

*Lesson 23: Water
Distribution Systems*

53:171

Water Resources Engineering

Water Distribution

Transmission from Source

New York City Water Supply



World's Longest Water Tunnel

Twenty miles long and over fourteen feet in diameter, the world's biggest water tunnel, a completed section of which is shown in the left, is nearing completion and when finished will help carry a billion gallons of water to New York City homes and factories every day.

FAR beneath the feet of tramping millions, the longest tunnel of its kind in the world is nearing completion in New York City. Twenty miles in length, it will help distribute a billion gallons of water a day to New York homes and factories. Officially the shaft will be known as City Tunnel Number Two, City Tunnel Number One, completed fifteen years ago, has long been overtaken. Hence 2,500 workmen have been toiling day and night for the last three years to construct the supplementary tunnel. To cut it through solid rock, they expended 8,000,000 pounds of dynamite. Blasting went on twenty-four hours a day without disturbing surface dwellers, although the tunnel runs beneath one of the most densely populated areas in the world. A railroad train could be driven through the new fourteen-foot shaft.

Above, tunnel in course of construction. Twenty-five hundred men have used 8,000,000 pounds of dynamite in blasting the tunnel through the island's solid rock.

Within the wooden cage, above, the Barcross-Bore compressed air shovels were hoisted as the factory to be seen there was criss-crossed to work in tunnel. They can pick up a load, swing around, and dump it in the cage standing behind them.

This gigantic wooden frame, left, was used in caving out all the heads in the concrete lining of the tunnel. Workmen in foreground grimed like that of tunnel's great size.

Rememberable air photo of New York City showing the new tunnel, and the old, forming a loop around the city, may be run through both to either of them.

DECEMBER, 1912

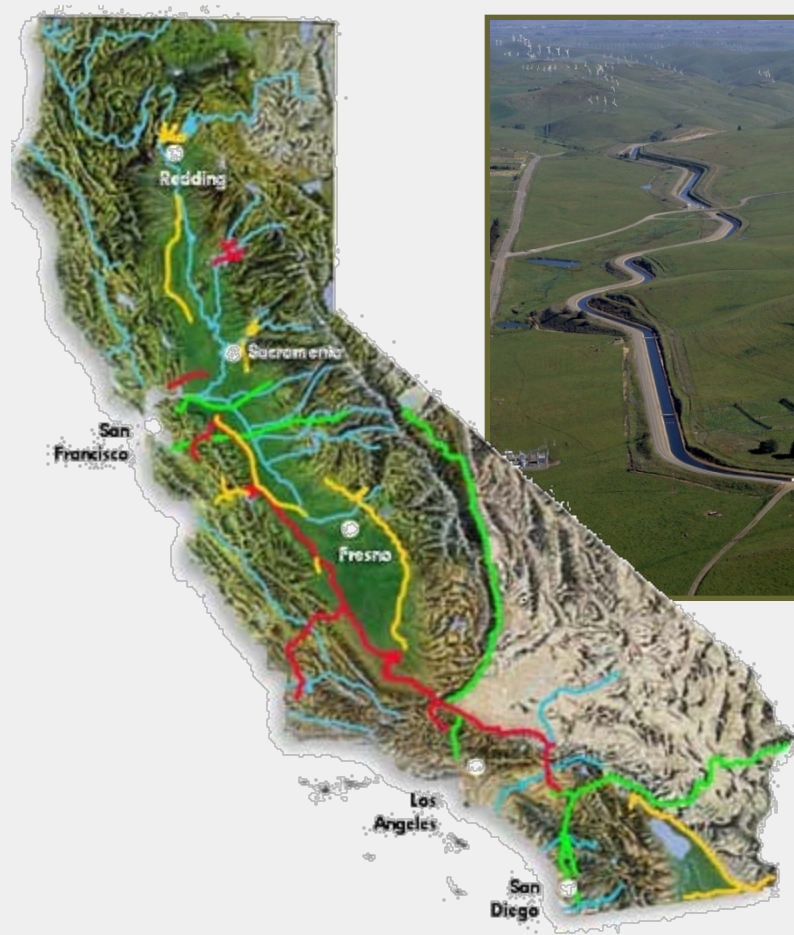
Popular Science (1932)

