would perhaps be small, but, by the construction of some good-sized dams, a large amount of water could be saved which now runs to waste whenever the gullies are a little better supplied than usual.

4. But even if the water from this source could not be, without too much expense, brought in at a cost to be serviceable for sluicing, it would, I believe, be found comparatively easy to bring in a supply at such a level as to serve for flushing the proposed "main channel" for carrying off tailings. I have made the main channel the subject of a separate report, but I may here remark that, without a proper supply of flushing water, no channel of the kind could be of much service. I would also point out that a race to catch water for the flushing only, as it could be made at a lower level, could intercept a larger and more regular supply of water than one formed immediately below the lowest of the present races.

5. From the streams flowing out of the Kakanui Range it might be possible to bring in a supply by fluming across the Kyeburn, but the work would most probably be found too costly in proportion to the quantity of water to be obtained. Even the Kyeburn itself could be brought in, but as there are a number of races heading from that river, it would most likely be found that enough water to be worth making a race for could not be taken without injury to the interests of the owners of these races.

6. The next possible source of supply is the Manuherikia River. It has often been purposed to attempt to bring in a race to Naseby from the Manuherikia, but the undertaking has appeared too formidable, and nobody has ventured to incur the heavy expense that would have to be gone into for surveys to determine whether the scheme is practicable or not.

On the accompanying tracing I have marked by a plain red line the probable course of the race. This race would head from a point on the Manuherikia where, by approximate observation, the level of the river is 2,600 feet above the sea. The Trig. Section X on the spur overlooking Naseby is 2,055 feet above the sea, thus shewing a fall of 545 feet. The actual distance is 22 miles, but the length of a race between the two points would probably be between 50 and 60 miles. Assuming the length to be 60 miles, this would give a fall of 9 feet to the mile. But by fluming and tunnelling the race could be shortened. This race, coming along the contour of the ranges, could be made to intercept the waters of several streams, and it might probably be found advisable to increase its carrying capacity as it neared Naseby.

In reference to this race, it should be observed that there is every reason to believe that besides the immediate advantage to the Hogburn diggings, a large race brought along the bases of the Hawkden and Mount Ida Ranges would command a great extent of ground which, for want of water, has not yet been tested, but which it is almost certain would pay for sluicing on a large scale.

7. But although I am sanguine that additional supplies of water could be brought in from all the sources I have indicated, I would by no means be understood to say that the Government should hastily enter upon any very large expenses. In the first instance I should advise that a sum of say £400 be set aside to defray the cost of proper surveys and estimates to determine the practicability of the schemes, viz.:—1st. To bring in water from the Little Kyeburn and other streams for flushing. 2nd. To bring in a large race from high up the Manuherikia River.

8. With regard to the scheme for bringing in flushing water in connection with the main channel, it is important to notice that this is clearly a work that would never be attempted by private enterprise, although it would be of immense advantage to the Hogburn diggings. There would be no way for a company undertaking such a work to make a return a profit. But the effect of a supply of flushing water, especially in connection with a main channel, would be to enable miners to work much good ground that they now cannot get at, to render the diggings far more permanent by indefinitely postponing the blocking up of the outlet, and thus to maintain one of the most productive gold fields in the province in at least its present prosperity for many years to come. If something of the kind be not soon done it is to be feared that the mining population will, as the claims now held get worked out, take their departure probably to other provinces, if not to other colonies.

8*a*. I would, therefore, most earnestly recommend that if found by the engineer's report to be practicable the flushing water race be constructed by the Government with the least possible delay. I am unable to give any reliable estimate of the probable cost. So much would depend upon the amount of tunnelling and the hardness of the ground to be gone through; but, assuming the length of the race to be 15 miles, and the cost per mile to be even £200, the work could be done for £3,000, which would be cheap, considering the advantage to the mining interest.

But I would propose that this work should be done in connection with the "main channel," and with it placed in the hands of a local trust empowered to levy rates (on a system similar to the main tail race plan as applied at St. Bathans). If that were done the trust would derive an income from persons taking advantage of the channel and flushing water, &c.; the Government would not only be at no expense for maintenance, but would probably, in course of time, be recouped for great part of its outlay.

9. As regards the scheme for bringing water from the Manuherikia, I would propose that the report of the engineer be made public, and I believe that if the report be favorable a company may yet be formed to carry it out. Such a company would, of course, come within the scope of the regulations respecting advances.

10. In conclusion, I would most respectfully urge upon the Government the great claim of the Mount Ida district for a reasonable share of the assistance the Government is empowered to afford. The Hogburn is the most populous of the Otago mining localities, and, with the assistance I propose, might for many years to come continue to contribute largely to the revenue of the country.

The Marewhenua is but now in course of being opened out, but gives every promise of being a sluicing district of the first order, and it will be a wise policy to deal liberally with such applications for aid as may come from that quarter. The other parts of the district are, as a rule, not in a position at present to derive any advantage from works for additional water supply, all the known available sources being already taken up under water licenses. The only exception that I can think of at present is Macrae's Flat, where a main tail race is wanted. But as this subject will probably be