest in that area of the state and all efforts to maintain that quality must be made.

A site rotation plan might be developed for the campgrounds in Travertine District in addition to the seasonal closings that now occur.

No campsites should be added in the Travertine District now or in the future.

10. Page 17, paragraph 1. It is misleading to use a "site density standard" as the criteria for establishing numbers/acre for campsites. Site numbers need to be related to the features of the natural resource and these of course vary considerably. An acceptable standard for Rock Creek may not be acceptable for Cold Springs or for the campgrounds located in the Lake District.

11. Page 18, 2.c. #2 continued. It is unrealistic to relate to arbitrarly dividing the lake into three equal areas. Management of the lake and and the portions open to each activity must be based on the condition of the resource as well as the human reaction to that condition. For example high speed boat use for either water skiing or fisherman travel is not appropriate in the cove or narrow areas of the lake. Shoreline erosion always occurs at an accelerated rate when this is allowed.

A total analysis of the lake is in order to determine which areas should be open for high speed use and which areas should be wake or speed limits.

12. Page 20, 4.a. The proposed visitor center is strongly supported. The existing transition or buffer between the City of Sulpher and the Park is not adequate. The area targetedfor the visitor center would benefit both the City of Sulpher and the Chickasaw N.R.A.

13. Page 36. The plan to provide external parking is strongly supported. Often the thought is that people will not use a system for transportation. However, experience in other N.P.S. areas seems to indicate that they will.

14. Page 36, Paragraph #3. The provision of the bicycle trail is supported. However, to call it "experimental" is questionable especially when the cost is considered. My recommendation it not be termed experimental unless this is a way of freeing funds for that part of the project.

15. Page 36 paragraph 6. Again, the question, are standard densities an adequate measure for management?

General Comments:

The plan is basically sound. It is realistic and perhaps recognizes the local political implications.

The research functions definitely need to be implemented as quickly as possible. Hard data is needed to make wise management decisions.

The efforts toward upgrading surface and subsurface water conditions should be vigorously pursued. All levels of government in that area must realize their responsibilities toward elimination of all sources of water pollution.

As a suggestion, land application of park sewage effluent might be considered as an alternative. The Environmental Protection Agency has been actively researching this procedure and it would be appropriate to explore and research this possibility at Chickasaw N.R. A.

The research projects in the midwest have shown land application of non chemical containing effluent to be feasible and in fact highly economical.

I would be happy to share specific information about land application of effluent should you desire.

Thank you very much for allowing me this opportunity for comment.

Sincerely,

M. Allen Arnold

M. Allen Arnold
Outdoor Recreation Consultant

Hardware ★ ★ Kampout & Invalid Equipment ★ ★ Sporting Goods

GOODYEAR TIRES

Hicks Service, Inc.

300 West Muskogee
Phone (405) 622-2400
Sulphur, Okla. 73086

Dec. 10, 1979

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 12 1979

Mr. Paul Wykert, Sup't.
Chickasaw Nat'l. Rec. Area
Sulphur, Oklahoma 73086

Dear Paul,

After reading as much as possible, the brochure of the proposed changes and inprovements of the Chickasaw National Recreation Area, I feel like this will be a great asset to the community as well as the Park.

You probably have in your files the changes of U.S. 177 Highway proposal suggested and signed by members of the Sulphur Chamber of Commerce several years ago. This was a public meeting of interested citi ens of Sulphur.

The proposal had a first and second choice . The first choice was with an overpass. The second was to go around the East side of Sulphur and then back Suoth.

C J Hicks

CHICKASAW
NATIONAL RECREATION AREA
RECEIVED

DEC 04 1979

December 3, 1979

Paul V. Wykert, Superintendent
United States Department of the Interior
National Park Service
Chickasaw National Recreation Area
Post Office Box 201
Sulphur, Oklahoma 73086

Dear Sir:

SUBJECT: Comments on D.E.I.S. - 79-59, US DOI National Park Service

Page ii - My comments are as follows:
(a) Public or User Comments
(b) Have comments under Interested Agencies, Organizations or Individuals.
If so, where is correspondence of early public involvement?

Page iii - Table of Contents
Summary (a) Subsection - Paragraph 3
The Area's Needs (Page 8, 11 and 12)

The draft E.I.S. does not provide on page 8, 11 or 12 any specific need for further development of the Chickasaw National Recreation Area in Oklahoma. In fact, it does not list one plant or animal species that are suffering from loss of habitat due to visitor capacity or oppression. It does however indicate the desire to intensify studying the area at large expenses to the taxpayers (Primarily Oklahomans) to see if potential diversification of outdoor recreational opportunities would attract more visitors. Page 13; ~~however, does~~ begins to give insight into the true proposal of the Draft E.I.S. Chickasaw National Recreation Area. Since the area does not provide sufficient population to benefit from local access by hiking and biking trails proposed adjacent to Rock Creek, D.O.I. hopes to attract more visitor use by giving better facilitation to water and land recreation including, water skiing, boating, fishing, swimming, camping and hunting. However, these benefits are to be provided only if new agreements can be negotiated between the National Park Service and the Oklahoma Department of Wildlife Conservation, Page 8. Pages 8 and 9, continues discussing Resource Management stating:

" " " " " (Hunting will not be permitted in Travertine District, nor around Buckhorn, The Point, Guy Sandy, Goddard Youth Camp, the dam, and other developed areas.) Such an agreement will include provisions that assure management in accord with National Park Service policies, for instance, excluding introduction of any exotic species or gross artificial manipulations of animal or plant species mosaics. Hunting seasons and closure areas will be according to State laws and regulations and subject to NPS approval.

#3. Employ programs to keep exotic fish species from moving upstream into natural environments.

The goal for hunting will be sustained-yield cropping of native species that have grown up in a natural environment on the land where hunted. The goal for fishing in Arbuckle Reservoir will be sustained-yield harvest of suitable fish types, without stocking except to introduce new species or to correct imbalances.

b. Proposals Related to Vegetation Management

There is uncertainty as to what the natural vegetative mosaics throughout the recreation area would be had there not been townsite development, grazing, exclusion of fire, and concentrated visitor use at various locations. Therefore the proposals are:

#1. Initiate research to reveal what the flora was at various periods (including the present) in different parts of the area. This will reveal what the "natural" compositions were that occurred in the late aboriginal period, and so allow determination of the successional stages that should be restored or preserved. Extraneous influences not present in the natural setting will also be determined (such as introduced grasses, drainage devices, animals introduced or extirpated, and the frequency and effect of fire).

