

FURTHER PAPERS RELATING TO WATER SUPPLY UPON THE GOLD FIELDS.

No. 1.

The Hon. W. GISBORNE to His Honor O. CURTIS.

SIR,—

15th August, 1871.

I have the honor to acknowledge the receipt of your Honor's letter of the 29th July, forwarding copies of a resolution passed by the Provincial Council of Nelson, relative to water supply upon the gold field of that Province; and, in reply, to acquaint you that the subject shall receive careful consideration.

The Hon. the Superintendent of Nelson.

I have, &c.,
W. GISBORNE.

Note.—See Appendix, 1871, page 7, D. No. 8.

No. 2.

Mr. A. GREENFIELD to Mr. C. E. HAUGHTON.

SIR,—

Superintendent's Office, Nelson, 11th March, 1872.

The question of water supply for the Nelson South-West Gold Fields having been again considered by the Nelson Government, I am directed to request that you will be good enough to urge upon the General Government the advisability of immediately constructing at least one of the works recommended by the Superintendent and the Provincial Council, and mentioned in the Superintendent's letter No. 40, of the 29th July, 1871.

The scheme which this Government would prefer should be taken in hand first, is that referred to in the Provincial Engineer's report (copy of which I enclose) as the "Nelson Creek Water Supply," a complete portion of which, mentioned in the first paragraph, is estimated to cost £30,000. This work of itself, it is calculated, would supply 100 heads of water, which, if sold at the very low price of £1 per head per week, would realize £5,200 per annum, and would be the means of working a large area of ground known to be richly auriferous.

For further information I must refer you to the enclosed report, and to the documents already forwarded to the Colonial Secretary with the letter above referred to.

In conclusion, I have to state that the Government is quite prepared to undertake the construction of this work, should the General Government guarantee the funds for that purpose.

I have, &c.,

ALFRED GREENFIELD,
Provincial Secretary.

The Under Secretary for Public Works.

P.S.—I may point out to you that it does not appear at all likely that any application will be made by persons in this Province for advances of money under the Regulations issued by the Public Works Department.

Enclosure in No. 2.

EXTRACT from PROVINCIAL ENGINEER'S REPORT, 1871.

Nelson Creek.

RACE to commence at Lake Hochstetter and terminate at Paddy's Look-out, distance in a straight line about seven miles; but the length of the race will probably be about sixteen miles. Works required: a race from the lake to Paddy's Look-out, and small dam at Lake Hochstetter. Race to carry 100 heads; approximate cost, £30,000. Revenue (100 heads sold once at £1 per head), £5,000 per annum. The workings here will be very similar to those in the Napoleon Hill district, the water to be delivered at a considerable elevation on alluvial hills, and would, in all probability, sell several times. By tunnelling through the low range which divides the watershed of Nelson Creek from that of the Ahaura, and the construction of the necessary race, the lake water would command Baxter's, Sullivan's, and Callaghan's, as well as all the ground on the Nelson Creek side of the ridge; in all, about thirty square miles of country.

Lake Hochstetter, the source from which it is proposed to obtain the water, has an area of at least two square miles. This race can be doubled by the erection of a dam twelve feet high and four chains long; the drainage area, including the lake, is at the very lowest computation ten square miles, taking four feet per annum as the amount of rainfall which can be utilized [see Appendix B.] This race would supply annually 6,969,375,000 gallons in round numbers, or 200 heads running ten hours per day for 300 days. Storage area would be required before this amount of water could be retained, but this could be constructed at little cost; the land at the eastern end of the lake is very flat for some distance, so that every foot the water was raised in the lake would greatly increase the area. The area