

MINISTRY OF POST WAR RECONSTRUCTION.

REGIONAL PLANNING DIVISION.

PRELIMINARY REPORT

ON A

PLAN FOR THE DEVELOPMENT OF THE AUSTRALIAN CAPITAL TERRITORY

AND JERVIS BAY IN RELATION TO THE SURROUNDING REGION.

December, 1945.

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1.

Introductory.

Preliminary studies are being made of the Australian Capital Territory considered as the nucleus of a region based on Canberra as regional centre and Jervis Bay as port. The construction of a railway by New South Wales between Yass and the A.C.T. and by the Commonwealth between Canberra and Jervis Bay as provided for in the Seat of Government Acceptance Act, 1909, and the development of Jervis Bay as a major port, would provide a more direct outlet to the seaboard for a large region in New South Wales with an area of 38,000 square miles and a population of 200,000, at present served by the ports of Sydney and Melbourne. This region linked with the development of the A.C.T. comprises the whole of the Southern Tablelands and Monaro and South Coast regions and portions of Illawarra, Murrumbidgee and Lachlan regions of New South Wales. It includes the following towns - Goulburn, Cootamundra, Narrandera, Queanbeyan, Young, Junee, Temora, Nowra and Yass.

The above area has been defined by a line equidistant by rail from Jervis Bay via Canberra and either Sydney or Melbourne assuming that the Victorian railways have been standardised to the 4'8½" gauge and that the intersystem boundary presents no barrier to the free passage of goods. If the Victorian railways were not standardised the traffic in the main would be divided between the two systems and additional area of 19,000 square miles with an additional population of 70,000 would use Jervis Bay as a port.

2.

Resources of Region.

The resources of the region first defined are now briefly considered. Physiographically, the region comprises, passing from east to west, a well watered coastal fringe where the principal industries are dairying and forestry, followed by a belt of rough, broken country almost devoid of soils and then by a belt of tablelands which includes the A.C.T. and is partly agricultural and pastoral country of gentle slopes mainly devoted to wheat farming and which leads to the inland plains lying between the Murrumbidgee and the Lachlan rivers with irrigation and grazing predominating. It is thus a representative slice of typical New South Wales topography. The rainfall varies from 30 - 40 inches on the coast to 15 inches in the west. East of the dividing range there are summer rains; west, winter rains with an average reliability of 40%. About 85% of the region has no months aridity. The three principal generalised soil types present are, east to west, podsol, red brown earths and terra rossas, and mallee soils. No adequate soil surveys have been made of the region. The water resources of the region are very substantial both on the coast the highlands and the inland plains. They include the Shoalhaven and Clyde as coastal rivers Lake George basin, the headwaters of the Snowy river, the upper half of the Murrumbidgee basin and portion of the Lachlan basin. All resources are capable of considerable development both for irrigation and hydro-electricity and would support increased population.

The mineral resources are restricted. Gold mines are scattered through the hilly country. In the past considerable quantities of gold have been obtained from Braidwood, Captain's Flat and Major's Creek on the upper Shoalhaven River. The only coalfield is the Clyde which is not worked. The region is proximate to the Southern Coalfield.

The forest resources are ample and capable of large expansion by plantation of pines and increasing hardwood forest reserves. There are excellent timber stands close to the coast and ports. About 25% of the fish caught off the New South Wales coast are obtained from this region.

3.

Present Use of Resources and Future Development of Region.

Land utilisation is shown on map 4. It will be seen that all primary industries are represented, viz: dairying, sheep, cattle, wheat, rice, fruit and vegetables. There is room for expansion in all fields of

production except rice. Dairying could be extended along the coast. The tablelands and slopes could be developed most, subject to the limitations of soil conservation. Rice growing has been a highly successful irrigation crop. Depending on market prospects, citrus growing could be expanded.

Metal mining and coal mining are not important. At Bungonia near Goulburn there is a large deposit of limestone which is used in steel making.

The present development of power resources is shown on map 5 which shows electric power stations and supply lines. Burrinjuck is a hydro-electric station. Canberra and Yanco are steam generating stations of over 3,000 KW. The proposed Snowy river hydro-electric scheme develops 250,000 KW, the Shalhaven scheme 50,000 KW, and both would be tied in with the existing Burrinjuck - Port Kembla - Sydney grid. The principal towns of the region, Canberra, Goulburn, Queanbeyan, Wagga, Junee, Cootamundra, Yass and Young are connected by transmission lines of not less than 33,000KW capacity. The prospects of cheap power are as good as anywhere else on the Australian mainland. This points the way to extensive development of secondary industries throughout the area.

