

Reclamation and the Arid West – 1936

Narrator: For untold centuries the turbid waters of the Colorado River battered their way through the forbidding canyons of its 1,700-mile course. Highways were pushed across the desert. Railroad lines thrust their ribbons of steel through the sagebrush and cactus. And transmission lines for construction power brought hundreds of miles across the heat-stricken wastelands of the southern Nevada desert. Every section of the country was called upon to contribute to the staggering quantity and wide diversity of materials required. Thousands of tons of steel; millions of barrels of cement; machinery; gasoline and oil by the thousands of gallons; tools; building materials: all these and much more were concentrated at the site of operations in an endless stream. The engineering forces completed their surveys working under the most hazardous conditions and every state in the Union furnished its quota of laborers and artisans.

It was not long before roads and rail lines had penetrated into the very lowest reaches of the canyon. To provide these arteries of transportation, thousands of tons of virgin rock were blasted from the age-old walls of the gorge. Thus the first thunders of man's determination to conquer the Colorado River reverberated between the sheer cliffs of the canyon, which heretofore had known only the hot silence of the desert and the roar of the river's angry floods. [It was on June] 6, 1933, that the first bucket of concrete was placed in the very lowest of the dam forms, 135 feet below the level where a few months previously had flowed the unchallenged Colorado River. What was to become the highest dam in the world began to rise from the impregnable rock of its foundation. As bucket after bucket of concrete was dumped into the forms, the plan of the structure became apparent and soon extended along its full 660-foot dimension of thickness at the base. Throughout the [...] The design of which became more noticeable as the five-foot layers, or lifts, in which the concrete was placed rose from level to level. As the work of placing progressed, the crews became expert in the handling of the equipment and record-breaking daily pours were made only to be surpassed by later achievements on this same structure.

The Boulder Dam power plant is built in two wings, one alone each side of the canyon wall at the downstream toe of the dam. The first generator was placed in operation on September 11, 1936. Equipped with 17 generating units, with capacities ranging from 40,000 to 82,500 kilovolt amperes, this, the world's largest power plant, is capable of generating 1,835,000 horsepower of electrical energy when operating at its rated capacity. The transmission lines carrying Boulder Dam power radiate in a network from the dam with the major lines serving the Los Angeles metropolitan area. From the takeoff structure located on the roof of the powerhouse, the lines are taken up over the rim of the canyon into the switchyard above where the most highly specialized and modern developments in the power transmission field are to be found. From the switchyard, the lines travel out across the desert bringing light to the homes and cities and power to the factories of the great Southwest. From [...]

This is Owyhee Reservoir with a two-year water supply safely impounded. It's filling! There'll be no drought [...]. Whalen Dam, the diversion structure of the North Platte project in Wyoming and Nebraska. [...] for crops. In rough country, where canals sometimes must be steep, the ditches are lined with concrete to prevent erosion. In broken country [...] system in a grapefruit grove at Yuma, Arizona. Elaborate systems are convenient but expensive. Their appearance testify prosperity. Irrigation, by which a high degree of control is obtained over the application of water to the land, coupled with the mild Western climates, serve to make fruits in [...]. The settler's tent gives way in a few years to fine well-kept rural homes, a far cry from the sagebrush replaced here less than [...]. [...] to three inches a year in the Southwest. Twenty inches will not safely support cultivated agriculture. Three inches will not support life.