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PROGRESS REPORT

FROM

THE PARLIAMENTARY STANDING COMMITTEE
ON RAILWAYS

ON THE PROPOSED

MALLEE RAILWAY EXTENSION
(MILLEWA RAILWAY);

TOGETHER WITH

MINUTES OF EVIDENCE.

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2ND S.—RAILWAYS STANDING COMMITTEE REPORT NO. 2—[6d.]—16759.

PROGRESS REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON RAILWAYS, to which the Legislative Assembly referred the question of connecting the districts lying between the Ouyen to Mildura railway and the South Australian Border with the existing railway system by means of a 5 ft. 3 in. gauge railway, has the honour to report as follows :—

DESCRIPTION OF DISTRICTS.

1. The districts lying between the Ouyen to Mildura railway and the South Australian Border are mostly unoccupied Crown lands, being let for grazing on annual licences. They include the whole of the County of Millewa and, in the aggregate, contain over 2,000,000 acres which are 10 miles or more from either the Victorian or South Australian railways. Only a little more than half this area is, however, considered suitable for settlement and cultivation. The frontage to the Murray River, extending from the Yelta Reserve, which is on the Victorian side of that stream opposite Wentworth, to near the South Australian Border, a distance of, roughly, 50 miles, is low-lying, flat country, and is subject to inundation from the flood waters of the Murray and Darling rivers. In the eastern portion of it are box flats, having a hard grey soil and in the central and western parts extensive blue-bush, salt-bush, and pig-face plains. These plains have a hard, reddish-grey soil with an excess of salt. The flooding extends back from the river some 8 or 10 miles in times of high flood, so that approximately from 400 to 500 square miles, or 300,000 acres, are fit for grazing only when the water recedes and the land dries. Some years hence portions of these flats, which are less saline, may be made secure from flooding by the erection of earthen or levee banks and used for irrigation settlement similar to Curlwa, near Wentworth.

2. On the southern side of these low-lying flats the ground rises gradually until it attains a height of 100 feet, or slightly more, above the flood level of the Murray River. This higher country, extending back from the flats for about 20 miles, is slightly undulating. Covering the greater part of it is a reddish, loamy soil of good strong quality for Mallee land. Three-fourths of this country is timbered with tall mallee, pine, belar, and sandalwood, with occasional cabbage-bush, hop-bush, and needle-wood. Here and there small plains were met with. These were thickly grassed when the Committee made its inspection last autumn. A few sandy rises, covered with stunted mallee and spinifex, were seen, but their total area is comparatively small. It is 70 miles from the Mildura railway to the South Australian Border, and this good country extends from a point about 14 miles west of the Carwarp-Yatpool-Red Cliffs line to within some 10 miles of the Border, giving an area of between 500,000 and 600,000 acres, mostly first class Mallee country, well adapted for settlement and wheat-growing. From about 10 to 16 miles due west of Red Cliffs and from 8 to 12 miles south-west of the Mildura Irrigation Settlement, in the neighbourhood of Benetook and Derrick Tanks, are several swampy blue-bush and dillon-bush plains unsuitable for cultivation. On the western side of the good country approaching the South Australian Border are some outcrops of limestone and copi rises, making that land of little value for cropping. But these poorer areas are not extensive, there being some good wheat lands intermingled with them.

3. Southward of this area of 500,000 or 600,000 acres of good Mallee country to within 10 or 12 miles of the Ouyen-Murrayville railway the country may be divided into three belts, each containing, roughly, 350,000 acres. The western belt, adjacent to the South Australian Border, is of inferior quality, being more sandy than loamy, and mostly clothed with Mallee scrub. The central portion, extending from Rocket Lake southward across Mopoke Plain and Birthday Plains to the Sunset country, north-west of Underbool, contains land of better quality, and that which the Committee inspected at Sunset and Birthday Plains is suitable for settlement and wheat-growing if a supply of water for domestic and stock purposes can be brought from some reliable outside source into that country at a reasonable cost. The eastern part, towards the Ouyen-Nowingi line, is of lighter quality, being grazing land only.

ANNUAL RAINFALL.

