

LOCATION: R.M. 6.6 on the North Concho River, Colorado River Basin near San Angelo, Tom Green County, Texas

DRAINAGE AREA:
1,511 square miles
One inch of runoff 80,587 acre-feet

DAM:
Type: Rolled earth fill
Length: 40,885' (including spillway)
Maximum Height: 128'
Top Width: 20'

SPILLWAY:
Crest Elevation: 1,938.5' msl
Length: 1,150'
Type: Ogee
Control: None

INFLOW:
Spillway design flood peak, cfs 614,500
Spillway design flood volume, ac-ft 1,054,600
Spillway design flood runoff, inches 13.09

OUTFLOW:
Total routed peak outflow, cfs 387,500
Spillway, cfs 356,200
Outlet works, cfs 31,300

OUTFLOW WORKS:
Type: 2 conduits with 6 gated inlets
Dimensions: 2-18' diameter
Invert Elev: 1,840.0' msl
Control: 6-7.5'x14.5' slide gates

LOW-FLOW OUTLETS:
Type: 2-2.5' steel pipes, paralleling flood control conduits
Invert Elev: 1,878.5' msl (intake to wet well)

POWER FEATURES: None

Feature	Elev :Feet :(msl)	Reser- :Area :(ac-ft)	Accumu- :lative :(ac-ft)	Runoff: :(inch- es)	Incre- :mental :(ac-ft)	Spillway: :Capacity :(cfs)	Outlet Works Capacity (cfs)				Low-Flow Out- lets Capacity (cfs)		
							1 :inlet	2 :inlets	1 :cond	2 :cond	1 :pipe	2 :pipes	
Top of Dam	1964.0												
Max Design Water Surface	1958.0	18,390	696,300	8.64		356,200						118.5	237
Top of Flood Control Pool and Spillway Crest	1938.5	12,700	396,400	4.92	277,200	0	7,400	14,000	15,650	31,300		108.5	217
Top of Conservation Pool	1908.0	5,440	119,200	1.48	80,400		5,930	11,200	12,550	25,100		91	182
Sediment Reserve Total Storage					38,800*								
					396,400								
Invert, Lowest Intake	1840.0												
Streambed	1836.0												

*Estimated 50 years of sediment storage below elevation 1938.5' msl

(Sheet 1 of 2)

AUTHORIZATION: Flood Control Act of 18 Aug 41 (PL 77-228) (HD 315/76/1) and Flood Control Act of 22 Dec 44 (PL 78-534)**.

FINAL PROJECT COST (NOV 64):

Federal:	\$14,740,000
Non-Federal:	None*
Total:	\$14,740,000

ANNUAL O&M COST (FY 81):

Federal:	\$ 478,400
Non-Federal:	None*
Total:	\$ 478,400

COST ALLOCATION METHOD: Incremental

LOCAL AGENCY: Upper Colorado River Authority

LAND ACQUISITION:

	: Guide Contour ('msl) :	Area (Acres)
Fee simple	1909	18,247
Easement		65
Total		18,312

FLOOD DATA:

Date	Peak Discharge (cfs)
Sep 36	184,000
Sep 36	97,400
Oct 57	94,000

Gaging stations: North Concho, near Carlsbad, at dam at San Angelo; South Concho at Nasworthy Dam; Concho River near San Angelo and near Paint Rock.

Bankfull capacities below dam: North Concho to mouth - 25,000 cfs; Concho River from mouth of North Concho - 25,000 to 35,000 cfs.

STATUS: Construction began in May 47. Closure section completed 7 Mar 51, Deliberate impoundment began 1 Feb 52. Project is complete and operational.

*NON-FEDERAL PARTICIPATION AND LOCAL COOPERATION:

A contract with the Upper Colorado River Authority was approved 11 Oct 48 for 100 percent (80,400 ac-ft) of the conservation storage between elevations 1908.0 and 1886.0 ft msl. UCRA has paid \$860,437 in addition to a capitalized OM&R cost of \$64,325 for this water supply contract which is renewed annually at a cost of \$1.00.

REMARKS:

**FC Act of 18 Aug 41 authorized \$2 million for initiation of the project and FC Act of 22 Dec 44 authorized the completion of project.

Dependable yield***: 5.6 cfs or 3.62 MGD

***Based on a critical dry period from 1949-1953 and 50 years of sedimentation.

Visitation (1981): 912,716

Shoreline at top of conservation pool: 27 miles