

It is very much to be regretted that proper Government supervision does not yet exist to prevent real estate men bringing undue influence to bear on these irrigation enterprises for which, in some cases, they have advocated Government ownership in order to remove the burden of failure from their own shoulders.

As there is a moderate precipitation of 14 inches a year on these lands, and usually a good rainfall during June, the quantity of irrigation water decided upon was one cubic foot per second to every 150 acres, or the equivalent of 1.32 feet depth, and this was arranged for as follows:—for 6,000 acres during

May and June . . . .	62 days	0.82 ft. deep	=	4,920 ac. feet.
July and August ..	38 "	.50, " "	=	3,000 " "
Total . . . . .	100 "	1.32 " "	=	7,920 " "

of this 4,920 ac. feet will be supplied from streams in flood and the 3,000 ac. feet from reserved water. These figures were derived from the following calculations:—

Total water supply 1 c.f.s. per 150 ac. for 100 days =	1.32 ft. deep.
7,920 ac. ft. =	3,450,000 c.f.s. in 1 day = 40 c.f.s.
add for loss 25%	10
to be provided for	<u>50 c.f.s.</u>

and this gives an allowance of 0.00666 c.f.s. per acre,  
or 0.04666 c.f.s. for watering once a week.

The reservoir is at the head of the North Fork of Mission Creek where there are two small lakes. The water area will be 272 acres at the water surface formed by the dams and will hold 3,070 acre feet. About one mile below the dams an eastern branch of the North Fork of Mission Creek joins the west branch, and this eastern branch can be run into the reservoir by a ditch or flume of about 2 miles length. Within half a mile of each other there are 3 dams on this reservoir site.

Dam No. 1 has a length of 445 feet with a maximum depth of 31 feet, or 24 feet above the surface of the ground. The foundation is in granitoid rock; at the west end the dip is 75 degrees with a strike almost at right angles to the line of the dam, dipping into a water-tight hardpan below about 10 feet of wet gravel for a distance of 95 feet beyond which is hard gneiss for a distance of

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