#2. Establish experimental test areas to determine the effects of various manipulative techniques and observe and record the results for ultimate use in designing a program of resources management geared to the selected goals. Generally the resource type that will be selected will be that prevailing at the start of the historic period; however, in certain spots, such as around public use areas, other vegetational situations may be selected.

#3. Discontinue agriculture throughout the area and allow the vegetation to succeed to a more nearly natural state. Where wildlife cropping has been practiced under permit with the Oklahoma Department of Wildlife Conservation, consideration will be given to gradually phasing out such cropping to minimize disruption of any species dependent upon it.

c. Proposals Related to Faunal Management

#1. Perpetuate native species, remove exotics to the extent practical, and introduce none.

Allow animals to interact with their habitat in natural settings. An exception would be the limited indoor display of live specimens at Travertine Nature Center.

#2. Provide special attention to unusual species for the area, including those threatened regionally (none are on Federal lists of threatened and endangered species).

#3. Initiate studies to determine extirpated species and the feasibility of reintroducing any to the free-roaming state; the pronghorn is one such example. "

This indicates to me a complete change in the nature of the area with numerous modifications to the natural geologic conditions as indicated throughout the Draft E.I.S. In addition, one of the purposes will be to eliminate any penned exotic animals which presently act to serve children of the area information as for example: the Bison who once roamed free throughout all of Oklahoma. As an Indian I object to this!

Another very lacking part of the Draft E.I.S. is the determination of the adverse effect the proposal would have upon the conservation of energy. Page 92 seems to indicate a decline in the attractiveness of the area; however, one very essential factor has been omitted. There is no distinction made of distances traveled to visit the area. And, should the purpose of the Chickasaw National Recreation Area be to increase the attractiveness to visitors who drive longer distances, it could drastically increase energy consumption.

Another very lacking part of the Draft E.I.S. is that it does not indicate any degree of significance to the known nineteen archaeological sites. This is also coupled with the insinuation that park headquarters could qualify as a National Historic Site; however, plans call for its relocation; and no mitigation of adverse impact measures have been given.

Additionally, it is my understanding that US 177 was situated through the area prior to the proposal of the area becoming the Chickasaw National Recreation area (presently and/or Platt National Park); and, that this prevents the Fees Proposals, Page 13, under current law. If this is true why was this very important issue

not addressed on Page 25 which states:

"Circulation by vehicle will remain as now until US 177 is relocated. A corridor for a potential overpass to accomplish this relocation is designated in the Cold Springs area so that development will not foreclose this option. However, other alternatives will be considered. When the relocation option has been selected, environmental analysis will be required".

The option referred too, is the proposed bicycle/hiking trail to Buckhorn from the Bromide Springs area. This appears to be a conceived idea to fulfill the purpose of relocating US 177 in order to initiate the fees proposal! Since, present visitors are protected by a 25 MPH speed limit it does not appear to be sufficient justification for the large expenditure of public funds to relocate US 177. Additionally, a commitment of funds or a funding agreement between ODOT and DOI should have been included in the Draft EIS. This poses a very interesting aspect to NEPA, in that to construct such projects as referred to in the Draft EIS require a Section 4(f) determination of no prudent or feasible alternative to the use of such lands. As a private citizen I do not see how US 177 could be relocated without still passing through park lands to serve its present traffic desire corridor!

I see such a proposal as a responsibility of D.O.I. and evidently from the large Government appropriations supporting your personnel bureaucracy funds would not be hard to find to relocate US 177 if you received ODOTS permission and agreed to acceptable standards of construction.

In summary, I love wildlife, I like to see beautiful plants in their natural state and I think the Chickasaw's deserve their tribute as passed by Public Law 94-235; however, I see no attempt at addressing the issues of importance in the Draft E.I.S. and request that a new study and Draft E.I.S. be circulated.

Sincerely,

John C. Tacker

John C. Tacker
528 Howard
Del City, Oklahoma 73115

CC: Senator David Boren
Secretary, Department of the Interior

Public Comments and National Park Service Response

I. United States Department of Agriculture-Soil Conservation Service:

Comment: "The draft environmental impact statement clearly sets forth anticipated effects of the plan and adequately reflects the magnitude of potential impacts. The impacts upon prime farmland and other agricultural interests will be insignificant. We concur in the proposals and findings of the management plan and draft EIS and appreciate the opportunity to review the documents."

Response: None

II. Department of Housing and Urban Development:

Comment: ". . . it has been determined that the Department will not have comments on this statement."

Response: None

III. United States Department of the Interior:

A. Bureau of Land Management

Comment: "We do not have comments on the environmental statement and the general management plan for the Chickasaw National Recreation Area."

Response: None

B. Bureau of Mines

Comment: "Two 8-inch crude oil pipelines owned by the Cherokee Pipeline Company may cross the national recreation area south of Sulphur. If so, we suggest that the situation be clarified in the final statement and plan. Otherwise, we have no objection to either document."

Response: The pipelines have been abandoned and, in 1975, most of the pipe removed except that underneath the Buckhorn arm of Lake of the Arbuckles.

C. Fish and Wildlife Service

1. Comment: "Care should be taken in any attempts to reintroduce endemic animal species which have been extirpated through past human activities. . . ." "Before

such a venture, we would suggest consultation with the Oklahoma Department of Wildlife Conservation, the U.S. Fish and Wildlife Service, and other entitites which may have expertise in this area."

Response: Research and consultation, such as suggested, will precede any attempt at reintroduction.

2. Comment: "From a statement on page 57 regarding the 'normal flow' of Travertine Creek, it appears that work on the proposed flood diversion channel at the Travertine Nature Center may come under the jurisdiction of the U.S. Corps of Engineers' dredge and fill permit program (404)."

Response: The Corps of Engineers was sent copies of the draft environmental statement, but did not furnish comments. The Tulsa District Office of the Corps of Engineers has been contacted and indicated by letter of February 1, 1980, that the project falls within the scope of the nationwide permit. If deviations from that permit occur, the Corps of Engineers will be consulted to determine whether an individual permit is required. There is no intention to place dredge or fill material in Travertine Creek.

