

DEPARTMENT OF PUBLIC SERVICE
CITY OF LOS ANGELES

December 12, 1924.

O. G. Gillespie, C.E.
Director, Bureau of Sanitary Engineering,
Berkeley, California.

My dear Mr. Gillespie:

I am sorry that you had to write me your note of December 6th, reminding me that a report was due you on sanitary conditions on our system. I promised to send you this, and have been waiting from day to day to finish as many of the items discussed by us as might be possible before writing to you, and that is the only reason for the delay. However, before I start in with the matters in hand, I wish to thank you for returning Mr. Goudey's letter, the disappearance of which, had caused me considerable uneasiness as to the efficiency of my office system. I am wondering if you have received the two maps which I mailed to you some little time ago. You do not acknowledge them, and I hope they have not gone astray. One of them was the skeletonized map of the system, which I showed you while you were here, and the other one was a map of the city proper, showing the locations and elevations of our various distribution reservoirs.

Taking up Mr. Goudey's report to you under date of October 31st, I will try to reply to the different recommendations therein contained, in the order in which Mr. Goudey discussed them.

LOWER FRANKLIN RESERVOIR: A Wallace & Tiernan vacuum feed chlorinator has been installed here, as you already know, but has not been in service during the dry season, as there seemed to be no particular need for it. It is our intention to treat this water with chlorine during the rainy season as a safeguard against any contamination which might possibly enter the reservoir from its watershed. It is recognized that the actual contact period in the conduit is short, but it is anticipated that an excessive dose will be used, and that its effect will be sufficient, even though the conduit itself is short. It must be remembered, however, that this conduit extends to within 200 feet of the outlet tower, and that the actual contact period for a large part of the water is much longer than Mr. Goudey has mentioned in his report. We believe, the protection afforded by this machine will be adequate but it is the intention of this Department to take whatever steps may be necessary to protect this reservoir against storm water in the canyon. The road along the west bank of Lower Franklin Reservoir has been closed to public travel. A substantial iron frame gate hung on posts set in concrete has been put across the road below the dam, and another one on the city property line above the reservoir with suitable signs stating that the road has been closed for the protection of the city water supply. These gates will be kept locked and they are guarded on each end by an iron fence, 6 feet in height, strung on iron posts set

in concrete and provided with barbed wire at the top.

SILVER LAKE RESERVOIR: Silver Lake Reservoir is out of service and will remain so for the present. In the meantime, a Venturi meter is being installed on the 36-inch main, leading from the lake and as soon as this installation is completed, a concrete chlorine house will be built and an automatic Wallace & Tiernan machine will be installed. This machine, together with the pump which is necessary to operate the injector, is on hand, and there should be no delay in completing the installation.

The storm drain above Ivanhoe Reservoir leads into a bypass tunnel from which there is no danger of storm water reaching Bellevue Reservoir. No water has been fed from Silver Lake to Bellevue Reservoir for several months, and none will be so fed before next summer, and perhaps not then. Before it is again used, it is a simple matter to disinfect it should there be any risk of contamination, and this will be done if necessary. In the meantime, the Department is endeavoring to have a sewer constructed which would lead this storm water northward, and away from our reservoir. If this can be done, the present conduit beneath our reservoir will be permanently closed.

BELLEVUE RESERVOIR: The first item which Mr. Goudey mentions at this point, is a manhole at the southeast corner of the reservoir on the new sewer line which has just been completed. A piece of cast iron pipe has been connected across this manhole, the joints ~~of~~ being set in lead, so that to all intents and purposes the manhole no longer exists, and there is no possible chance of sewage backing from here into the reservoir. Sewers are now provided all the way around this reservoir, and the house connections are at present being made. Before the end of December all houses around Bellevue will be connected to the sewer and all existing cesspools will be pumped out and back-filled. The levee protection at the north end of this reservoir has been improved, and the portal of the inlet tunnel is being extended with reinforced concrete so far inside our property line that it is adequately protected at all times. The roof over the reservoir proper has been extended to the extreme north end, and the Department feels there is no longer any opportunity for pollution of the water. All cracks in the bypass ditch on the westerly edge of the lake have been opened up and filled in with hot asphaltum so as to make a water tight closure. A new fence has been built around this property and the Department feels it is not necessary to increase its height, as it is adequately protected by three strands of barbed wire at the top and a resident keeper is about the lake all the time. The dirt privy mentioned in Mr. Goudey's report was removed several weeks ago, and its contents completely destroyed.

