

Name of Dam: Velma Lake (Middle)

County: El Dorado

Project: W.C.B. #1

National Forest: El Dorado

Date of Construction: July 1950

Drainage: Unnamed stream, Rubicon River

Location: T.13N., R.17E., Sec. 36. Located six and one-half miles by trail from Eagle Falls campground on Emerald Bay (Fallen Leaf Lake Quad.)

Ownership of Dam: Department of Fish and Game under Special Use Permit from El Dorado Forest. Issued 11-26-52. Expires 11-26-57. (See remarks)



Main Dam

Size of Lake: 42.5 surface
acres

Maximum Depth: 44'

Elevation: 8000'

Dam Dimensions-Height: 3.5'

Length: 23.5'

Bottom Width: 4'

Crest Width: 2'

Ground Level Width: 3'

Depth of Footing: 3'

Type of Construction: Rubble masonry

Cubic Yardage, Main Dam: 17.4

Cubic Yardage Saddle Dam(s): 21 (2 dams)

Valve: 12" Calco #101 slide
headgate

Distance From Bottom of Valve to Spillway: 3.5'

Total Cost: \$2514.82

Cost Per Cubic Yard Construction: \$65.49

Active Storage: 148 acre ft. Cost Per Acre Feet Storage: \$16.95

Method of Construction: Hired labor

Project Purpose: Provides stream flow in the outlet stream from the lake to campers flat on the Rubicon River. Also adds stream flow to Rubicon River. Outlet stream from Middle Velma Lake has resident population of eastern brook and rainbow trout. Before the construction of the dam the outlet stream dried up each year.

Operation: Recommended release 0.5 c.f.s. (see remarks) from time dam stops spilling (usually July 15) through October. Flush valve on first visit to lake (usually July 15) and if dam has stopped spilling set valve at recommended flow as measured in the weir a short distance downstream from dam. Normally the dam is checked again about August 15 and again about September 15. Currently (1963) the warden headquartered at Al Tahoe operates the dam.

Remarks: The Department of Fish and Game applied for renewal of the Special Use Permit in 1957, to date (1963) has not been renewed but now is in the process. The storage in this lake disappears rather fast probably through a leak somewhere in the bottom of the lake. Storage should be watched closely and release cut down if necessary to last throughout the dry season.