3. Comment: "In its report of November 20, 1959, on the Arbuckle Project, the Fish and Wildlife Service recommended that 660 acres of project land on the Big Sandy Creek arm, plus 615 acres of adjacent land to be acquired specifically to replace wildlife habitat inundated by Arbuckle Reservoir, be made available to the ODWC for wildlife management purposes in accordance with the terms of a General Plan as provided for in the Fish and Wildlife Coordination Act. Following project land acquisition, a General Plan for Use of Lands for Wildlife Conservation and Management-Arbuckle Reservoir, Oklahoma was executed between the Department of the Interior and the ODWC on April 13, 1967, and amended on March 17, 1969. It is our contention that the lands designated in the General Plan were set aside specifically to mitigate the loss of wildlife habitat and hunting losses resulting from the Arbuckle Project. It is unclear whether the General Plan and related use of Arbuckle Project lands legally is still in effect or whether it was rendered void along with the former management agreement between the Bureau of Reclamation and the ODWC by legislation establishing the Chickasaw NRA. The DES should address this issue and attempt to clear up the possible conflict in land management."

Response: "The Act of March 17, 1976 (80 Stat. 235), established the Chickasaw National Recreation Area, which includes Arbuckle Reservoir and lands adjacent thereto. With this act, the National Park Service assumed primary responsibility for public recreational use and management of available land and water areas of the Chickasaw National Recreation Area, but in such a manner so as not to interfere with the primary purpose of the project as set forth in the Act of August 24, 1962 (76 Stat. 395)." The above is quoted directly from the March 31, 1978 Memorandum of Agreement between the Bureau of Reclamation (now Water and Power Resources Service) and the National Park Service for the Administration of the Arbuckle Reservoir Section of the Chickasaw National Recreation Area for public recreation use. A Memorandum of Agreement for the Management of Game and Fish between the Oklahoma Department of Wildlife Conservation and the Chickasaw National Recreation Area was executed August 22, 1979. Thus, the lands in the Guy Sandy arm are administered by the National Park Service and the Service and the Oklahoma Department of Wildlife Conservation has agreed to cooperate in the formulation and application of plans and programs to guide the management of wildlife and fish upon and in lands and waters administered by the Service.

The lands will remain as wildlife habitat and be open to hunting. Any developments proposed thereon which will be counterproductive of such uses will be discussed and coordinated with the State Agency. The lands will gradually be returned to natural habitat for native wildlife species and monitoring of any changes to effect this return will take place. Section 3 of the Act of March 17, 1976, 16 U.S.C. - 460 hh-2 requires that the areas' lands and waters to be open to hunting and fishing in accordance with applicable Federal and State laws. The section further states that the Secretary may designate periods and zones where no hunting or fishing will be permitted for various listed reasons. Except in emergencies, any of these periods or zones will be put into effect only after consultation with the appropriate State agency, taken to mean the Oklahoma Department of Wildlife Conservation.

The National Park Service will allow hunting not only on the 1,000 some acres mentioned in the General Plan but also an additional 1,000 some acres in the Rock Creek Corridor. This land had not previously been open to public hunting and will effectively almost double the amount of public hunting land within the recreation area.

Description of the Proposal

4. Comment: "Page 8, I.B.I.a.#2. The last sentence under #2 regarding fish and wildlife statutes should include provision for compliance with Federal as well as State mandates if waterfowl hunting is to be allowed."

Response: A sentence will be added to the final environmental statement on page 8 to read: "In the case of waterfowl hunting, compliance with Federal and State mandates will be provided."

5. Comment: "Page 9, I.B.I.b.#3. Before the use of wildlife food plots is discontinued, consideration should be given to the history of the Arbuckle Project and the original purpose for which lands were set aside as specified in the General Plan for Use of Lands for Wildlife Conservation and Management-Arbuckle Reservoir, dated April 13, 1967, and amended on March 17, 1969."

Response: See response to the third comment.

6. Comment: "Page 11, IB.BI.g.#3. We suggest that a #3 be added to this list of requirements for mineral exploitation inside the boundaries of the Chickasaw NRA to require the restoration of lands as nearly as possible to their pre-exploration conditions of contour and vegetation."

Response: Item #2 has been changed as follows: "Any activities in the NRA in the exercise of rights to oil and gas not owned by the United States will be in accordance with 36 CFR Part 9, Subpart B. These regulations are designed to prevent or minimize damage to the environment and to insure to the extent feasible that all units of the National Park System are left unimpaired for the enjoyment of future generations."

7. Comment: "Page 19, I.D.2.c.#4. Determination of a desirable number of hunters would depend to a large extent on the species being sought and probably should be coordinated with the ODWC."

Response: This certainly will be done.

8. Comment: "Pages 20 and 25, I.D.4.a. The proposed flood diversion channel at the Travertine Nature Center could provide opportunities for fish and wildlife enhancement. Possibilities include the development of a controlled marsh environment and/or a small pond fishery. At any rate, we suggest that care be taken to disturb the least practicable

amount of vegetation in the excavation. In revegetating the channel, consideration should be given to plant species of value to fish and wildlife including native grasses, forbs, legumes, and shrubs."

Response: Travertine Creek, at the Nature Center, is subject to intermittent flow, dependent upon Buffalo and Antelope Springs. For the last several years, the springs have ceased to flow for 3-4 months during the winter. The channel will be constructed with the least practicable disturbance to vegetation and will be revegetated with native species. The channel will resemble the natural swale it will follow. Flood waters will flow into the channel only when the creek waters reach within three feet of the top of the arch beneath the building.

9. Comment: "Page 25, I.D.4.b. Alteration of wildlife habitat will be minimized by routing the proposed bicycle and hiking trails along the ridges. We suggest, however, that valuable habitat components such as den or nest trees, burrows, rock outcroppings, and established game trails be avoided."

Response: The bike trail will be located on both the ridges and along the creek, dependent upon terrain features and construction standards. Habitat components will be avoided whenever possible in the alignment of both the hiking and bicycle trails. This is addressed on page 107, in the Mitigating Measures section.

10. Comment: "Page 29, I.D.4.c. In removing stumps and debris from swimming areas, be cognizant of the value of these materials as fish habitat."

Response: The safety and health of visitors is the primary objective of the proposed removal. Active recreational pursuits at swimming beaches probably is not conducive to fish habitat.

Description of the Environment

1. Comment "Pages 60-80, II.D.1.c. We applaud your efforts at documenting water pollution sources and effecting corrective measures."

Response: None

12. Comment: "Page 84, II.D.2.b. The timber rattlesnake (*Crotalus horridus*) probably should be added to the list of poisonous snakes occurring on the area."

Response: There is no reported occurrence of the timber rattlesnake in the area.

13. Comment: "Page 85, II.D.2.c. We expect that both the bald eagle (Haliaeetus leucocephalus) and peregrine falcon (Falco peregrinus anatum) could occur in the area at least as migrants or transients."

