

Mid-Pacific Region Auburn Dam

Background

The Auburn-Folsom South Unit of the Central Valley Project was created as part of the American River Division by the Auburn-Folsom South Authorization Act, Public Law 89-161, approved by the President on September 2, 1965 (79 Stat. 615). The unit was designed to provide flood protection and new supplemental water supply for irrigation, municipal and industrial needs, which would alleviate depleted groundwater conditions in the Folsom South service area. The primary feature of the unit was to be the Auburn Dam, Powerplant, and Reservoir, located on the American River, near the town of Auburn, about 40 miles northeast of Sacramento. Besides flood protection and water supply, the dam and reservoir would provide power generation, recreational opportunities and fishery enhancement.



Aerial view of Auburn Dam site and foundation.

Auburn Dam and Reservoir

In conjunction with Folsom and Nimbus dams and other facilities of the Central Valley Project, the Auburn Reservoir was designed to control the varying flows of the north and middle forks of the American River. The authorized project plan for Auburn Dam is the construction of a concrete arch-gravity dam more 700 feet high, straddling a gorge downstream of the confluence of the North and Middle Forks of the American River and upstream of Folsom Reservoir. The dam would impound Auburn Reservoir with a maximum surface elevation of 1,140 feet above sea level and a capacity of about 2.5 million acre-feet. The project included a powerplant and relocation of major upstream facilities, such as State Highway 49 and recreation facilities. The Auburn Powerplant was to be built at the downstream toe of Auburn Dam on the north abutment and would have housed five units, each with a capacity of 150,000 kilowatts. Releases from the reservoir would have also operated the Auburn Powerplant and supplied the Folsom South Canal.

History

The Auburn-Folsom South Unit included authorization of Sugar Pine Dam and Reservoir, which provides water for irrigation, and municipal and industrial uses to the Foresthill Divide area, and the Folsom South Canal, which originates at Nimbus Dam on the American River and provides water for municipal and industrial use in Sacramento and San Joaquin counties.

Preparatory excavations and test drilling on Auburn Dam began in fall 1968 and in 1974 work began on the dam's foundation. In 1975, a 265 foot earthen cofferdam was constructed and began diverting the river flow through a bypass tunnel completed three years earlier. On August 1, 1975, an earthquake with a magnitude of 5.7 occurred near the Oroville Dam, about 50 miles northwest of the Auburn site. Construction of Auburn Dam, Reservoir, and Powerplant was well under way when construction was temporarily suspended due to concerns about the ability of the dam to withstand a similar earthquake.



Although the cofferdam built to divert the river through the tunnel bypassing the dam site was not damaged, the event raised concerns about the safety of dams like the thin arch concrete dam proposed for the Auburn site. While engineers and geologists began to look into the safety concerns, work at Auburn continued. In April 1976, the Association of Engineering Geologists, Seismic Hazards Committee, issued a report stating that an earthquake similar to the one near Oroville in 1975 would cause the proposed dam at Auburn to fail. Concerns about dam safety were further heightened in June



Pictured above is what the Auburn Dam site presently looks like.

1976, when the Teton Dam in Idaho failed. The potential for significant foundation displacement caused the re-evaluation of the original arch design. The seismic hazard analysis led to a re-evaluation of the type of dam to be constructed; alternatives considered were rock-fill and curved concrete gravity-type dams. Consensus from knowledgeable and credible sources was that a safe dam based on updated designs could be constructed at the Auburn site. No further construction activities took place after 1979, when Reclamation accepted the foundation excavation and treatment contract work as substantially complete. During the 80's and 90's numerous proposals were submitted, however rising cost, potential seismic hazard in dam design along with environmental concerns, contributed to the unsuccessful attempts of any legislation presented to Congress.

In 2008, the State Water Resources Control board revoked Reclamation's 38-year-old water right permits for the Auburn Dam. In 2011, Congressman Tom McClintock renewed interest in the Auburn Dam, as he publicly announced his intent to pursue its funding. Studies associated with the Auburn Dam continue to build interest to reexamine the construction of the Dam. The Auburn Dam remains an active authorized project.

The original intent was to assign recreation management to the California Department of Parks and Recreation (State Parks) once the Auburn Reservoir was completed. In 1977, Reclamation entered into an agreement with State Parks to provide law enforcement and manage recreation on 26,000 acres of land within the surrounding Auburn Dam and Reservoir area. On January 24, 2012, Reclamation and State Parks signed the 25 year Auburn-Folsom-Natomas Managing Partner Agreement, which allows for continual operational support, maintenance and recreation at the Auburn Dam Reservoir project lands.

Reclamation continues to manage the Auburn Project Lands as a potential reservoir site. Reclamation in partnership with State Parks, continues to fulfill its environmental stewardship obligations, coordinate recreation and resource project proposals from multiple stakeholders, and provide basic public safety for the estimated 900,000 visitors annually who use this resource for hiking, white water rafting, horseback riding, rock climbing and other recreational activities.

For More Information:

MP Region Public Affairs

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