
HEDLEY'S WATER RACE

Location

DAIRY FLAT ROAD ARGYLE, GREATER BENDIGO CITY

Municipality

GREATER BENDIGO CITY

Level of significance

Heritage Inventory Site

Heritage Inventory (HI) Number

H7824-0085

Heritage Listing

Victorian Heritage Inventory

Hermes Number 11658

Property Number

History

Contextual History:History of Place:

Heritage Inventory History of Site:

Construction of part of the race - Mclvor Hydraulic Co.

January 1865: The Mclvor Hydraulic Co. is about to construct a water race for sluicing which is to be carried on by small parties of 6 to 8 without capital, as efficiently as by a wealthy company. With sufficient water supply, the 40 acres applied for at Red Hill could furnish employment for 3 times as many as under the proposed application.

March 1865: Mclvor Hydraulic and Gold Mining Co. - Prospectus - Capital £10,000. Purpose:- Conservation of head waters of Sandy, Mclvor, Wild Duck Creeks, and conveying of same, by means of race, through the known auriferous country from Tooborac to Heathcote, at an elevation sufficient to command the whole Mclvor gold field. Race to be capable of conveying 6 million gallons per day (equal to 60 sluice heads), to commence at the base of

Sugar Loaf Mountain. For the present, 7 miles to be constructed... Water race will command 90 square miles of auriferous ground which, owing to lack of water, had to be abandoned... Sites for flour, quartz and saw mills have been selected along the line.

June 1865: Applications have been made for a lease of 150 acres of the low alluvial ground lying along the banks of Mclvor Creek, between the township of Heathcote and the opposite ranges.

September 1865: Mclvor Hydraulic Co. - commenced sluicing.

November 1865: Mclvor Hydraulic Sluicing Co. - since last communication 115 chains of race have been excavated, 93 yards of tunnelling, and nearly all the rock and other obstructions removed, leaving the whole line almost connected for a distance of 6 miles and a half. Satisfactory progress has also been made with the large reservoir at the Emu Plains.

July 1866: Mclvor Hydraulic Co.'s upper reservoir now filled - will shortly begin sluicing near Johnson's Gully.

September 1866: The Mclvor Hydraulic Co. report having cut their water race as far as Hayes' Gully, a distance (along the contour) of 10 miles. They have taken up areas in this gully, by virtue of miners' rights, and are now engaged in carrying on sluicing operations.

May 1867: Mclvor Hydraulic Water Scheme and Sluicing Co... Asked for government assistance. 12 miles of race completed.

August 1867: Construction of dam area 2,500 yards, capacity 250,000 gallons, height at bank 7 ft. Mclvor Hydraulic Co.'s race.

October 1867: Heavy floods in Mclvor and Wild Duck Creeks... Bursting of Hydraulic Co.'s dam bank.

Hedley's sluicing works

April 1880: Mr Hedley has 40 hands employed at the rear of Heathcote Hotel on his sluicing works.

October 1880: Mr Hedley's sluicing works - alterations being carried out with the view to raising the railings higher and carrying them farther from the works.

December 1882: Two important sluicing companies - the Meadow Valley Company and the Mclvor Hydraulic Company - have only had two months work, owing to the water falling off, whereby no opportunity has been afforded for washing up any portion of the ground in their sluice boxes.

June 1883: The Heathcote Sluicing Company are reticent with regard to the yield of gold from their claim, but they are now in full operation, and it is believed doing well. They employ about 30 men, and wages are paid regularly.

September 1883: Heathcote Sluicing Company...are still working and employing 28 men.

December 1883: The Heathcote Sluicing Co. have temporarily ceased working, the race which was cut from Sugarloaf Creek, about 18 miles distant, having run dry... Mr Hedley, the manager, reports having obtained during the past season, from all sources, 1,625 oz of gold: not a bad return by any means.

September 1884: The Sluicing Company have operated on one and a half acres, from the surface to 10 feet in depth, and have not yet washed up. They have 30 chains of box sluices, and 1,000 feet of 9 inch pipes with 80 feet pressure.