Response: In the final environmental statement the following will be added to c., Page 85: "It is expected that the bald eagle (Haliaeetus leucocephalus) and the peregrine falcon (Falco peregrinus anatum) could occur in the area at least as migrants or transients. Park records show that since 1926 there have been no sightings of the peregrine falcon and three of the bald eagle, (2-14-72, 2-1-78, 12-4-78)." Also on Page 99 - a new sentence after 5th paragraph will be added: "Because of limited sighting and the minimal development planned, no effect is expected on threatened or endangered species."

The Environmental Impact of the Proposed Action

14. Comment: "Page 99, III.A.2. Mention is made of transporting sewage effluent out of the watershed. Although not impacting the Arbuckle Lake watershed, will this action adversely affect other areas? At least a sentence or so should be added to adequately treat this potential concern."

Response: Arbuckle Lake is a municipal water supply. The sewage treatment plant, while located within the 1976 boundary extension, is the responsibility of the City of Sulphur. Upgrading of the plant is underway. The EPA is involved in the renovation project, as are Oklahoma Public Health officials.

15. Comment: "Page 99, III.B. More detailed and specific information is needed concerning impacts on both aquatic and terrestrial habitats and resources associated with construction of the Travertine Creek overflow channel."

Response: This is a very minor project involving 0.7 acre. It consists of enlarging slightly an existing swale to allow flood waters, should they ever again occur, to flow around the building -rather than into it - when the existing archway beneath the building can no longer handle the flow. The impact on aquatic and terrestrial habitats will be negligible.

16. Comment: "BIBLIOGRAPHY, page 138. In scanning the bibliography of the DES, we questioned the citation crediting authorship of a research proposal to Robert S. Kerr."

Response: The citation has been corrected. Robert S. Kerr referenced the Robert S. Kerr Environmental Research Laboratory.

D. Water and Power Resources Service

1. Comment: "In compliance with the new Council on Environmental Quality Regulation (40 CFR, Parts 1500-1508, November 29, 1978), it appears that the revised format for environmental statements should be considered in organizing the statement."

Response: Planning and the development of the draft statement preceded the new guidelines. To change in the middle of the process would be both expensive and time consuming. Conversion was considered and rejected for those reasons.

2. Comment: "Page 15.--Regarding the parking congestion problem, we suggest this be further clarified. It appears that it would be appropriate to proceed with developing studies to resolve the parking problem instead of waiting for the problem to reoccur."

Response: Chickasaw NRA has experienced a drop in visitation in the past years. It may be premature to expect the problems of parking congestion to occur within new visitation figures. A circulation system study, at this time, would be further complicated by unknown utilization of the proposed visitor center and lack of an active project on moving U.S. 177, a definite factor in any circulation study.

3. Comment: "Pages 15, 23, 32, 33, 50, and throughout.--The proper name of the lake is the Lake of the Arbuckles and should be used in lieu of Arbuckle Lake or Arbuckle Reservoir."

Response: Highway signs on the interstate and road maps indicate both Arbuckle Lake and Arbuckle Reservoir. The lake is most commonly called Arbuckle Lake. The Chickasaw National Recreation Area brochure (handout) does call it Lake of the Arbuckles.

4. Comment: "Page 17-18.--We suggest the boating carrying capacity calculations should be reevaluated. (See detailed comments regarding same subject in the land management plan.)

Detailed Comments: We believe the boating capacity analysis should be reexamined in several respects. We do not agree

that the lake surface should be arbitrarily divided equally among the three types of boating use. This is not only inconsistent with the varying "areas per boat" standards cited, but it also fails to consider the varying "turnover" rates and relative activity distribution for the three activities.

While turnover rate was considered in determining daily boat launching capacity, this capacity was erroneously based on parking spaces instead of boat launching lanes. It is true that inadequate parking areas would prevent full boat ramp capacity from being used; however, actual boat access to a lake is governed by the number of boat launching lanes. Two daily launch standards are widely accepted. Based on a "12-hour" day, a maximum of 36 boats could be launched and retrieved per lane (based on 10 minutes per launch and retrieval) or a maximum of 40 launches (based on 9 minutes). These maximum standards are not affected by turnover rate. A secondary consideration, when relating boat launching capacity to lake surface capacity, is docking space. If docking space is available, boat launching capacity would have to be reduced accordingly:

> Boats accessing lake from docks + boats accessing lake from launch lanes = total boats on lake.

It appears that no adjustment factor was included in the analysis to reflect what portion of the lake surface is "suitable" for the three boating activities. Normally, the entire lake surface is not suitable for each of these three activities because of size, wind and wave action, water depth, proximity to the shoreline, obstruction, shoreline configuration, etc.

Another adjustment factor which apparently was not considered relates to daily use patterns by activity. Boat fishing activity normally is high in the early morning and evening, while boating and water-skiing generally peak out during mid-afternoon. As a result, all of the available lake surface is not used to capacity by each activity during each hour of the assumed "12-hour" recreation day.

As was alluded to in the plan, another important adjustment factor is often required because the "summer pool" of a lake/reservoir is less than the normal "conservation pool." However, the reduced boating capacity that would be associated with a reduced lake surface area would not be directly proportional, as is stated in the narrative, due to the change in the "suitability factor" at lower elevations. For example, under a severe drawdown situation, an elevation would eventually be reached where power boating and

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that the lake surface should be arbitrarily divided equally among the three types of boating use. This is not only inconsistent with the varying "areas per boat" standards cited, but it also fails to consider the varying "turnover" rates and relative activity distribution for the three activities.

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> Boats accessing lake from docks + boats accessing lake from launch lanes = total boats on lake.

It appears that no adjustment factor was included in the analysis to reflect what portion of the lake surface is "suitable" for the three boating activities. Normally, the entire lake surface is not suitable for each of these three activities because of size, wind and wave action, water depth, proximity to the shoreline, obstruction, shoreline configuration, etc.

Another adjustment factor which apparently was not considered relates to daily use patterns by activity. Boat fishing activity normally is high in the early morning and evening, while boating and water-skiing generally peak out during mid-afternoon. As a result, all of the available lake surface is not used to capacity by each activity during each hour of the assumed "12-hour" recreation day.