The chicken house at 912 Lucile Street still remains, but can scarcely be regarded as a source of contamination of the lake. However, this Department has asked the City Council to pass an ordinance prohibiting the keeping of chickens or any other domestic fowl or animal within 100 feet of any city reservoir. This ordinance has been drafted, and as soon as it can become effective it will be enforced and the objectionable hen house removed. This Department does not feel that it is necessary, nor is it inclined, to purchase any more property about this reservoir, because we believe that adequate protection is provided without the acquisition of any more ground.

HOLLYWOOD RESERVOIR: (Weid Canyon) As you are aware, a Venturi meter has been installed on the outlet from this reservoir, and a very attractive house built for the chlorine machine. Owing to difficulties in designing a proper injector with its pump, and securing the necessary machines, this installation has been delayed, but I have a letter from Wallace & Tiernan people, under date of December 2nd, in which they assure me that their Mr. Luippold will be here in a few days to settle the matter finally. It will then be but a short time before this machine will be in operation. The Wallace & Tiernan people are, seemingly, quite anxious to sell as many of these machines as possible, and yet they advise me against duplicating the installation at this point, or for that matter, at any of our other stations where Venturi or pedestal type machines are used, because they insist such duplication is entirely unnecessary. However, should duplicate installation be found advisable, it will be made later.

LOS ANGELES RIVER SURFACE INTAKE: Duplicate chlorine machine installation is now being provided at this point.

The Department does not feel that a cast iron syphon to connect the Crystal Springs wells with the Crystal Springs conduit is necessary, and believes that the expense would not be justified. Whenever storm water is running in the river these wells are shut down and the gates closed, and should this pipe be washed out there would be no risk of contaminating the city's distribution system.

CHLORINE RECORDS: The Department has drafted a form of book record to be kept at each and every chlorine station, and I am sure that when you see these forms you will be quite satisfied with the manner in which the records are to be kept. The order for the new blanks has been placed with the printer, and I am expecting to receive the books very shortly. It seems better to have our own stock of forms, with the name of the Department at the top in the usual way, and not to be continually begging stocks of pads from the State Board, although we appreciate your thoughtfulness in offering to furnish them. As soon as the forms are received from the printer I will send you copies of them so that you may see how we have handled the matter.

ROMANA RESERVOIR: The sewer manholes mentioned by Mr. Goudey possibly might overflow at some time or other, but Maxwell street, which adjoins our property on the north, is to be graded and paved in the immediate future, and as soon as that work is completed the unbroken curb will serve as ample protection against this menace. In the meantime we have had a generous ditch provided along the entire north side of our property to take care of storm water, or manhole overflow, should such occur. This relieves the only risk at this point.

BULNA VISTA RESERVOIR: The only comment offered at this point was in relation to the bypass ditch around one side of the lake. This bypass ditch serves as a storm drain and it is quite possible that some storm water might find its way from the ditch into the lake. The Department has ordered changes made which will entirely eliminate this risk and I hope that when you see these changes you will be quite satisfied as to the result.

Mr. Gillespie

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MISCELLANEOUS: I have asked the legal department to write a note to Mr. Cunningham, as you suggested, warning him that disposal of sewage on his subdivision in Franklin Canyon will have to be such that there can be no chance of polluting the water in our reservoir. This letter is written to him simply to cover our legal obligations in the matter, and you may be very sure that when building operations commence in the canyon we will take whatever active measures may be necessary to see that the water is protected.

The writer does not anticipate any particular advantage to be derived from the use of the orthotolidin test when made by the field men who operate the various chlorine machines. However, he is willing to be convinced, and as soon as the machines are working each operator will be provided with the necessary equipment and instructed in making the tests.

This, I think, covers all the points which we discussed, and I trust you will feel that this Department is ready and anxious to do anything that is necessary to protect the water supply against objectionable pollution of any sort.

Yours faithfully,

CARL WILSON

Laboratory Director

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