4. Except the Murray and its ana-branches, there are no rivers or even small water-courses in the County of Millewa. In the northern portion of that county the average annual rainfall is 12 inches, and in the southern 13. Just across the South Australian Border in the settled districts of Paringa and Loxton the rainfall is no greater, and the wheat-growers there have, on

the whole, done exceedingly well since they took up their holdings about 10 years ago. Many of them have retired on a competence in the last year or two. Like the other parts of the Mallee, the country in the County of Millewa has been, and no doubt will be, subject to periodical droughts, but looking at the tall mallee and large pine and belar trees growing throughout the 500,000 acres of good land referred to, it is apparent they must have lived through several severe droughts. If they could do so settlement in that country ought also to be able to survive these occasional dry periods if the farmers are supplied each year with water for domestic and stock purposes from a reliable outside source, and they fallow their lands in accordance with modern methods of farming in dry areas, so as to conserve in the soil as much of the rainfall as possible, and thus give the seeding a good start. Throughout this large area of suitable land are a number of small tanks put down by the pastoral lessees to water their stock, and at one place—the Troughs—a small supply is pumped from the Murray River inland for about 9 miles. Some of the catchments are good, especially in the eastern and central parts of this country, but the low average annual rainfall renders it necessary, as elsewhere in the Mallee, to bring a dependable supply of water for domestic and stock purposes into the district, if the settlement is to be profitable and permanent.

BORING FOR WATER.

5. The State Rivers and Water Supply Commission assured the Committee that there was no likelihood of underground supplies of fresh water of any value, or even of a supply fit for live stock, being found by boring in the northern part of the County of Millewa. On the eastern side of this large area bores were put down at Kooralong and Yatpool. The latter bore was carried through to bed-rock, at a depth of 1,402 feet, but no usable water was obtained. On the western side bores were put down by the South Australian Government with a similar result. One of these bores reached a depth of 1,800 feet. Failure also attended private boring operations across the Murray River, near Lake Victoria, in New South Wales. The complete identity of the geological formations met with in all these bores prohibits the possibility of a valuable underground supply of water being met with. The depths to possible water in the Millewa district would be about 1,000 feet, as compared with 200 feet or so in the Underbool-Murrayville district. The cost of boring to such a great depth would be too large for the supply a bore would give. It would cost from five to ten times as much as the same supply delivered by open channel, including pumping, even with two or three lifts.

WATER SUPPLY BY PUMPING.

6. Mr. A. S. Kenyon, Engineer of the State Rivers and Water Supply Commission, informed the Committee that surveyors had taken the levels of most of the 500,000 acres of good Mallee country extending back about 20 miles from the flats bordering on the Murray River, and found that a reliable supply of water for domestic and stock purposes could be pumped from that river up rising mains for a few miles, and then conveyed in open earthen channels throughout the greater part of that area. In some isolated higher parts a second, and perhaps a third, lift may be necessary to take the water on to some of the proposed holdings; but these small pumping plants would be operated by electricity generated at the larger pumping stations on the banks of the Murray. The eastern part of this good country would be watered by the pumping plants at Red Cliffs and Merbein irrigation settlements, the additions to the former plant and main earthen distributing channels being estimated to cost £10,000, and to the Merbein £8,000. The estimated capital outlay to instal a pumping plant on the Murray River below Merbein, probably near Ned's Corner, and to construct earthen main water channels throughout the remainder of the area of 500,000 acres of good Mallee country, and also into the lands extending from the western boundary of that country to the South Australian Border, was set down at £300,000 at present prices for machinery, &c., and current rates of wages. But this sum would not also provide a supply for the Mopoke and Birthday Plains and Sunset country. It was stated by Mr. Kenyon that the levels of the Sunset and Birthday Plains country will permit the extension by gravitation of the Wimmera-Mallee system of channels, if the area between there and Paigüie—the furthest northern point to which the surveys of the Wimmera-Mallee water channels have been extended—is found suitable for the conveyance of this water. Should a practicable route be obtained an expenditure of £30,000 or £40,000 would be necessary to water that country by gravitation. Investigation of this matter is, however, being deferred by the Commission until other Mallee areas, such as Patchewollock, Bumbang, Kooloonong, and North Millewa—which are known to be suitable for settlement, and readily commandable by water channels—have been surveyed. The Kooralong and Widgil country could be watered by an extension of the channels to be supplied from the Red Cliffs pumping station, and it is thought likely that the Rocket Lake and Mopoke Plain areas could also be commanded by an extension southward of those channels.