As was alluded to in the plan, another important adjustment factor is often required because the "summer pool" of a lake/reservoir is less than the normal "conservation pool." However, the reduced boating capacity that would be associated with a reduced lake surface area would not be directly proportional, as is stated in the narrative, due to the change in the "suitability factor" at lower elevations. For example, under a severe drawdown situation, an elevation would eventually be reached where power boating and

water-skiing would no longer be safe because of inadequate water depth even though there still might be several hundred surface acres of water. Nevertheless, since the Lake of the Arbuckles has historically been near conservation pool elevation 872.0 between May 1 and September 1, the "conservation pool" adjustment factor is not applicable."

Response: It is not proposed to equally divide the lake among three types of boating use. This was only one method of obtaining a maximum number of boats (of any type) on the lake at one time. The parking capacity was used because it effectively limits launch capacity. No docking space is available or proposed and management has delineated an area "suitable" for water skiing. The purpose of this section, in effect, is to propose an upper limit of boats on the lake at one time and leave the apportionment of uses to the site managers, perhaps using some examples given in the carrying capacity section. The suggested capacity limits will be refined and perhaps modified with management experience.

5. Comment: "Page 17.--The agency "Bureau of Outdoor Recreation" should be changed to read 'Heritage Conservation and Recreation Service'."

Response: The "BOR" was used in terms of a citation of a previously published document.

6. Comment: "Page 18 and throughout.--References to the Bureau of Reclamation should be changed to read 'Water and Power Resources Service'."

Response: This will be done where practicable or by addendum.

7. Comment: "Page 92.--It is suggested that visitor-use statistics be rechecked for accuracy. See detailed comments below:

> Regarding use statistics, we suggest they be rechecked. Visitation figures reported to us by National Park Service on annual WPRS recreation inventories differ significantly (at least for 1975-1978) from those appearing on page 38:

WPRS Summary	Year	Visitor Days *
	1975	206,026
	1976	200,271
	1977	183,382
	1978	147,569

*One person participating in one or more activities at a site during all or any portion of one calendar day."

Response: National Park Service methods of computing use figures are quite different from those required in the WPRS Recreation Inventory. Comparisons between the two methods are meaningless. Attempts to resolve the discrepancy have not been successful. The use figures submitted by Chickasaw to the Water and Power Resources Service for their annual recreation and wildlife summary form do not match those that are later published in the WPRS annual "Utilization of Recreation Areas on Reclamation Projects."

8. Comment: "Page 45.--The date of the cooperative agreement with WPRS (Bureau of Reclamation) should be March 31, 1978."

Response: An apparent error. It will be corrected from 3/1/78 to 3/31/78.

9. Comment: "Page 55.--The listing of data on this page has 500-year flood control contour of elevation 885.85. We are not aware of where the elevation was acquired, but this should be checked since it is above top of flood pool elevation."

Response: Page 55 of the DES contains a misprint. Elevation 885.85 should read the 100-year flood contour as it does on page 27 of the GMP. This estimated figure was obtained from the Army Corps of Engineers in order for the Park Service to comply with Executive Orders 11988 and 11990 regarding use of floodplains. This misprint will be corrected in the final environmental statement.

IV. U.S. Department of Transportation, Federal Highway Administration:

Comment: "We are in agreement with the discussion within the Draft Environmental Impact Statement which deals with the possible relocation of US-177 and the concerns which need to be addressed should this action be implemented."

Response: None

V. Environmental Protection Agency:

Comment: "On . . . page 58 of the Draft Environmental Impact Statement, it is mentioned that there are spring developments where water is pumped and then stored for consumption by visitors to the park. Such an arrangement would be classified as a non-community public water system if it serves an average of at least 25 individuals daily, at least 60 days out of the year. All non-community public water systems were required by the Safe Drinking Water Act and State regulations to begin sampling for coliform bacteria and nitrate prior to June 24, 1979. The supplies may also be required to be sampled daily for turbidity depending on whether the systems are defined as surface or ground water systems. Shallow and subsurface springs and infiltration galleries at or below ground level are considered surface supplies by EPA since surface contamination can render such a system an unsafe source . . . . We would like to see a discussion of the results of sampling in the Final Statement."

Response: There is only one spring, Black Sulphur, which is pumped and then stored for public consumption. In compliance with the Safe Drinking Water Act as a non-community public water system it is sampled for both coliform bacteria and nitrate. The Black Sulphur Spring is used by an average of five (or less) persons per day year round. It is considered a ground water system, with a demand pump from a cased-well source. Nitrates (NO_3) are tested on a three-year cycle, maximum allowable level is 10 mg/l. The March, 1975 sample for NO_3 was 0.044 mg/l and the September, 1978 sample for NO_3 was 0.02 mg/l. Black Sulphur is chlorinated (ppm Cl_2 @ 0.1) and a complete bacteriological survey is done every two weeks. Any total coliform reading of MF 1.0 requires a retake and retest of sample. Regular samples tested by the Oklahoma State Department of Health over the past five years have never had a total coliform reading meeting or exceeding this value.

Medicine and Bromide Springs have been pumped in the past, although they have not been utilized in some years and there are no plans for doing so. Jack Diamond and Pavilion Springs are artesian and are approved systems, tested and sampled and in compliance with state and federal health requirements.

VI. State of Oklahoma Department of Transportation:

Comment: "The DEIS discusses three possibilities with regard to US 177 in the area studied.

1. US 177 to remain on its present alignment.
2. US 177 to be constructed on a new alignment with an overpass spanning the park area.
3. US 177 to be constructed on new alignment to the east, totally bypassing the park lands.

The DEIS discussed how each of these alternatives may affect the park proper; however, impacts within the park constitute a very small percentage of the total affect of any action associated with US 177 in this area. Other impacts of concern with regard to US 177 would necessarily incorporate such factors as the number of families to be relocated, noise and air quality impacts of routing the highway through residential neighborhoods, the potential isolation of the State Veterans Hospital, excessive and environmental effects of highway construction which are normal considerations in the EIS process.

Although each of the alternates are discussed in very general terms, final alternate selection must entail a full analysis of all impacts associated with each. This Department has performed some preliminary analyses necessary for early project planning, but formal project development procedures have not been initiated. We would recommend that each alternate presented in the DEIS be continued so as to not preclude future options with regard to the highway within the broader scope of potential impact analyses required by the National Environmental Policy Act, or other related legislation, and the corresponding implementing regulations.

We realize the burden this places upon long range planning relative to the Chickasaw National Recreation Area, and will lend our assistance, as far as practicable, towards minimizing this problem. However, since we have no active plan for improvement of this segment of US 177, we cannot provide input relative to the final location at this time."

Response: The effects noted in the Chickasaw draft environmental statement will be useful in the preparation of an environmental assessment on the alternate selection process and in a Section 4 (f) statement that may be required.