June 1885: Mclvor Sluicing co. - idle for last 6 months. Heavy rains have fallen, and sluicing is now being actively carried on.

September 1885: Mclvor Sluicing Co. are now in full work, the late rains having improved their prospects of a continued water supply. A large amount of dirt has been washed. It is the intention of this company to extend their water scheme, with a view of increasing their supply, in order to enable them to sluice all the year round.

November 1886: The Sludge Question - The Sludge Inquiry Board...sat at the Town Hall on Thursday afternoon

last week, and took the following evidence.

Thomas Hedley, sworn: I carry on Sluicing operations here at present under a miner's right. The Mclvor Hydraulic Sluicing co., at whose works I am operating, would use five million gallons a day when in full work. The water is brought from Sugar Loaf creek. The race is about 26 miles long, the most part constructed by myself, and purchased from company. The company expended £10,000. spent myself between £5,000 and £6,000. There is a log weir at the head of the race. Have a log weir also in Long Gully, which holds about seven million gallons. About 4 years ago I had 5 months sluicing, the year before about 4 months and last year about 4 months. Have not had a full head of water this year. Work eight hours a day. Worked 9 hours a day during 9 months of one year, being the most in one year. have worked out about 20 acres up to the present, the average depth being about 10 feet, or something over. The ground left would last about 50 years, but it would hardly be so deep as that worked. It is all ground sluicing now. Used to work with boxes. Intend to relay boxes next summer. On account of the dry season this year. I worked with as little expense as possible. The fall in tail-race is about 18 inches in the chain. Deliver the tailings into a paddock worked out five years ago. The proportion of tailings to sludge is very small. In 100 loads of soil there would not be over 10 or 15 per cent. The sludge now goes down the creek. Have had levels taken to see if I could change the tail race to pass the tailings, and deposit them at Commissioners Flat. It could be done. Don't think it would effectually dispose of the sludge. The fall would be better that way. But the gravel would stop and the sludge go away with the water. One season would cover the flat as deep as I could run it on. It would be difficult to keep the sludge back. The water is so thick that it would not settle for 24 hours, and without a still dam it would not settle at all. There is not sufficient fall on Commissioners Flat to admit of building a dam. It would not pay to make small dams across the flat. It takes me all my time to make it pay now. I could not possibly do it. It would mean ruin to me. The level would not admit of dams being made in any of the gullies I have worked. Employed 7 and 8 men this year, last year 10 and 12. Have had as many as 50 employed. If I had wet seasons I would have about 30 men employed and I would remove as much stuff in one year as I have done in the last 4 years. Generally keep one or two men on tail race to keep it clear. Complaints have not been made to me on the system of the work. Have had complaints of the sludge being run into the creek, but have taken no notice. Have to employ for maintainance when the water is running - one man 25s a week to turn water off and on and to look after 7 miles of the race, another £1 to look after 12 miles of the race, and 2 boys at 5s each. The size of the race is 5ft wide to the head of the race from the reservoir and 6ft wide from the reservoir here. The race will carry 16 inches of water and the fall is 6ft 8 inches per mile. cannot suggest any remedy against the damage the agriculturalists sustain by the sludge. Since the first Mclvor rush there has been puddling and the sludge allowed to run into the creek, and I started sluicing thinking to use the creek for the same purpose...

