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## Letter from Francis Burton Harrison to Walter L. Fisher, 1912 Dec 3.

Francis Burton Harrison

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December 3, 1912

Hon. Walter D. Fisher,  
Secretary of the Interior, Washington, D. C.  
Dear Sir:

There is an economical and adequate source of water supply for the City of San Francisco which has not as yet been brought to your attention and which unquestionably merits investigation. Mr. H. M. O'Shaughnessy, City Engineer of San Francisco, acting in the capacity of Consulting Engineer, for one of the individuals interested in this project before his election as City Engineer, has made a most favorable report in regard to its possibilities for San Francisco water supply.

The project consists of one large and three small possible reservoirs lying north of the Merced River in Merced County, California, on Dry Creek, as shown on the attached map. The total capacity of the large reservoir, estimated from preliminary surveys, is approximately 65,000,000,000 gallons. The combined capacity of the three small reservoirs is approximately 58,000,000,000 gallons; the total capacity of the four reservoirs being approximately 123,000,000,000 gal. The elevation of the floor of the lowest reservoir is approximately 210 ft. above sea level. The elevation of the floor of the largest and highest reservoir is approximately 300 ft. above sea level. This means that water could be taken to San Francisco by gravity a distance of approximately 150 miles. The advisability of maintaining pressure greater than this over many miles of pipe line is questionable and as even in the event of the development of the Hetch Hetchy project pumping would probably be resorted to after the water had actually reached the city, this project does not suffer when compared with the Hetch Hetchy project in this respect.

The proposed reservoirs are so situated that water can be drawn from both the Tuolumne and Merced Rivers. This means that flood waters could be impounded so that the rights of irrigationists would not be jeopardized and the development of the project would in no way interfere with the possible development of irrigation in that region.

Mr. O'Shaughnessy advises the construction of an earth fill for a dam in the instance of the largest reservoir and the same construction can be carried out in the development of the other three.

The preliminary surveys and investigations of this project have been made by Mr. Chas. D. Martin, an engineer of Merced County. His work on the large reservoir was checked over and passed by Mr.

O'Shaughnessy, but as the project was being considered then for its possible value in connection with land development, only the amount of water that could be drawn off at a certain fixed level was estimated; This amount, Mr. Martin and Mr. O'Shaughnessy figured at 125,625 acre feet, or in gallons, - 40,933,000,000. Below this level in the large reservoir there are approximately 15,000,000,000 gallons more, which makes the total capacity of the large reservoir as above stated, 65,000,000,000. Mr. O'Shaughnessy's suggestion that the project would be tremendously valuable for city supply, led to further investigation which brought to light the other reservoirs herein mentioned. The following is a quotation from a report dated July 29, 1912, made by Mr. O'Shaughnessy to Wm. H. Crocker of San Francisco, concerning the largest reservoir herein referred to:-

"As the outlet of the reservoir will have an elevation of 300 feet above the sea, it would be possible to use this source as an auxiliary supply to Oakland, Berkeley or San Francisco. The water would be pure, unpolluted water from the snow sheds of the Sierras, and the expense of developing and conveying would not be 66% of many of the other Sierra schemes."

Owing to the fact that the reservoirs are situated in the foothills and that facilities for construction work are of the best, the cost would be as Mr. O'Shaughnessy states, far less than the cost of the Hetch Hetchy project.

The estimates of the capacity of the small reservoirs have been made conservatively, and Mr. Martin, the Engineer, states that in his opinion construction work will hardly be any more expensive per gallon of storage than in the case of the largest reservoir.

I would be glad to furnish you with such data as I have at my command, but would prefer that an unbiased engineer, whom you may care to appoint for the work, make a complete report.

Very truly,

Francis Burton Harrison

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