VII. Oklahoma Department of Wildlife Conservation:

1. Comment: "In general, we agree with the comments provided by the Fish and Wildlife Service . . . . We specifically have a problem with the proposed management plans for the present public hunting area. This area was set up as mitigation for hunting and fishing losses through

creation of the reservoir. Without the ability to manipulate the habitat and utilize food plots, the areas mitigation value is lost. Mitigation was a required part of the original project and is still needed."

Response: See response to Comment #3, Fish and Wildlife Service.

2. Comment: "Page 8, B. RESOURCE MANAGEMENT, I.a. Proposals Related to Hunting and Fishing Management. Although the legislation of 1976 cancelled the management agreement between the Water and Power Resource Service (formerly the Bureau of Reclamation) and the Oklahoma Department of Wildlife Conservation, we feel the General Plan (of 4-13-67 and amended 3-17-69) which provided approximately 1,275 acres to mitigate wildlife losses resulting from the construction of the dam and reservoir should be in effect for the life of the project, which construction was made possible by the agreement drafted in accordance with the Fish and Wildlife Coordination Act. (Page 19, #4 addresses small game and deer hunting plan, involving approximately 1,000 acres.)"

Response: The National Park Service (NPS) intends to fulfill the terms of an August 22, 1979 Memorandum of Agreement with the Oklahoma Department of Wildlife Conservation (ODWC) wherein it is stated:

> "It is mutually agreed that joint and cooperative endeavors between the Department (ODWC) and the Service (NPS) will contribute substantially toward promoting and providing maximum recreation, hunting and fishing benefits at Chickasaw National Recreation Area for the best interests of the people of Oklahoma and of the United States."

3. Comments: "Page 8, B.I.a.#3 This item appears to be contradictory as it seeks to "keep exotic fish species from moving upstream . . . ." but, at the same time, provides for the introduction of "new species" (top of page 9) which, in our vocabulary, mean exotic fish. Exotic fish are present in the Lake of the Arbuckles, including such species as walleye, Northern pike, spotted bass, carp, and red ear sunfish. Any goals for fishery management will be difficult to attain, as long as water quality problems persist as described on pages 60-62."

Response: Exotic species, by definition, are those plants and animals not naturally occurring in the ecosystem in which they are presently found. In accordance with Executive Order 11987 of May 1977, the National Park Service is directed to restrict

the release, escape or establishment of such species. Therefore, the objective is to keep exotic fish species in the Lake of the Arbuckles, a man-made environment where they have been introduced, and physically prevent them from moving upstream into the natural stream environment where they do not naturally occur. The introduction of "new species" referred to on page 9 may include exotic species when referring to the Lake of the Arbuckles, as it is a man-made environment. The emphasis is to distinguish between the fishery management of the natural environment or streams, and the man-made environment in the lake.

Renovation of sewer lines that traverse the Recreation Area are underway by the City of Sulphur and improvements projects in the upstream watershed supplying the lake have been undertaken by the Murray County Agricultural Stabilization and Conservation Committee.

4. Comment: "Page 9, b. Proposals Related to Vegetation Management In the pursuit of the restoration and preservation of a "natural environment", the lake itself is the most obvious extraneous influence, as it is a man-made impoundment which has drastically changed the ecology of the area, both in the terrestrial and aquatic ecosytems.

The following terms should be clearly defined:

"natural" as used on page 9,b,l.
"historical" as used on page 9,b,2.
"natural setting" as used on page 9,c,l.
"natural mosaics" as used on page 99.
second paragraph from bottom of page."

Response: Definitions:

"natural" - largely unaltered by human activity.
"historic period" - period of time at the end of the aboriginal period and before the white man impacted the area.
"natural setting" - habitat largely unaltered by human activity.
"natural mosaics" - composition of ecological groupings of plants and animals according to factors largely unaltered by human activities.

5. Comment: "Page 9,b.#3. Phasing out of cropping intended for optimizing wild game populations will result in an overall decline in productivity at various trophic levels, affecting both game and nongame organisms, because food availability is one of the limiting factors. This objective seems

aimed at phasing out hunting by phasing out game species dependent on food plots"

Response: Emphatically and categorically, there is no intention nor objective to phase out hunting. The hunting of native species in a natural habitat is the long-term objective.

6. Comment: "Page 9,c.#1. Proposals Related to Faunal Management We concur in this philosophy but the small size of the project and the extensive ecological changes which have taken place would make it difficult, if not impossible, to determine what a "natural setting" is (at least, one free of human influence)."

Response: Either left alone or perhaps manipulated to encourage succession, lands can be made to reclaim themselves regardless of past use.

7. Comment: "Page 9,c.#3. The ecology of the area has undergone a gradual but drastic change in the past 200 years. It has been transformed from a mixed grass prairie interspersed with forested stream courses to an agrarian dominated community (see page 68). Settlers erected fences, plowed fields, planted crops, built roads, railways and highways, dammed streams, etc. Prior to such development, the prehistoric prairie supported roaming herds of the American bison, American elk and pronghorn antelope. These large herbivores maintained an equilibrim between themselves and their natural predators. Their migration movements were the result of seasonal climatic changes and range conditions. The habitat that supported these ungulates no longer exists; without it, reintroduction of the pronghorn antelope or any other former range animal would be a fruitless and futile effort."

Response: The feasibility of any reintroduction program would be coordinated with the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation.

8. Comment: Page 19,#4. Proposals Related to Rock Creek Corridor Carrying Capacity We do not recommend concentrating hunters to a density of 10 acres per hunter. This not only degrades the quality of the hunting experience but it could be hazardous. We recommend on our Game Management Areas a density of 1 hunter per 80 acres of habitat for big game and 40 acres for small game, which may vary with type of terrain and cover."

Response: The objective as stated in #4, page 19 is to provide sufficient entry points and parking facilities for use of the

area. The parking areas will also serve visitors to the area in non-hunting or waterfowl hunting periods. As the differences between the referenced rate of 10 acres/hunter and your recommendation of 40-80 acres/hunter is large, it may be necessary to close a portion of the parking areas during hunting seasons as not to overload the area. This will be coordinated with the Oklahoma Department of Wildlife Conservation.

9. Comment: "Page 60,c. Water Quality The presentation on Water Quality is excellent. The problems outlined will be a major obstacle in the implementation of fishery management proposals and, once again, provide evidence of human impacts on the aquatic environment."

