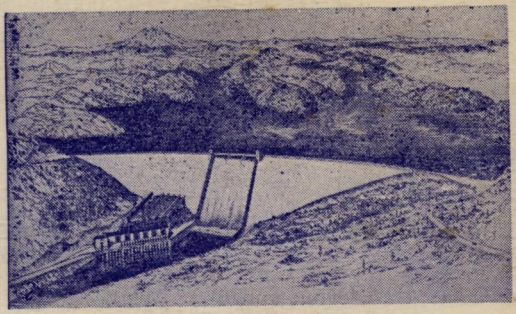
Shasta
Dam Facts . . .



Briefly Stated for Busy Folks

Redding Chamber of Commerce

REDDING, CALIFORNIA

Courtesy of the
Board of Supervisors
Shasta County

Shasta Dam

Maximum Height.....560 feet
Crest Length.....3500 feet
Top Thickness.....37 feet
Base Thickness.....580 feet
Elevation Top of Dam.....1077.5 feet
Cement.....1,340,000 tons
Aggregates.....12,000,000 tons
Concrete Content.....6,000,000 cu. yds.
Earth and Rock Removed.....4,250,000 cu. yds
First Concrete Placed.....July 8, 1940

Spillway

Highest Overflow Spillway in the World.
Height of Overflow.....480 feet
Width of Spillway.....375 feet
3—110x28 feet Drum Gates
18—102 Inch River Outlets

Reservoir

Reservoir Area.....29,500 acres
Length.....35 miles
Capacity.....4,500,000 acre ft.
Drainage Area.....6,665 sq. miles
Shore Line.....About 350 miles
High Water Level.....1,065 ft. above sea level
Low Water Level.....828 ft. above sea level

Conveyor

(Delivers Gravel From Pit to Dam)

Length of conveyor—9.6 miles. Contains 26 separate sections, each motivated by 200 h. p. motor, except 4 down grade which generate energy used on the others.

Width of Belt.....36 inches
Time in Transit.....1 hr. 40 min.
Speed of Belt.....550 ft. per min.
or at the rate of 6-1/4 miles per hr.
Capacity of Belt.....1100 tons per hr.

Conveyor belt contains 1000 bales (500,000 lbs.) of cotton, and 1,000,000 lbs. of rubber.

Cement Storage Tanks at the Dam Site

10 tanks for storage of bulk cement, each tank 74 ft. high and 23 ft. in diameter.
Total Capacity.....55,000 barrels,
or approximately 220 car loads.

Mixing Plant

10 Stories High.
Daily capacity of 10,000 cu. yds.
Contains bunkers at top holding 2165 cu. yds. rock and gravel and 3200 barrels of cement.
5—4 cu. yd. mixers.

Head Tower

Height Above Ground.....460 ft.
Below Ground.....102 ft.

The 4 legs are 184 ft. apart. The area within the 4 legs is approximately 1 acre.

Seven cableways reach from the head tower to the tailtowers on the other side of the canyon. These cable ways deliver the concrete to the dam forms. 3 longest cableways—each 2680 ft. long.

Main 3 in. diameter track cable weights 22 lbs. per lin. ft.

Some Comparisons

Dam	Height in ft.	Length in ft.	Base in ft.	Area in Reservoir	Storage Capacity In Acre Ft.
Shasta	560	3500	580	29,580 acres	4,500,000
Friant	320	3430	250	4,800 acres	520,000
Boulder	727	1282	660	146,500 acres	30,500,000
Grand Coulee	550	4200	500	82,000	10,000,000
East Park	139	250		1,850	51,000
Stony Gorge	125	868		1,280	50,200

Sacramento River—400 miles long—21,000,000 acre ft. Aver. annual flow.

Colorado River—2,000 miles long—16,000,000 acre ft. Aver. annual flow.

Height Shasta Dam.....560 ft.

Highest Tower S. F. Bay Bridge.....519 ft.

Height Head Tower.....460 ft.

Height Tower of Sun at Golden Gate International Exposition.....400 ft.

Base Thickness of Dam.....580 ft.

Length of a Passenger Train, Engine and Seven Cars.....About 560 ft.

Height Pit River Bridge.....500 ft.

Height State Capitol Bldg.....250 ft.

Drop of Water Over 375 ft. Long Spillway.....480 ft.

Drop of Water Over Niagara Falls.....162 ft.

Spillway drop is 3 times the height of Niagara Falls.

The conveyor belt is twice as long as any other belt in existence.

Shasta Dam Power Plant

5 main generating units, each with 103,000 h. p. turbine, and 75,000 k.v.a. generator. Average head —408 ft. Two station service units, each with 3,000 horse power turbine and 2,500 k.v.a. generator. 10 story building—446 ft. long, 121 ft. wide. Capacity—375,000 kilowatts.

Railroad Relocation

Redding to Delta—37 miles by present route.

The relocation eliminates 7 miles in length, and 5000 degrees of curvature, or about 14 complete circles.

The new route contains 12 tunnels aggregating 3½ miles in length, and 8 major bridges aggregating 2½ miles in length gaining 658 ft. in elevation. Maximum grade of 0.9 of 1 per cent.

