

REPORT ON POSSIBILITIES OF OBTAINING WATER SUPPLIES
FOR MINING AT LISLE GOLDFIELD.

LOCATION & ACCESS:

Lisle alluvial goldfield is situated in the north-eastern district, 49 miles by road from Launceston, via Lilydale.

It is served by railway from Launceston as far as Nabowla, where second class road deviates south-westerly to the settlement of Lisle.

TOPOGRAPHY:

The goldfield occurs within a basin shaped valley 3 miles in length and 2 miles in width at the widest part, representing the water-shed of head portion of Lisle Creek and its numerous affluents in that vicinity. Lisle Creek flows northerly to eventually junction with Denison River.

The basin is surrounded by ranges to a maximum height of 1350 feet above the valley floor.

Other streams adjacent to Lisle basin include (a) Little Forester River, flowing northerly, to the east (b) Wyena Creek (Eastern Branch of Denison River) to the west and running north-westerly (c) upper reaches of North Branch of Second River, flowing westerly and situated west of Wyena Creek (d) St. Patrick's River, flowing to the west and situated 3 miles to the south-east of Lisle basin at nearest point.

WATER SUPPLIES:

(1) Present Supplies: During the wet months of the year sufficient water for sluicing the present workings is readily obtainable from Lisle Creek and its tributaries, but during periods of little rain mining works are necessarily curtailed owing to the limited watershed.

In the earlier years of maximum gold production the valley was covered by a thick growth of timber and heavy undergrowth which retarded and controlled the run-off of water, but this has since been removed. In consequence, the water now disperses quickly by surface flow, so that even after heavy rains the streams soon assume the normal run.

The rights for water obtainable within Lisle watershed are nearly all held by those now operating in the area.

In the past attempts have been made to secure water supplies from other sources. In 1923 the New Bonanza G.M. Co. constructed a race 14 miles in length from an upper branch of Little Forester River to their holdings in the north-east part of Lisle Basin. Besides the water supplies being inadequate, inverted syphons across other branches of the river burst, with the result that the scheme proved unsuccessful. This race came into

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the area at too low a level to serve the field as a whole.

Recently Greta Hydraulic Company obtained large water supplies from the main portion of Little Forester River by means of a race to Greta flats on Lisle Creek. This came in at a point much below the main workings and therefore cannot be utilised by miners in Lisle Basin.

A short race, to augment winter supplies of water to western side of the valley only, was cut some years ago from two small heads of north Branch of Second River to the upper reaches of Stony Creek, a western branch of Lisle Creek. This race, which is said to have conveyed 10 sluice heads, is now in disrepair and not used.

(2) Other Possible Sources - North Branch of Second River:

It is possible that during wet seasons water supplies could be obtained from the northern slopes of Mt. Arthur by diverting the water, near Lilydale-Patersonia road, from the old race with intakes at head of North Branch of Second River. The old portion of the race would need to be reconditioned over a length of one mile and approximately 3 miles of new race constructed along St. Patricks River water-shed to a low divide near head of Lisle Creek. This route would be shorter than continuing the old race along the rim of Lisle Basin and would enable water to be taken from the heads of creeks in St. Patricks River watershed.

The supply from this source in wet seasons would approximate 15 sluice heads. It would not be permanent and in dry seasons it is doubtful whether any water could be secured.

The cost of reconditioning the old race and cutting the new portion is estimated at approximately £300.

As the route is wholly through private property arrangements with the owners to take the race through their land would probably entail monetary compensation which cannot be estimated at this stage.

ST. PATRICKS RIVER:

The divert water from St. Patricks River by means of race to a suitable point in Lisle basin constitutes a long and costly scheme. To enable the water to be carried over the high dividing range the intake would probably be in the vicinity of Diddleum Plains. It would necessitate the construction of a race approximately 20 miles in length, many miles of which traverse steep, rock bound country. The greater portion of the route is on purchased land, and, if a race was taken through, the owners would probably require to be compensated. It is very doubtful whether sufficient permanent supplies could be obtained from this source, since, during dry periods, the water in upper parts of the river is very low. A conservative estimate for construction such a race approximates £4000. Much preliminary levelling and stream gauging would be necessary before

a definite decision regarding the scheme could be made.

Apart from other considerations it must be pointed out that St. Patricks River is the source of Launceston water supply and objections to taking water from that stream would almost certainly be made by the Launceston City Council.

The owners of properties fronting the river also have certain riparian rights which would have to be taken into account.

CONCLUSION:

Two schemes for the supply of mining water to serve Lisle goldfield have been examined.

In that from North Branch of Second River the water supply is small at any period and is not permanent throughout the year.

The permanent amount of water obtainable from St. Patricks River is doubtful, the cost of the scheme is prohibitive and numerous other objections have to be taken into account.

It is therefore concluded that a scheme to obtain adequate water supplies to serve the whole of the alluvial goldfield throughout the year is impracticable.

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24th August, 1936.