Response: None

10. Comment: "Page 75, Table 22 Title should read 'Water Quality Data. . . .' instead of 'Quality date. . . '."

Response: The referenced report titled material "Quality Data." The typographical error will be corrected.

11. Comment: "Page 84,c. Fauna (Biological Resources) The list of species is incomplete, vague and the use of scientific names is inconsistent. For example: lists 'catfish' and 'bullhead' which is also a catfish. It lists unwanted fish such as carp and carpsucker, while omitting important sport species such as the walleye and spotted bass. Scientific names should be used for all species or none.

The nearest known self-supporting pronghorn antelope herd in the state is more than 200 miles northwest of Sulphur, in Ellis County.

Is 'Louisiana whitetail deer' a distinct variety of deer in the project area? We are not aware of this particular sub-species occurring in Oklahoma."

Response: The scientific names were used for three species which may not be familiar to the majority of readers. Actual species checklists (with scientific names) of those expected and/or sighted within Chickasaw are available at the park. The walleye, a type of perch, will be added to the final statement.

The information on the pronghorn will be revised to read: Pronghorn (antelope) were once common to the area, but are not presently found closer than 200 miles to the northwest.

The Louisiana whitetail deer will be changed to whitetail deer.

12. Comment: "Page 85,c. Threatened and Endangered Species Bald eagles have been sighted in central Oklahoma on various occasions. Whooping cranes migrate through central Oklahoma, making brief stops in the state."

Response: See response to 13. Comment, Fish and Wildlife Service. The whooping crane flyway extends through the central portion of the state, however, Chickasaw NRA does not provide desirable habitat for this species and they have not been sighted in the area.

13. Comment: "Page 99,b. Impacts on Biologic Resources, 3rd paragraph This objective seems aimed at phasing out hunting by phasing out game species dependent on food plots. As the animals dependent on those crops are expected to decline, so will hunting opportunities decline, resulting in a degradation of the outdoor experience and a certain decline in visitation to the area during a time (fall and winter) when there is virtually no other outdoor recreation activity."

Response: See response to 5. Comment above.

VIII. Oklahoma Tourism and Recreation Department:

Comment: "The development concepts presented in the draft environmental statement are sound and thorough and I wish you every success in achieving full implementation of the program."

Response: None

IX. Oklahoma Department of Economic and Community Affairs (State Grant-in-Aid-Clearinghouse):
Comment: "A review of the environmental assessment . . . shows no adverse environmental impact is anticipated.

Response: None

X. Oklahoma Archaelogical Survey:

Comment: "The project does not take place on a known archeological site nor does it appear to be in a location likely to contain such a site."

Response: None

XI. M. Allen Arnold, Outdoor Recreation Consultant:

1. Comment: "Page 7, paragraph (4). A mention of conditions of some sections of trails in the park seems to be in order. For example, the trail from the Bromide Springs area to the overlook is in a deteriorated condition in places. Switch backs have been cut across and erosion is evident. (this may be in the state of environment statement)"

Response: Such deterioration can and will be corrected with programmed operating funds.

2. Comment: "Page 8, B.1.a.#3. To the casual reader this is unclear. Park managers certainly will understand what is meant, but if there were situations where others would be reading this it needs to be clarified. It seems to read that exotics will be kept from their natural environments and that certainly is not the intent I am sure."

Response: See response to 3. Comment, Oklahoma Department of Wildlife Conservation.

3. Comment: "Page 9,b. Yes, the proposal for increased research needs strong backing and the determination of the natural resource base is of vital importance to the park manager."

Response: Agree

4. Comment: "Page 10,e. All proposals should be vigorously pursued. Both point and non-point pollution sources need to be identified and researched to determine what directions the N.P.S. management should take.

An aggressive thrust to move the Sulpher dumping grounds is in order. As well as working with the City of Sulphur to eliminate other pollution sources. Proper control of upstream watershed is a long documented and necessary practice for proper park management."

Response: Agree

5. Comment: "Page 11, g. The National Park Service should take all steps to insure mineral extraction does not detract from preservation of the natural, scenic and recreational values of Chickasaw National Recreation Area."

Response: See response to 6. Comment, Fish and Wildlife Service.

6. Comment: "Page 13, C.2. The inclusion of Environmental Education as a proper function of Travertine Nature Center is strongly supported. My recommendation is to further the development of Environmental Education programs in addition to the normal park interpretive functions."

Response: Within budgetary constraints, this will be done.

7. Comment: "Page 13, C.4. The collection of fees for the Travertine District is supported. Even with the realization that the local residents have viewed what was Platt National Park as their 'own park' the continuance of existing user fees and the institution of new entrance fees is supported."

Response: None

8. Comment: "Page 13, D.#2. The concept of greater activity numbers within present use levels is generally supported. However, the concept of greater utilization of existing parks as opposed to expansion of park opportunities by the provision of increased parklands is opposed. Greater utilization of existing parks will inevitably lead to many more management problems."

Response: "Offering new facilities in terms of additional activities within present use levels rather than as a means to increase capacity" means renovated comfort stations, pavilions for inclement weather-use by picnickers, bike and hiking trails and similar improvements. One of the purposes of the plan is to provide a higher quality of visitor experience.

9. Comment: "Page 15, 2.a.#3. It is my recommendation that in the Cold Springs campground the campsites that lie directly adjacent to the access road to Travertine Nature Center be eliminated. I personally have camped there and have seen a problem of transition from the campground walker to the road traffic. Also the campsites adjacent to the Travertine access road receive a relatively high volume of traffic noise that is not evident in the campsites further away from this road.

There is no doubt that the camping facilities in the Travertine District of Chickasaw N.R.A. are the finest in that area of the state and all efforts to maintain that quality must be made.

A site rotation plan might be developed for the campgrounds in Travertine District in addition to the seasonal closings that now occur.

No campsites should be added in the Travertine District now or in the future."

Response: The possibility of a one-way road system past Cold Springs Campground along with the removal of some campsites may alleviate the traffic problem. Campground renovation by individual sites is an ongoing project. No additional campsites are foreseen for the Travertine District.

10. Comment: "Page 17, paragraph 1. It is misleading to use a 'site density standard' as the criteria for establishing numbers/acre for campsites. Site numbers need to be related to the features of the natural resource and these of course vary considerably. An acceptable standard for Rock Creek may not be acceptable for Cold Springs or for the campgrounds located in the Lake District."