PROBABLE WATER RATE.

7. The water rate for the dry areas supplied by the pumping plants at Long Lake, near Swan Hill, and Nyah is from £10 to £12 per square mile. But those works were carried out some years ago, when prices of machinery, &c., and wages were much lower than at present. Moreover, had not the Wimmera-Mallee water been brought by gravitation to these areas, thus lessening the need for frequent pumping operations, the water rate would have been considerably increased in recent years. In the Millewa dry areas, between the Mildura railway and the South Australian Border, the rate will be from £15 to £25 per square mile per annum, because of the necessity to pump the whole of the supply, and the desire to make this scheme self-supporting. Though the average annual rainfall in the North Millewa country is the lowest in Victoria, the soil is regarded as the best in the whole of the Victorian Mallee. The State Rivers and Water Supply Commission is satisfied as to the stability of settlement in that district, and the prospects of production. It is also satisfied with the recent results obtained by running water through long lengths of earthen channels. The Commission is, therefore, prepared to carry out the water scheme in this large area of good country if railway facilities are provided, because it believes that, though the annual water rate will be high, the settlers will be well able to bear it.

TIMBERED LANDS.

8. As already stated, the North Millewa country is, on the whole, somewhat heavily timbered for Mallee lands, the trees consisting principally of tall mallee, pine, and belar. Consequently, a good deal of hand labour will be required to clear these lands and make them suitable for cultivation, as the ordinary mallee roller will not be able to break down the trees without some manual assistance. Hitherto, however, such lands have been in good demand by settlers in the Mallee, as the size of the trees denote the quality of the land, showing it has a strong loamy soil, which will give high yields of grain when cleared of timber and properly cultivated. In this instance the timber, instead of being burnt off on the holding, ought to be a source of profit to the settler if railway facilities to remove the timber to the market are provided simultaneously with the settlement of the country. There will be a good demand for the timber as firewood for the extensive pumping plants at Red Cliffs and Mildura, and for household purposes for the residents of those towns. The cultivators at those irrigation settlements will also require supplies of fencing posts and vine stakes. Therefore, the fact that the North Millewa country is well timbered ought to prove a benefit instead of a hindrance to the settlers.

ROUTES OF PROPOSED RAILWAYS.

9. Several routes for serving, by a railway or railways, the country lying between the Ouyen-Mildura line and the South Australian Border were brought under the notice of the Committee during its visits to that country. Two proposals branched off the Ouyen-Murrayville railway; one being from Walpeup, running north-west through the Parish of Pagnie to the eastern side of Mopoke Plain, and thence northward through the Rocket Lake country till nearing West Keera Tank, about 20 miles due west of Yatpool station, on the Mildura railway, and then turning west for about 30 miles, proceeding through the centre of the North Millewa district towards the South Australian Border. The route of this line from Walpeup to West Keera would be parallel with the Ouyen-Yatpool railway for close on 50 miles, keeping about 20 miles west of it. Its approximate length from Walpeup northward and westward to within 16 miles of the South Australian Border would be 80 miles. Witnesses urged, in support of this route, that it would maintain the system of paralleling the Mallee railways at distances about 20 miles apart, which had proved successful in the Southern and Eastern Mallee, both from the point of view of settlement and production. But they overlooked or were not aware that such a line, after passing through the settled parishes of Pagnie and Wynulet, would traverse on its eastern side a fairly large area of country unsuited for settlement, being fit for grazing only.