Richard Williams, sworn: I am a farmer here, hold 1400 acres of land about 4-1/2 miles from Heathcote, principally on the Mclvor creek.... Had one or two small floods in the Mclvor Creek last year. The heaviest flood occurred 3 years ago. The sluicing I believe has raised the level of the floods. The creek has been silted up, and where there were deep waterholes before there is now no water at all. The creek is now more like a sludge channel, and in dry weather you can walk up the middle of it... The best of the land has all been flooded and silt deposited on it. Over 100 acres has suffered from the deposit of sludge. The depth of the sludge in some places is 2 or 3 ft., and in some a few inches... There is black soil underneath the sludge. Don't think it affects the crop where the sludge mixes with black soil. If there is much silt the crop dries up. Keep 70 or 80 head of cattle, and 2,000 sheep and lambs. Have water at springs and dams. The stock don't drink at the creek in summer since the sluicing. Didn't find the water injurious to the stock. It comes down like porridge, and settles and gradually fills up the creek. If there is no sluicing the water is clear... Have had horses and cattle lost in the creek since the sluicing. Have had over 120 sheep in the creek in one season. The wool is of no use after the sheep have been in the sludge. This happens before the creek dries up in the summer when the sludge is soft... The land was purchased 14 or 15 years ago. The creek was quite clear then...

William Speed, sworn: I am a land owner on the Mclvor and Wild Duck Creeks... Have had numbers of cattle bogged in the sludge... The first were bogged about 3 years ago... Have to move them away in consequence of the sludge. Water them at dams. Would water at the creek if there were no sludge. The sludge does not come from the Meadow Valley Creek into my property...

William Duncan, sworn: I am a farmer here. Have 12-1/2 acres affected by sludge on the Mclvor Creek... The sludge covered the crops last year. Lost a portion of it last year. Put it into grazing for 5 years. If you plough in the sludge you cannot touch the soil underneath in places. The sludge is 3 ft deep in some places. The land might recover in a few years. Nothing will grow where the sludge is very deep, but a little where it is not so deep. Have about 20 cows on this land. Can't water at the creek on this land. The water is too thick, Believe it would kill them. Mr Hamilton had a horse die, and he took a ball of mud out of it 11lbs in weight. Cattle also bog in the creek. Have had some die in the creek. About a dozen were pulled out and died afterwards... Had to make dams and lift the fences, in consequence of the sludge...

James Tehan, sworn: Am President of the Mclvor Shire... Injury has been done to the creeks by the sludge. The Council had to build a bridge in one place instead of a crossing in consequence of the sludge. The creek keeps

silting up. The Council built the bridge 3 years ago. The water holes further down get silted up more and more every year. The creek is silted up for about 5 miles, and is now getting rapidly filled up lower down. Think the Council sent a deputation to the Mining Department about the sludge... Suggest that the sludge be impounded. Don't think there are leases, &c., to render it impossible to make use of Commissioner's Flat. Think they could impound the sludge, and remove injury to farmers down the creek, by making dams and letting the water settle. Have seen it done by puddlers years ago. There would be sufficient acreage during Mr Hedley's lease. Have seen this method proved to be satisfactory. Believe vegetation would grow on the sludge after a time...

1887-1892: Hydraulic sluicing by pumping was begun in Victoria in 1887. The application of pumping to hydraulic sluicing was due to the enterprise of the Hon. J.A. Wallace, assisted by the Messrs Hedley and others under Mr Wallace's employment. The works were in the experimental stage from 1887 to 1892. The principal difficulty was in getting a gravel pump which would stand the large wear and tear due to the lifting of boulders, gravel, sand, and other material. After repeated trials and much expense, a suitable centrifugal pump was devised; and in 1892 the system was so far perfected as to admit of regular working. Mr Wallace's experience is that powerful machinery should be used.

June 1887: Mclvor Sluicing Co. has been at work with a splendid flow of water, and with moderate rains expect to continue until October.

December 1887: Mclvor Sluicing Co. cleaned up for a return of 158 oz 18 dwt.

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June 1888: Mclvor Sluicing Co. - no work this quarter due to lack of water.

June 1889: Mclvor Sluicing Co. have resumed operations on an extensive scale.

September 1889: Mclvor Sluicing Co. have not, at present, cleaned up.