New York City Water Supply



Ashokan Reservoir
Catskill
Aqueduct

California Water Projects



Los Angeles Aqueduct



From
Owens
Valley
to Los
Angeles



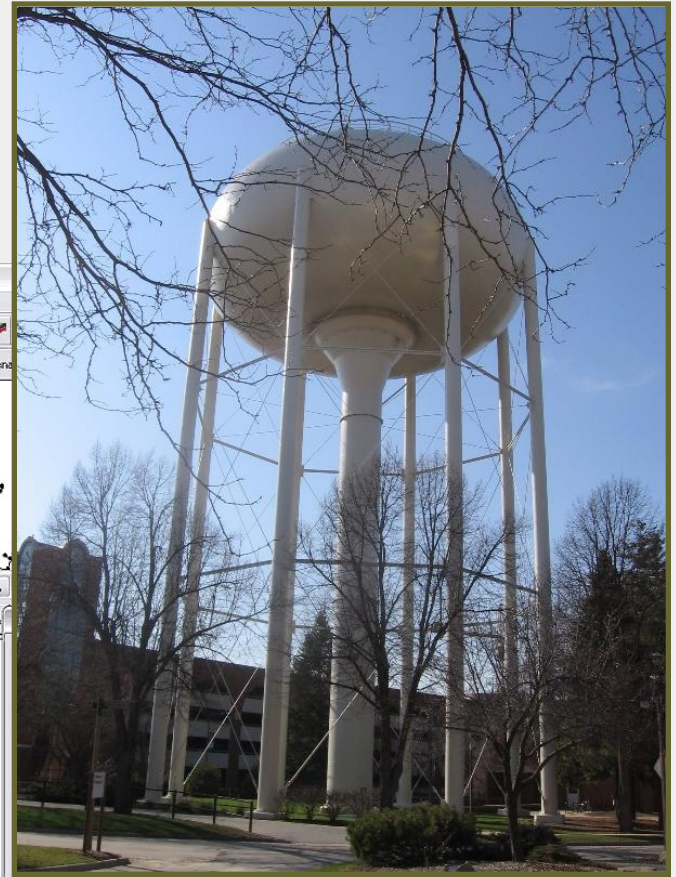
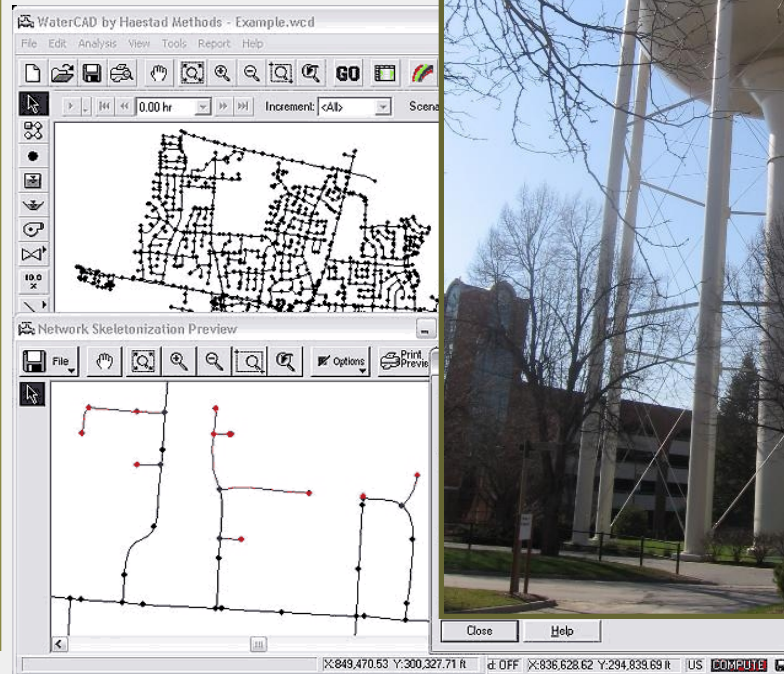
Water Distribution System

Components

Pumping Station



Distribution Storage



Distribution Piping