10. The other proposal was to branch off the Ouyen-Murrayville railway at Underbool, and run about 15 miles north-west, passing close to the Pink (salt) Lakes on their west side, and thence north, keeping a few miles to the east of the Sunset and Birthday Plains country, but nevertheless within reasonable carting distance of it, and proceeding through the Mopoke Plain and Rocket Lake country to Box Flat Tank—about 6 miles south-west of West Keera Tank, and some 30 miles due west of Carwarp—and thence turning westward for a length of about 25 miles, terminating 16 miles east of the South Australian Border. This route would be 75 miles in length. No survey has been made of either of these proposals; but from an inspection of the country it was estimated that the cost of railway construction for a broad-gauge line for either route would be about £5,500 a mile at present prices of rails, &c., and wages rates, or £440,000 for the extension from Walpeup, and £412,500 for the Underbool line. It was claimed for these routes that one long railway, starting at either Walpeup or Underbool, and going 50 miles northward and then 25 or 30 miles westward, would better serve the extensive territory lying between the

Ouyen-Mildura line and the South Australian Border than two shorter branch railways—one northward for 30 miles and one westward for 50 miles—as these would be more expensive to operate. A further reason given for a connexion with the Ouyen-Murrayville railway was that it would give the settlers a choice of either the Adelaide or Melbourne markets; and, moreover, if the Hopetoun railway were extended northward through Patchewollock to either Walpeup or Underbool, it would enable the wheat produced in this new district in the North-west Mallee to be railed direct through Murtoa, Horsham, and Balmoral to Portland for shipment abroad, or to Geelong, *viâ* Ararat and Lismore, for export. Either route would keep the grain off the Mildura railway, on which the traffic is increasing, and might before long, it was said, have to be duplicated in parts if that traffic were added to by taking all the expected Millewa production on to it.

11. Those advocating the extension from Underbool also pointed out that several thousand tons of salt would be despatched annually by rail from the Pink Lakes. The Committee visited these three lakes and saw the salt being gathered off their dried surfaces and carted 10 or 12 miles into Underbool over a bad road. The Lands Department lets on lease the right to gather the salt, and with nearer railway facilities it would get an increased rental. The lakes were so thickly incrustated with salt that men drove horses pulling skimmers over the surface gathering the salt into heaps, which were then shovelled into boxes on skids and hauled to the bank. The salt was of good quality, being used in its natural state for live stock and by butchers for brine and, when refined, for butter-making and table purposes. A charge of 18s. a ton is made for carting the salt into Underbool.

12. The other routes urged were from Carwarp westward towards the South Australian Border for a distance of 55 miles; from Red Cliffs, south-west for a few miles, and then westward for about a similar mileage, the cost of either of these proposals being estimated at £300,000; from Mildura south-west from a point between Mildura and Merbein, passing through some unoccupied blue-bush land for about 13 miles to near Benetook Tank, and thence westward to within 15 or 20 miles of the South Australian Border; and from Merbein south-west for some 14 miles through White Cliffs dry-farming areas—which are being used in some instances for wheat-growing—and thence southward, passing near Flagstaff and Derrick Tanks, into the North Millewa country, and westward to near the South Australian Border. The length of each of these latter projects would also be about 55 miles, and the estimated cost £300,000 without land purchase for the railway track close to Mildura and Merbein or for rolling-stock. It was urged in support of the extension westwards from Carwarp that it would pass through good agricultural land all the way, the country in the neighbourhood of Kooralong Tank being better than that in the vicinity of Benetook Tank; that there was ample room at Carwarp for a junction station and enlarged township, and that, being the nearest station to the seaboard, the railway rate on wheat for export, which would be the principal traffic forthcoming, would be less by the Carwarp route than from any of the other suggested junctioning stations on the Mildura-Merbein line. Those advocating the Red Cliffs connexion pointed out that that town promised within a few years to rival Mildura in importance, because of the extensive closer settlement for returned soldiers being undertaken there by the Government; that Red Cliffs would before long have its banks, high school, hospital, courts, &c.; and that the local railway station would have a good water supply for locomotive purposes and be equipped with a staff which could without much extra expense perform the work of a junctioning station. Witnesses urging Mildura as the starting point of the new line gave similar reasons to those stated by the advocates of the Red Cliffs connexion, but added that all the advantages to be established at the latter town, such as stores, banks, courts, high school, &c., were already in existence at Mildura, which, moreover, was the headquarters of the Shire of Mildura. The Merbein witnesses dwelt on the need of nearer railway facilities being provided for the wheat-growers on the dry areas or back-blocks at White Cliffs, which had been settled for several years, and could not progress as they should do unless those facilities were given. Some of these farmers had to cart their wheat from 12 to 18 miles into Merbein railway station.