1890: [Letter to the Editor] The Heathcote Water Supply and the Mclvor Hydraulic Sluicing Company - Sir, - ...in view of the action of the Heathcote Borough Council, in writing to the Mining Department to request that a renewal of our Lease be refused, in the interest of the public, I am compelled to...appeal to the public for a fair consideration of the matter... When the members of the late Sludge Commission were at Heathcote, Cr Lewis openly advocated the course adopted, as what he pleased to call a feasible settlement of the sludge difficulty. The Commissioners told him in presence of witnesses, that his suggestion was a disgraceful one for anyone to make...and no Government department would listen to such a proposal for a moment... I know that our operations have done some considerable injury to the Creek and River, and been a source of considerable annoyance to people living down the River, and I am sorry for it, but I could not prevent it. But whatever cause of complaint against our operations the people down the River may have, the people of Heathcote certainly have none, they have had all the benefit and advantage of our work and enterprise. For several years I was working away, employing in addition to my own family of strong and willing young men, a large number of workmen of various kinds, and bullock teams, cutting a race, (26) twenty-six miles in length, chains of tall fluming, punching tunnels through rocky hillsides, constructing reservoirs, putting into circulation a constant stream of ready money, in the shape of wages, and bringing on to the place costly appliances in the shape of pipes and machiner, and when the water came over the Red Hill, it was greatly admired. The large amount of money necessary for carrying on the works was provided without stint. No one in the locality was asked to contribute a penny towards it. Since the completion of the works we had but one really good season for sluicing, during which we obtained a large amount of gold, but the whole of that was expended in an attempt to develop the resources of the district in another branch of Mining; in fact, the whole cost of construction, and nearly the whole proceeds of the work, amount in all to upwards of £20,000, was expended at Heathcote, and one of my sons is now carrying on at great expense the only progressive mining venture in the District worth consideration... The Echuca papers and yourself complained of our works and advocated the using of the water for a better purpose than sluicing, but you have never advocated confiscation. I always knew we held the only available source of water supply in the district. I often offered to fill a reservoir for the town if the Council would provide one, and did fill the only one they had... We

know that...the members of Parliament for Rodney and Mandurang will be called on to protect their constituents by doing all they can to prevent the sludge from going down the river and we know that we cannot carry on our sluicing operations without making sludge and that there is no way of dealing with two or three million gallons of sludge per diem, but to let it go down the only natural channel... We are quite willing to let the Railway Department or the Council, or both, have our reservoir and everything connected with our scheme for the price formerly offered, but Mr Lewis or any one else may rest assured that they will never be gratified by seeing us deprived of our property by confiscation. Such a course would assist to strangle mining enterprise... Thomas Hedley, Yackandandah.

May 1894: In May, 1894...I revisited the old spot of which I retain such vivid recollections. What changes! How different the surroundings. Then Mclvor was all bustle, animation and business with an adult male population numbering tens of thousand, busy as ants by day, with abodes of calico to retire to for their hard-earned rest at night. All resolute, strong, active and as sturdy a lot as ever broke the earth's surface. To-day, Heathcote a well built, pretty, little town has only one street, one however, of which its inhabitants are justly proud, for it certainly is a majestic thoroughfare several miles in length, with trees on both sides of the road, forming a delightful shade to pedestrians on the footways and a noble avenue along the roadway. Its municipal chambers, police camp, and churches belonging to every Christian denomination are among the most noticeable public buildings. Provision has been made for a water supply by the construction of an extensive and capacious reservoir.

The greatest contrasts noticeable to me were: First, that the newly turned soil of by-gone days has given place to a carpet-like surface of green sward, especially noticeable on the Commissioner's Flat. Secondly, the lack of animation in the town, utter dullness seems to pervade the place where 40 years ago everybody was as busy as bees hiveing.

By the courtesy of Mrs Farley I was afforded the pleasure of a drive to the Heatcote Water Supply Reservoir. En route Mr John A. Wallace's water race was pointed out. This race, I was informed, heads from the Tooborac Creek and the water was intended to be utilized to sluice the Red Hill and adjacent old diggings, but that the local Council obtained an injunction to prohibit his working.

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>