

**Pertinent Data – Town Bluff Dam**  
(See Exhibit A for Supplementary Pertinent Data)

**LOCATION:** In Jasper County, R. M. 113.7 on the Neches River, 12 miles below the mouth of the Angelina River, ½ mile north of Town Bluff, TX, and 93 river miles north of Beaumont, Texas.

**DRAINAGE AREA:**

7,573 square miles  
One inch of runoff 403,893 acre-feet

**DAM:**

Type: Paved earth fill  
Length (including spillway): 6,698 feet  
Maximum Height: 45 feet  
Top Width: 25 feet

**SPILLWAY (Gated):**

Crest Elev.: 50.0 feet NAVD88  
Length: 240 feet  
Type: Broad-crested Weir  
Control: 6 tainter gates, 40 ft x 35 ft

**SPILLWAY (UNCONTROLLED):**

Crest Elevation: 85.0 feet NAVD88  
Crest Length: 6,600 feet

**INFLOW:**

Spillway Design Flood peak, cfs (1947 Study, w/o Sam Rayburn) 220,000  
Spillway Design Flood volume, ac-ft (1947 Study, w/o Sam Rayburn) 6,189,400  
Spillway Design Flood runoff, inches (1947 Study) 15.32

Probable Maximum Flood peak, cfs (1980 Study) 657,519  
Probable Maximum Flood volume, ac-ft (1980 Study) 9,564,194  
Probable Maximum Flood runoff, inches (1980 Study) 23.68

**OUTFLOW:**

Total routed peak outflow spillway, cfs 218,300  
Probable Maximum Flood total, cfs (1980 Study) 657,481

**OUTLET WORKS:**

Type: Two 4 feet by 6 feet conduits in right abutment of spillway  
Invert Elev: 52.0 feet NAVD88

**POWER FEATURES:** Construction and commercial operation began November 1989. Power online estimated at FY 88.

Units: 2-3,840 KW  
Installed Capacity: 7,680 KW  
Dependable Capacity: 6,000 KW

III:

Feature	Elev. : Feet : (NAVD : 88) :	Reservoir : Area : (acres) :	Reservoir Capacity			Total : Spillway : Capacity : (cfs) :
			Accumulative : (ac-ft) :	Runoff : (inches) :	Incremental : (ac-ft) :	
Top of Dam (1980 Study)	95.0	30,800	365,500	0.90		
Maximum Design Water Surface (1980 Study)	93.31	28,625	315,280	0.78		657,481
Top of Gates and Uncontrolled Spillway(1980 Study)	85.0	16,830	124,700	0.31		
Normal Pool (upper) (2003 Survey)	83.0	10,687	66,972	0.17	18,818	
Normal Pool (lower) (2003 Survey)	81.0	9,000	48,154	0.12	31,554	
Invert at Sluice Intake (2003 Survey)	52.0	4	11	0		
Sediment Reserve					<u>16,600</u>	
Total Cumulative Storage					66,972	
Gate Sill and Streambed (2003 Survey)	50.0	2	6	0		

AUTHORIZATION: River and Harbor Act 2 Mar 45 (PL 79-14) (SD 98/76/1)  
 Mod by R&H Act 30 Jun 48 (PL 80-858)

FINAL PROJECT COST (OCT 54):

Federal:	\$6,749,000
Non-Federal	<u>2,000,000</u>
Total:	\$8,749,000

ANNUAL O&M COST (FY 81):

Federal:	\$508,075
Non-Federal	<u>None*</u>
Total:	\$508,075

COST ALLOCATION METHOD: Law

LOCAL AGENCY: Lower Neches Valley Authority

LAND ACQUISITION (Updated 1984):

		: Guide Contour (NAVD 88)	:	Area (Acres)
Fee Simple	88.0			21,644
Easement				<u>1,157</u>
Total				<u>22,801</u>

FLOOD DATA – NECHES RIVER:

Date	Peak Discharge (cfs)
May 1884	120,000**
May 1944	99,700
May 1953	<u>90,900</u>

\*\*Estimated channel capacity below dam: 20,000 cfs.

STATUS OF PROJECT: Construction initiated Mar 1947. Dam and outlet works were completed and deliberate impoundment of water began 16 Apr 1951. Project is complete and operational.

\*NON-FEDERAL PARTICIPATION AND LOCAL COOPERATION:

As a unit of the four reservoir plan for Neches – Angelina River Basin, this project was constructed subject to contribution by local interest of \$5,000,000 toward the first cost of the system upon completion of the entire system. The Lower Neches Valley Authority (LNVA) furnished assurances that it was willing to contribute \$2,000,000 towards completion of Town Bluff Dam and B.A. Steinhagen Lake, exclusive of power facilities, and \$3,000,000 upon completion of Sam Rayburn Reservoir. Public Law 858 provides that the sponsoring agency will be permitted to withdraw from B.A. Steinhagen Lake not to exceed 2,000 cfs for its own use. The LNVA also pays \$200,000 per year for 50 years toward total cost of the two projects. A contract with LNVA was approved 22 Jan 57 embodying the above provisions.

LNVA pays no O&M costs except on features and appurtenances which may be provided and owned by the Authority.

REMARKS:

B.A. Steinhagen Lake serves as a regulation project for hydropower releases from Sam Rayburn Reservoir.

Annual Visitation (10-year average): 275,235

Shoreline at top of normal pool: 160 miles

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