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UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

ARNIE J. SUOMELA, COMMISSIONER



CANYON RESERVOIR
PROJECT

TEXAS

FISH AND WILDLIFE SERVICE

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Bureau of Sport Fisheries and Wildlife
Southwest Region
Albuquerque, New Mexico

FISH AND WILDLIFE RESOURCES
of the
CANYON RESERVOIR PROJECT
GUADALUPE RIVER
TEXAS

Report Prepared by the Branch of River Basin Studies
Albuquerque, New Mexico

February 1960



ADDRESS ONLY THE
REGIONAL DIRECTOR
2-RBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
P. O. BOX 1306

ALBUQUERQUE, NEW MEXICO

February 3, 1960

SOUTHWEST REGION
(REGION 2)
ARIZONA
COLORADO
KANSAS
NEW MEXICO
OKLAHOMA
TEXAS
UTAH
WYOMING

District Engineer
Corps of Engineers, U. S. Army
P. O. Box 1600
Fort Worth, Texas

Dear Sir:

This is a synopsis of my report on the relation of fish and wildlife resources to the construction of Canyon Reservoir, Texas. The report was prepared under authority of the Fish and Wildlife Coordination Act, 48 Stat. 401, as amended; 16 U.S.C. 661 et seq. Detailed material is presented in the attached report.

This report has been reviewed by the Texas Game and Fish Commission. The report and, specifically, the recommendations which follow have been endorsed by the Texas Game and Fish Commission as indicated in the letter to this office dated January 28, 1960, from H. D. Dodgen, Executive Secretary of that Commission, a copy of which is appended.

Canyon Reservoir is being constructed for the purposes of flood control and storage of water for municipal, industrial, and possible future irrigational uses. The dam will be on the Guadalupe River in Comal County at river mile 303. About 11,800 acres of land will be purchased in fee simple. Flowage easement will be taken on about 3,200 acres between elevations 918-948. Most of the affected bottom land is in cultivation. The remaining reservoir area is used for grazing. Maximum releases from the reservoir will be 3,000 second-feet; minimum releases will be zero. The Guadalupe-Blanco River Authority has indicated that a constant minimum release of 100 to 200 second-feet would be made during normal water years.

Canyon Reservoir lies in an area where there is a shortage of public fishing facilities and where people must travel long distances to secure reasonable fishing opportunities. Fishing pressure on the affected reach of the Guadalupe River will result in about \$40,000 annually in associated sportsmen's expenditures.

Canyon Reservoir will eliminate a short segment of stream fishery in the Guadalupe River within the project area, improve the downstream fishery, possibly produce a rainbow trout or smallmouth bass habitat in the 10-mile reach of stream downstream from the dam, and create a reservoir-type fishery which is in great demand in the area. It is estimated that fisherman use

of the river below the dam will result in sportsmen's expenditures of about \$200,000 annually if a trout fishery develops. Sportsmen's expenditures associated with reservoir fishing will be about \$2,000,000 annually.

White-tailed deer and wild turkeys are of economic importance in the project area. Demands to hunt these species are far greater than hunting opportunities. Sportsmen will spend about \$30,000 and \$4,000, respectively, for deer and turkey hunting annually within the reservoir area. Except for a sportsmen's expenditure of about \$2,000 annually for dove hunting, upland-game hunting is of minor importance.

Construction of Canyon Reservoir is expected to result in complete loss of deer and turkey populations and hunting opportunities for these species in the project area. Losses to mourning dove populations will also occur. From sportsmen's expenditures associated with hunting wildlife in the project area, there will be an annual loss of \$31,000 as a result of the project.

The fish and wildlife plans recommended for the project include features designed to provide maximum benefits to fish and mitigate wildlife losses as a result of project construction. Enhancement to the fishery can be attained by providing a constant minimum release into the stream downstream from the dam by stocking rainbow trout on a put-and-take basis in this reach, and by providing access areas to the downstream fisheries and parking facilities around the reservoir. The exact amount of release required can only be determined when the project is completed and put into operation, but a minimum release of 150 second-feet is deemed necessary to maintain a satisfactory trout fishery. Losses to wildlife can be partially mitigated through acquisition in fee simple of lands peripheral to the reservoir.

It is recommended:

- (1) That 8 parking areas, as shown on plates 2 through 6, and three access areas, as shown on plates 7 through 9, be purchased in fee simple and included as nonreimbursable project costs.
- (2) That boat-launching ramps be constructed at each proposed parking and downstream access area and also included as nonreimbursable project costs.
- (3) That a minimum instantaneous release of 150 second-feet or the natural inflow of the river, whichever is less, be provided at Canyon Dam.
- (4) That three access areas downstream from the dam be made available to the Texas Game and Fish Commission under a General Plan, as provided in Section 3 of the Fish and Wildlife

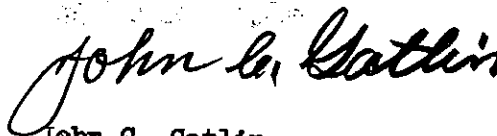
Coordination Act, 48 Stat. 401, as amended; 16 U.S.C. 661 et seq.

(5) That timber clearing in the reservoir area be kept to a minimum, except for clearing in parking and boat-launching areas and for construction and efficient operation of the project. Clearing in the downstream access areas should be limited to understory vegetation.

(6) That land acquisition policy take into consideration the mitigation of wildlife losses through purchase in fee simple, to the maximum extent practicable, of lands peripheral to the reservoir.

(7) That Federally owned land that is not within the wildlife management area be open to free public use, except for sections reserved for safety, efficient operation, and protection of public property.

Sincerely yours,



John C. Gatlin
Regional Director

Copies (10)

Distribution:

- (2) Executive Secretary, Texas Game and Fish Commission, Austin, Texas
- (1) Director, Marine Laboratory, Texas Game and Fish Commission, Rockport, Texas
- (1) Regional Director, Region 5, Bureau of Reclamation, Amarillo, Texas
- (1) Regional Director, Region 3, National Park Service, Santa Fe, New Mexico
- (1) Regional Engineer, Region VII, Public Health Service, Department of Health, Education, and Welfare, Dallas, Texas
- (1) Commissioner, U. S. Study Commission - Texas, Houston, Texas

GAME AND FISH COMMISSION

C O P Y

Austin, Texas

January 28, 1960

2-RBS

Regional Director
Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico

Dear Mr. Gatlin:

This acknowledges receipt of the revised draft of your report on the Canyon Reservoir Project, Texas, as submitted for review and concurrence.

Please be advised of my concurrence with revisions within the report and recommendations for management of the Canyon Reservoir Project, Texas.

Sincerely yours,

/s/ H. D. Dodgen
H. D. Dodgen
Executive Secretary

HDD:PEU:mah

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