Response: The "optimum" capacities cited in the Carrying Capacity section of the DES were selected from a suggested range of capacities presented in the referenced document. The capacities selected take into account various factors influencing each of the activities discussed. The capacities proposed are of a basic nature; maintenance and management practices may differ between area, according to their individual need. Also, adjustments will be made during final comprehensive design to best accommodate specific terrain factors.

11. Comment: "Page 18, 2.c. #2 continued. It is unrealistic to relate to arbitrarily dividing the lake into three equal areas. Management of the lake and the portions open to each activity must be based on the condition of the resource as well as the human reaction to that condition. For example, high speed boat use for either water skiing or fisherman travel is not appropriate in the cove or narrow areas of the lake. Shoreline erosion always occurs at an accelerated rate when this is allowed.

A total analysis of the lake is in order to determine which areas should be open for high speed use and which areas should be wake or speed limits."

Response: See response to Water and Power Resources Service, Comment #4.

12. Comment: "Page 20, 4.a. The proposed visitor center is strongly supported. The existing transition or buffer between the City of Sulphur and the Park is not adequate. The area targeted for the visitor center would benefit both the City of Sulphur and the Chickasaw N.R.A."

Response: Agree

13. Comment: "Page 36. The plan to provide external parking is strongly supported. Often the thought is that people will not use a system for transportation. However, experience in other N.P.S. areas seems to indicate that they will."

Response: None

14. Comment: "Page 36, Paragraph #3. The provision of the bicycle trail is supported. However, to call it 'experimental' is questionable especially when the cost is considered. My recommendation is it not be termed experimental unless this is a way of freeing funds for that part of the project."

Response: The first section of the bicycle trail is experimental in that potential use of such a trail is presently unknown.

15. Comment: "Page 36 paragraph 6. Again, the question, are standard densities an adequate measure for managment?"

Response: Standard densities are a guideline to be tempered by observation of the effect of such a level of use upon the resource.

16. Comment; "As a suggestion, land application of park sewage effluent might be considered as an alternative."

Response: This will be explored.

XII. C.D. Hicks, Chickasaw NRA concessioner (tent rentals):

Comment: "You probably have in your files the changes of U.S. 177 Highway proposal suggested and signed by members of the Sulphur Chamber of Commerce several years ago. This was a public meeting of interested citizens of Sulphur.

The proposal had a first and second choice. The first choice was with an overpass. The second was to go around the East side of Sulphur and then back South."

Response: These two alternatives remain viable and are briefly discussed under Alternatives, page 128.

XIII. John C. Tacker:

1. Comment: "The draft E.I.S. does not provide on page 8, 11 or 12 any specific need for further development of the Chickasaw National Recreation Area in Oklahoma. In fact, it does not list one plant or animal species that are suffering from loss of habitat due to visitor capacity or oppression. It does however indicate the desire to intensify studying the area at large expenses to the taxpayers (Primarily Oklahomans) to see if potential diversification of outdoor recreational opportunities would attract more visitors."

Response: By Public Law 94-235 establishing Chickasaw National Recreation Area, the National Park Service is mandated to provide for public outdoor recreation use and enjoyment and the efficient administration of the area. Furthermore, the Park Service is mandated to prepare a general management plan for each unit of the park system by Public Law 94-458 (October 7, 1976). The Chickasaw draft environmental statement provides the basis for NEPA (National Environmental Policy Act) compliance on such a plan. Page 7 (paragraph 5) of the DES gives examples of resource deterioration that affect the visitor's (whether local or long distance) experience of the park. Proposals covered by the DES are designed to start correcting these problems. As an early step, studies are called for to better define the problems and their solutions.

2. Comment: "Pages 8 and 9 . . . indicates to me a complete change in the nature of the area with numerous modifications of the natural geologic conditions as indicated throughout the Draft E.I.S. In addition, one of the purposes will be to eliminate any penned exotic animals which presently act to service children of the area information as for example: the Bison who once roamed free throughout all of Oklahoma."

Response: There will be no modifications to the natural geologic conditions. By constraining somewhat the flow of the Vendome Well, it is hoped that some of the mineral springs which no longer flow will be recharged and flow again. There is no intention to eliminate the four bison that occupy the 95 acre fenced pasture in the Travertine District. The bison is not considered an exotic animal at Chickasaw National Recreation Area.

3. Comment: "Another very lacking part of the Draft E.I.S. is the determination of the adverse effect the proposal would have upon the conservation of energy. Page 92 seems to indicate a decline in the attractiveness of the area; however, one very essential factor has been omitted. There is no

distinction made of distances traveled to visit the area. And, should the purpose of the Chickasaw National Recreation Area be to increase the attractiveness to visitors who drive longer distances, it could drastically increase energy consumption."

Response: Page 91 of the DES states that over 5.5. million people live within 200 miles of the recreation area. It also states that the majority of visitors are from the immediate locality or region of the park and primarily use the area on multiple weekends during the year. The purposes of the proposals contained in the DES is to restore the attractiveness of the area to all visitors and protect from further deterioration the natural attributes of the area. It is neither intended nor anticipated that the plan will draw additional visitors from longer distances as compared to the past.

4. Comment: "Another very lacking part of the Draft E.I.S. is that it does not indicate any degree of significance to the known nineteen archaeological sites. This is also coupled with the insinuation that park headquarters could qualify as a National Historic Site; however, plans call for its relocation; and no mitigation of adverse impact measures have been given."

Response: Clearance of the general plan was received from the assistant State Archaeologist. (See Comment Letter X) The present park headquarters building will not be relocated. It will remain and serve a useful purpose when and if the administrative functions are moved to a new building.

5. Comment: "Additionally, it is my understanding that US 177 was situated through the area prior to the proposal of the area becoming the Chickasaw National Recreation area (presently and/or Platt National Park); and, that this prevents the Fees Proposals, Page 13, under current law. If this is true why was this very important issue not addressed on Page 25 . . . ."

Response: The National Park Service, under the "Land and Water Conservation Fund Act of 1965" is directed to determine the feasibility of collecting entrance fees at its units. At Chickasaw, it would not be feasible to collect fees because of the large number of vehicular entrances to park land, the majority of which are to the Lake District. Relocation of US 177 has been under consideration for some time, however, neither the National Park Service nor the Oklahoma Department of Transportation have a commitment of funds for that purpose. If or when possible relocation of US 177 becomes an active project, all options and their impacts or consequences will be explored. The primary reasons the Park Service has

for possible relocation of US 177 is to eliminate the safety hazards to park visitors crossing the highway and to remove the detractive influence of heavy through traffic, particularly trucks, from the recreation area.

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS 1473A