

LOCATION: R.M. 303 on Guadalupe River and about 12 miles northwest of New Braunfels, TX, in Comal County.

DRAINAGE AREA:  
1,432 square miles  
One inch of runoff 76,000 acre-feet

DAM:  
Type: Rolled earth fill w/spillway in saddle 2,500' from rt abutment  
Length: 6,830' (including dikes & spillway)  
Maximum Height: 224'  
Top Width: 20'  
Dike: 10'

SPILLWAY:  
Crest Elev: 943.0' msl  
Length: 1,260' net at crest  
Type: Broadcrested  
Control: None

INFLOW:  
Spillway design flood peak, cfs 687,000  
Spillway design flood volume, ac-ft 1,285,800  
Spillway design flood runoff, inches 16.92

OUTFLOW:  
Total routed peak outflow, cfs 508,000  
Spillway, cfs 502,800  
Outlet works, cfs 5,200

OUTLET WORKS:  
Type: 1 gate controlled conduit  
Dimension: 10' diameter  
Invert Elev: 775.0' msl  
Control: 2-5'8"x10' hydraulically operated slide gates

POWER FEATURES:  
The Canyon Recon Report dated Sep 81 has indicated hydropower feasibility. GBRA is completing feasibility studies and intends to develop hydropower facilities at Canyon Lake and therefore no subsequent Corps hydropower studies are anticipated.

Feature	Reservoir Capacity						
	Elev Feet (msl)	Reser- voir Area (acres)	Accumu- lative (ac-ft)	Runoff (inches)	Incre- mental (ac-ft)	Spillway Capacity (cfs)	Outlet Works Capacity (cfs)
Top of Dam	974.0						
Maximum Design Water Surface	969.1	17,120	1,129,300	14.79		502,800	5,200
Top of Flood Control Pool and Spillway Crest	943.0	12,890	740,900	9.70	346,400		
Top of Conservation Pool	909.0	8,240	386,200	5.06	366,400		
Sediment Reserve					28,100*		
Total Storage					740,900		
Maximum Tailwater	813.9						
Streambed	750.0						

\*Estimated 50 years of sediment storage distributed as follows: 8,300 ac-ft between elev 943.0 and 909.0' msl  
19,800 ac-ft below elev 909.0' msl

AUTHORIZATION: River and Harbor Act approved 2 Mar 45 PL 79-14) (HD 247/76/1); Modified by Flood Control Act approved 3 Sep 54 (PL 83-780)\*\*

FINAL PROJECT COST (JUL 76):

Federal:	\$17,435,641.44
Non-Federal:	<u>1,400,000.00*</u>
Total:	\$18,835,641.44

ANNUAL O&M COST (FY 81):

Federal:	\$ 582,500
Non-Federal:	<u>38,300</u>
Total:	\$ 620,800

COST ALLOCATION METHOD:

Separable cost - remaining benefits

LOCAL AGENCY: Guadalupe-Blanco River Authority

LAND ACQUISITION:

	: Guide Contour ('msl)	: Area (Acres)
Fee simple	918.0	10,987
Easement	948.0	<u>3,620</u>
Total		14,607

FLOOD DATA:

Date	: Peak Discharge
	: (cfs)
Dec 13 (Historical)	140,000
Jul 32	95,200
Jun 35	101,000
May 57	26,900
Aug 78	135,000 (1)

(Upper New Braunfels gage)

(1) From change in lake contents.  
Bankfull capacity, cfs - 28,000

STATUS OF PROJECT: Construction began 27 Jun 58. Deliberate impoundment began 16 Jun 64. The project is complete and operational.

\*NON-FEDERAL PARTICIPATION AND LOCAL COOPERATION:

A water supply storage contract with the Guadalupe-Blanco River Authority was approved on 24 Oct 57 for 100 percent (366,400 ac-ft) of the conservation storage between elevations 909.0 and 800.0 ft msl. GBRA will pay \$8,979,861.84, in addition to their share of the annual O&M cost, for this water supply storage space.

REMARKS:

\*\*PL 83-780 provides for local interest's contribution during construction and permits construction of hydroelectric power facilities at non-Federal expense.

Dependable yield\*\*\*: 139 cfs or 89.8 MGD

\*\*\*Based on critical dry period and 50 years of sedimentation.

Visitation (1981): 1,790,585

Shoreline at top of conservation pool: 80 miles

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