FURTHER PAPERS

RELATING TO

WATER SUPPLY UPON THE GOLD FIELDS.

(NELSON.)

PRESENTED TO BOTH HOUSES OF THE GENERAL ASSEMBLY, BY COMMAND OF HIS EXCELLENCY.

WELLINGTON.

1872.

FURTHER PAPERS RELATING TO WATER SUPPLY UPON THE GOLD FIELDS.

No. 1.

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

15th August, 1871. SIR.-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.

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

I have, &c., W. GISBORNE.

No. 2.

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 professed.

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,

The Under Secretary for Public Works.

Provincial Secretary.

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 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. 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 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

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of the lake at present is two square miles, and I estimate that a dam twelve feet high would double it. giving a storage capacity of 6,272,437,500 gallons, or rather more than eight-ninths of the total available rainfall of that watershed. To carry out a system of works which would produce the greatest advantage from the use of the lake water, I should recommend the erection of a dam, say twelve feet high, and of a race capable of conveying 200 heads of water for a distance of about six miles from the lake. At this point the race should divide into two branches, each capable of conveying 100 heads of water or such quantity as might be required, one to run to Callaghan's and the workings to the northward, and the other continuing to Paddy's Look-out. The approximate cost of these works would be about £50,000, and the revenue derivable from 200 heads, at £1 per head per week, sold once, £10,000.

No. 3.

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

Superintendent's Office, Nelson, 15th April, 1872. SIR,-Referring to my letter of the 11th ultimo, renewing the application made by the Provincial Government of Nelson, on the 29th July, 1871, for a water supply on the Nelson South-West Gold Fields, known as the "Nelson Creek Water Supply," under the provisions of the Immigration and Public Works Act of 1870, I have now the honor to forward herewith the following documents relating to the scheme in question, namely:—
1. Memorial from a Committee appointed at a large public meeting held at Nelson Creek.

Letter from Mr. Frank Guinness, forwarding memorial.

3. Provincial Secretary's reply.

I have, &c.,

ALFRED GREENFIELD, Provincial Secretary.

The Under Secretary, Gold Fields.

Enclosure 1 in No. 3.

Mr. F. Guinness to Mr. A. Greenfield.

Ahaura, 24th March, 1872. DEAR SIR,-I do myself the honor of forwarding a memorial from the inhabitants of Nelson Creek, which

resulted from the meeting held there yesterday.

The meeting was very numerously attended, and most enthusiastic in adopting the views I ventured to suggest to them, which were, that it was preferable to get this important work done by the General Government funds than by a company, and to give expression to that opinion by a memorial addressed to you. I feel sure that this work will produce a very lasting benefit to the district, as all the miners say that there exist well known, and in many instances very rich, auriferous terraces, which are now impossible to touch with the present means at the disposal of the miners.

I trust, therefore, your valuable assistance will be given to obtaining this very desirable object.

I have, &c.,

The Provincial Secretary, Nelson.

F. GUINNESS.

Sub-Enclosure to Enclosure 1 in No. 3.

MEMORIAL of MINERS at Nelson Creek.

Nelson Creek, 23rd March, 1872. SIR,-We, the undersigned miners, residing in the Nelson Creek District, having heard that there is a probability of the General Government advancing the money necessary to construct the Nelson Creek water-race, according to the plans of Mr. Woollay's survey, from Lake Hochstetter, desire to express their opinion of the great benefit such a work, if completed, would confer on this district, which, although known to contain very extensive auriferous terraces, is at present to a great extent lying idle in consequence of the impossibility of obtaining a sufficient supply of water for sluicing

We therefore respectfully request you, Sir, to use all the influence you can with the General Government to induce them to put this great and important work into immediate operation. convinced that it will be the means of causing a large increase to the population, and be a means of greatly improving the revenue and benefiting the inhabitants of the district.

Signed on behalf of the meeting by the Committee appointed thereat,

RALPH DAWSON. JAMES SINCLAIR. Francis Reilly. JAMES HICKS. &c.

The Provincial Secretary, Nelson.

Enclosure 2 in No. 3. Mr. A. GREENFIELD to Mr. F. GUINNESS.

Ahaura, 30th March, 1872. SIR,-I have the honor to acknowledge the receipt of your letter of the 24th instant, enclosing a memorial from the Committee appointed at the public meeting held at Nelson Creek, for the purpose of considering the scheme recommended by the Nelson Government to be constructed under the provisions of "The Immigration and Public Works Act, 1870," for a water supply from Lake Hochstetter to Paddy's Look-out, which would command the valuable auriferous districts of Baxter's,

Sullivan's, Callaghan's, and Nelson Creek.

In reply, I have to request that you will be good enough to inform the Committee that the Nelson Government are fully aware of the importance of the scheme referred to, and will endeavour, as far as lies in their power, to induce the General Government to have it carried out without delay. Just before I left Nelson the Provincial Government renewed their application to have this scheme proceeded with, and there is reason to hope that the request will be favourably entertained.

The memorial shall be forwarded to the General Government on my return to Nelson, and I have

no doubt the expression of opinion therein given will be of great service when the application comes

under consideration.

I have, &c.,

ALFRED GREENFIELD,

Provincial Secretary.

F. Guinness, Esq.

No. 4.

The Hon. W. Reeves to His Honor O. Curtis.

Public Works Office, Wellington, 20th May, 1872.

I have the honor to inform you that the Government, having taken into consideration the SIR,recommendation of the Provincial Council of Nelson, forwarded in your letter No. 40, 29th July, 1871, and the subsequent correspondence thereupon, have decided to undertake the construction of the work referred to in the report of the Provincial Engineer, under date 15th April, 1871, as the "Nelson Creek water supply," and I should be glad to be informed whether the services of Mr. A. Dudley Dobson can be placed at the disposal of the department, for the purpose of at once proceeding with the detailed survey and estimate.

His Honor the Superintendent, Nelson.

I have, &c., W. Reeves.

No. 5.

His Honor O. CURTIS to the Hon. W. REEVES.

Nelson, 22nd May, 1872. (Telegram.) MR. Dobson's services at your disposal for survey, Nelson Creek water supply, but he will certainly require assistance beyond present Provincial staff.

OSWALD CURTIS, Superintendent.