VIEWES OF THE COMMITTEE.

13. The Committee had to set aside for the present both the Walpeup and Underbool proposals because, in the first place, the inspection showed that there was a much larger area of better country in the northern part of the County of Millewa than in the southern; and next, the survey of the latter lands had not been proceeded with, so that the levels have not been obtained, and consequently it is not known definitely if a supply of water for domestic and stock purposes can be carried into South Millewa at a reasonable cost. Moreover, as far as is known up to now, the greater part of the supply to water that extensive area will have to be pumped from the Murray River and taken first through North Millewa. In view of the urgency of settlement in the County of Millewa the Committee considered it advisable to build a railway first in the northern part, where domestic and stock water will be soonest available.

14. It was recognised by the Committee that the Carwarp route offered the lowest railway rates to the settlers in North Millewa, but the small difference in these charges as compared with those from and to Red Cliffs was more than outweighed, in the opinion of the Committee, by having a railway connexion with a large prosperous centre of population, such as Red Cliffs promises to be before long. The objection to both the Mildura and Merbein proposals was that they would be too circuitous a route to the seaboard, and thus unduly increase the railway freight and passenger rates. Moreover, the extension westwards of a railway from Red Cliffs will give the wheat-growers on the south side of White Cliffs dry-farming area a station near Vicknabush Tank, and reduce their carting distance to about 10 miles. It is also probable that if Red Cliffs settlement makes the expected progress a local motor-train service will be run two or three times daily between Red Cliffs, Mildura, and Merbein, linking up those irrigation settlements.

RECOMMENDATION OF COMMITTEE.

15. The Committee considers from its inspection of the country and the evidence received, together with the results obtained by wheat-growers just across the South Australian Border on land not of such uniformly good quality and with a rainfall no greater, that the North Millewa country offers excellent opportunities for settlement and production. It therefore recommends the construction of a 5 ft. 3 in. gauge railway from Red Cliffs south-west to a point about 2 miles north of Kooralong Tank, and thence westward, passing near West Keera Tank and terminating 4 miles north-east of Varly's Tank, or thereabouts. The length of this branch railway will be approximately 35 miles. It will make 400,000 acres available for settlement. The route stated above is only roughly outlined, the railway construction engineers having to select the course of the line according to the levels of the country, grades, suitable sites for wayside and terminal stations and approaches thereto, and probable township sites. The Committee also suggests that the railway survey should be extended 10 or 15 miles westerly beyond the terminal point stated, so that the land surveyors may know how to map out the farm allotments and provide roads to fit in with a further extension of this railway towards the South Australian Border, probably a few years hence, as settlement progresses.

16. The estimated cost of this 35 miles of railway was £192,500, or £5,500 a mile, without rolling-stock. This was for the class of line usually built in the Mallee. But the Committee is of opinion that the cost of construction should not exceed £5,000 a mile, or a total outlay of £175,000; the estimated expenditure being kept down by limiting the maximum speed of the trains on this branch line to 20 miles an hour, thus allowing a reduction to be made in the quantity of ballast used; by restricting the equipment at stations to the minimum until the traffic justifies improvements in the accommodation; and by leaving the railway unfenced. In unoccupied Crown territory such as the North Millewa country, where the line will be surveyed prior to the farming allotments being marked out, there should be no severance of holdings, the railway track being similar to a public road. If those abutting on the railway frontage desire to fence their holdings they should do so at their cost, as they would if the railway track were a highway. The Railway Department ought to be under no legal obligation to fence the line, or any part of it, until the Commissioners consider it necessary for the safety of train-running to do so.

R. F. TOUTCHER,
Chairman.

Railways Standing Committee Room,
State Parliament House,
Melbourne, 2nd November, 1921.

[*Minutes of Evidence are not printed.*]