The length of the 12 tunnels are as follows:

No. 1	2719 ft.
No. 2	2691 ft.
No. 3	1864 ft.
No. 4	856 ft.
No. 5	1900 ft.
No. 6	745 ft.
No. 7	1680 ft.
No. 8	897 ft.
No. 9	1610 ft.
No. 10	2243 ft.
No. 11	941 ft.
No. 12	916 ft.

The length of the main bridges follow:

First Sacramento Bridge	4353 ft.
Pit River Bridge	Highway 3588—R. R. 2770 ft.
O'Brien Creek Bridge	1032 ft.
Salt Creek Bridge	1395 ft.
Second Sacramento Bridge	1044 ft.
Doney Creek Bridge	653 ft.
Third Sacramento Bridge	762 ft.
Fourth Sacramento Bridge	312 ft.

Pit River Bridge

Pit River Bridge, highest double deck bridge in the world. Length 3588 ft. approximately 2/3 mi. Height 500 ft. above present water level. Has ten piers and 4 abutments. The 2 main piers exceed 350 ft. in height, and are among the highest in the world. The largest pier is 90x95 ft. in the base, and 358 ft. high. The lower deck will have 2 lanes of railroad track. The upper deck will have 4 lanes of highway traffic and 2 walkways. When the reservoir is full, the lower deck will be only 35 ft. above the water. The approximate cost of the bridge is $4,700,000.

» «

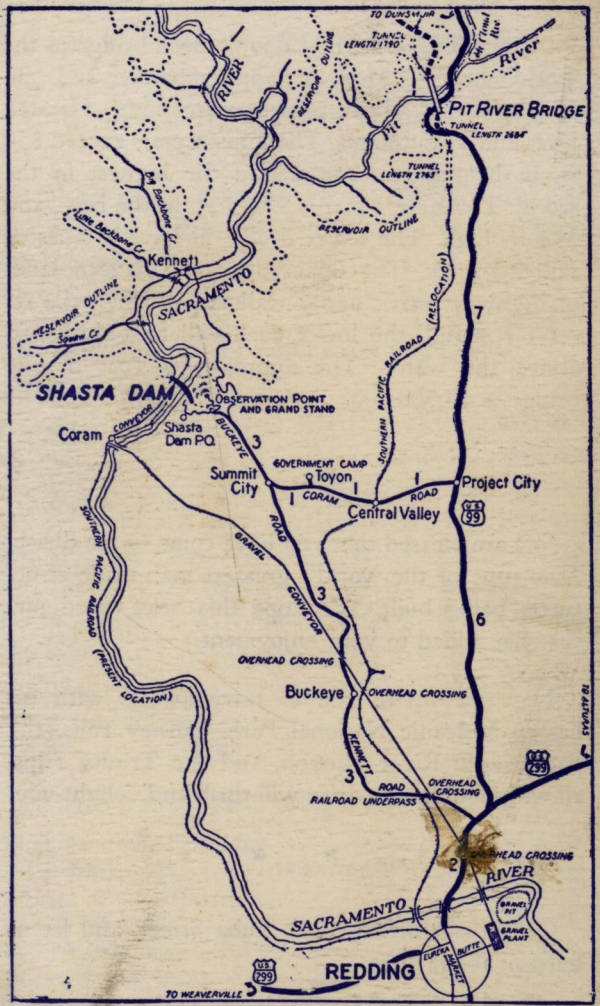
We are pleased that you have come to see Shasta Dam, one of the world's greatest man-made structures, being built. We hope this brief word picture has added to your enjoyment.

Now we invite you to tarry awhile with us. Lassen Volcanic National Park, Burney Falls, the Sacramento River Canyon, and the Trinity Alps, all within an hour's drive will thrill and delight you.

» «

Call at our office, 1342 Yuba Street, and let us tell you about them.

Redding Chamber of Commerce


TO DUNSMUIR
TUNNEL LENGTH 1790'
Pit River
RIVER
RESERVOIR OUTLINE
PIT RIVER BRIDGE
TUNNEL LENGTH 2484'
TUNNEL LENGTH 2782'
RESERVOIR OUTLINE
Mt. Shasta
Little Backbone Cr.
Kennett
SACRAMENTO
RESERVOIR OUTLINE
Squaw Cr.
SHASTA DAM
OBSERVATION POINT AND GRAND STAND
SOUTHERN PACIFIC RAILROAD (RELOCATION)
7
Coram
CONVEYOR
Shasta Dam P.O.
BUCKEYE
3
GOVERNMENT CAMP
Summit City
Toyon
CORAM
ROAD
1
Project City
Central Valley
U.S. 99
SOUTHERN PACIFIC RAILROAD (PRESENT LOCATION)
GRAVEL ROAD
CONVEYOR
3
6
OVERHEAD CROSSING
Buckeye
OVERHEAD CROSSING
KENNETT
3
ROAD
OVERHEAD CROSSING
RAILROAD UNDERPASS
U.S. 299
2
OVERHEAD CROSSING
RIVER
SACRAMENTO
GRAVEL PIT
GRAVEL PLANT
EUREKA
BUTTE
SHASTA
REDDING
U.S. 299
TO WEAVERVILLE
TO ALTURAS