

**Morris Sheppard Dam and Possum Kingdom Lake**

**OWNER**

The Brazos River Authority.

**ENGINEER (Design)**

Ambursen Engineering Corporation.

**LOCATION**

On the Brazos River in Palo Pinto County, 18 miles southeast of Graham.

**DRAINAGE AREA**

22,550 square miles, of which 9,240 is probably noncontributing.

**DAM**

Type Ambursen-type, buttress with flat-slab deck and an earthen dike  
 Length 2,740 ft  
 Height 189 ft  
 Top width 14.8 ft

**SPILLWAY**

Type Gated-controlled ogee weir  
 Control 9 roof-weir gates, each 73.66 by 13 ft  
 Crest elevation 987.0 ft above msl

**OUTLET WORKS**

Type 1 conduit, 54-inch diameter  
 Control Valve  
 Invert 874.8 ft above msl  
 Normal discharge is from turbine operation.

**POWER GENERATION FEATURES**

Two generating units, each 11,250 kw capacity.

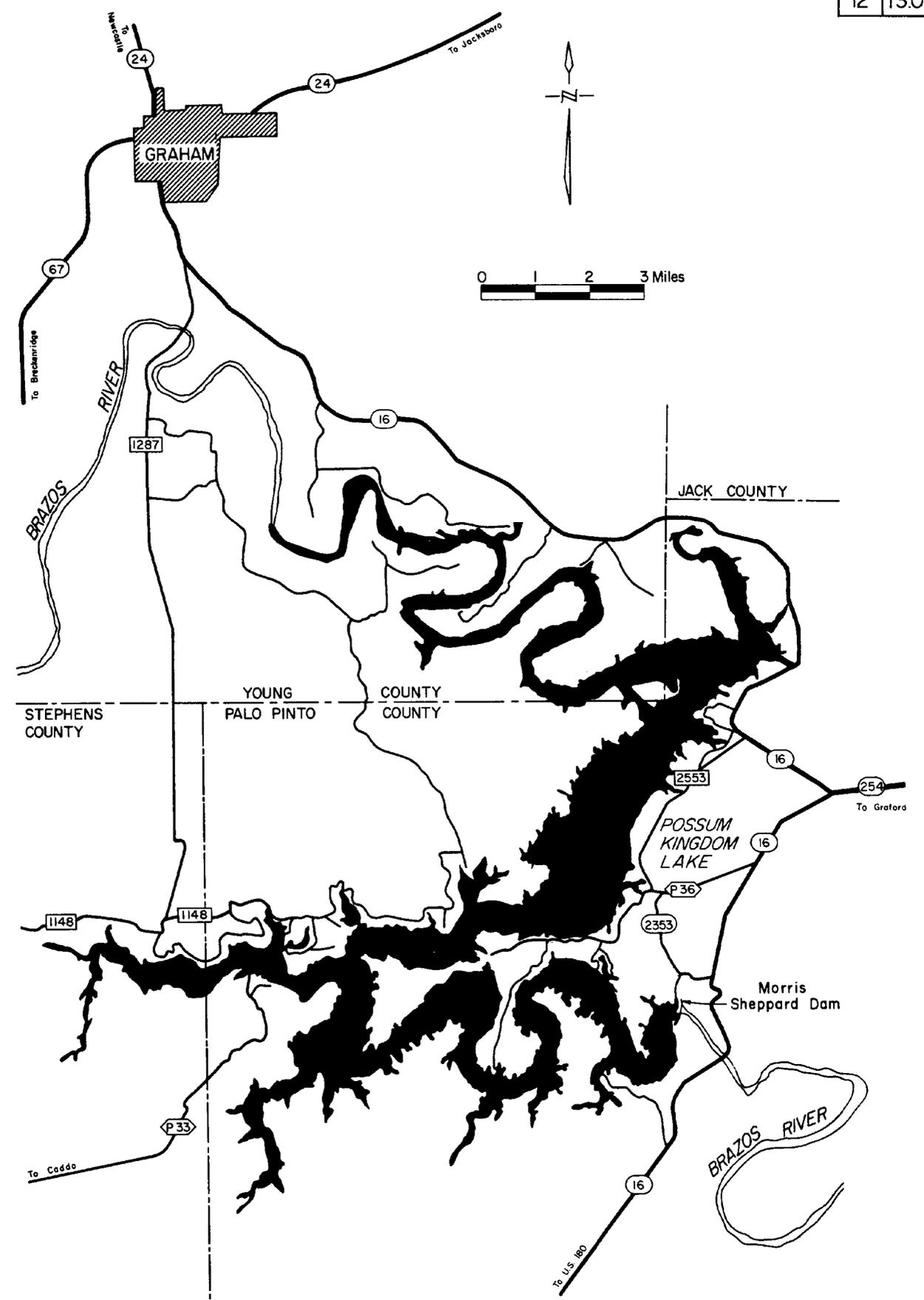
**STATE AUTHORIZATION**

Permit No. 1262 (Application No. 1351) May 9, 1938, allows construction of a dam to impound 750,000 acre-feet of water and the appropriation of 1,500,000 acre-feet of water annually for municipal, industrial, mining, irrigation, recreational and power generation uses.

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of dam	1,024.0	—	—
Top of gates	1,000.0	570,243	17,700
Spillway crest	987.0	383,272	11,682
Invert of penstock	911.5	5,000	725
Invert of 54-inch outlet	874.8	—	—
Usable conservation storage space	—	—	—

**GENERAL**

Construction started May 29, 1938  
 Dam completed March 21, 1941  
 Deliberate storage began March 21, 1941  
 Power generation began April 17, 1941  
 General contractor C. F. Lytle and A. L. Johnson  
 Estimated cost of the dam \$7,000,000



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Information courtesy of the Brazos River Authority