4. Region treated as a major zone of decentralisation.

The size of the three towns, Canberra, Goulburn and Wagga the availability of electric power and of a wide diversity of raw materials coupled with the development of Jervis Bay as a port with adequate railway communication with the interior in accordance with original intention at federation, would enable this region to be treated as a major zone of decentralisation. An employment analysis of a typical district of the region is compared with that of a partially industrialised country town such as Geelong, Victoria, viz :

						<u>Country town of</u> <u>50,000</u>
Forestry, mining, etc.	..	..	..	2	-	-
Farming	..	..	..	39	2	2
Industrial	..	..	..	19	43	43
Transport	..	..	..	6	8	8
Business, professional, personal						
service	..	..	..	23	30	30
Pensioners and others	..	..	..	11	17	17
						<hr/>
Total breadwinners	..	..	..	100%	100%	100%
						<hr/>

It will be seen that there is considerable scope for expansion of secondary industries. In addition, it is considered desirable to concentrate our limited capital resources and choose one of the three towns as suitable for expansion up to an optimum size of say 150,000. There is an obvious need for a large provincial city between Melbourne and Sydney. The logical choice would be Canberra where the nation has already incurred a large expenditure in making full preparation for a large city and which can expand fully at a minimum of expense.

5. Australian Capital Territory : its future development.

The future development of the A.C.T. is then envisaged with Canberra fulfilling the following functions :-

- (1) National capital, administrative centre, site of national university and Institutes of Social Science and Medicine.
- (2) Commercial and distributing centre as an intermediary between the "hinterland" of the region and the port Jervis Bay.
- (3) Sub-regional centre for A.C.T.

- (4) Area for development of selection secondary industries based on products of region.
- (5) Area for promotion of agriculture sufficient to provide fresh food for the city.
- (6) Health, recreation and tourist resort.

As a capital city and administrative centre only, Canberra could not cater for the needs of the whole of the population. Those not desirous of undertaking administrative work would be obliged to leave the territory in order to engage in secondary industry or other occupations. By fostering selected industries in the A.C.T. a greater measure of stability could be achieved. Secondary industries set up would have the advantage of a close internal market and a port for export. The existing Canberra electric generating station linked in with the Burrinjuck - Port Kembla grid and any proposed stations at Snowy or Shoalhaven rivers would provide adequate cheap power. The presence of extensive forests suggests the establishment of a paper industry. Other industries that would be considered would be optics, printing, ceramics, furniture making and building materials supply, but perhaps the first likely to be established would be those comprising the processing of the rural products, the region such as the milling of flour and other cereal products, the slaughter of animals and derivative industries such as meat canning and the leather industry, fruit and vegetable canning, wool scouring, spinning and weaving, manufacture of dairy products and bacon curing. A closer analysis of the region would enable a careful selection of desirable industries to be made. With the promotion of horticulture and production of fresh food for local consumption in the A.C.T. would be given a balanced diversified economy enabling Canberra to become a modern city completely adapted to and integrated with the region of which it is a centre.

6. JERVIS BAY.

In accordance with the Commonwealth constitution, Acts passed in 1909 and 1915 transferred 28 square miles of land and water at Jervis Bay from New South Wales to the Commonwealth to provide for a future federal port. In 1912, the Royal Australian Naval College was located at Jervis Bay and a group of buildings constructed. Subsequently, a breakwater, power house, workshops and other works were added. The Naval College was transferred to Flinders Naval Base, Victoria in 1930. The buildings were then leased as seaside accommodation houses and an attempt was made to develop Jervis Bay as a tourist resort for which it is well suited.

(a) As a Port:

Jervis Bay is 82 Miles south of Sydney and is at present classed as an intermediate port. The bay is extensive with a good inlet. The depth over the port is 120 feet and inside there are good anchorages of over 30 feet at low water covering about 35 square miles. The western side of the bay is exposed to heavy south easterly weather.

There are three wharfs or jetties. The Naval College jetty has a depth of water of 13 feet and is protected by a short breakwater. It is 200 feet long with no facilities. At Huskisson there is a small jetty with 9 feet of water and a boat anchorage in the estuary of the Currumbene Creek. The lighthouse jetty is about 240 feet long with 10 feet depth of water and can accommodate vessels up to 80 tons.

(b) As a Naval Base:

With the removal of the Naval College and the building of the graving dock at Sydney, Jervis Bay does not appear to have any future as a naval base until further developed.

East of Lake Windermere, the Royal Navy are at present operating on an air strip of limited length.

(c) As a Flying Boat or Seaplane Base:

St. George's Basin is a landlocked basin with a narrow channel to the sea known as Sussex Inlet. The tidal rise and fall within the basin is less than six inches. Average depth is about 30 feet. Runs of four miles in two directions at right angles are available. On the north side, an R.A.A.F. torpedo-bombing base with shipways, moorings, hangar, tarmac and complete signalling installations has been establishing during the war. The absence of fog and nearby high ground make St. George's Basin an almost perfect flying boat base. The south east quarter only of the margin of the basin is Commonwealth Territory.

Sussex Inlet is a narrow channel with a sand bar at its mouth which continually shifts with wind, tide and current. At low tide depth of water is 18 inches. At high tide, a 60 feet boat can pass through. Tidal current in channel is about 3 miles per hour. Depth of channel is about five feet. Dredging and widening of the inlet and training walls or breakwaters to eliminate the bar would be very costly so that the Basin has no possibilities as an alternative port even for coastal steamers.

7. COMMUNICATION BETWEEN YASS, A.C.T. AND JERVIS BAY:

(a) Between Yass and Canberra:

Railway communication between Yass and Canberra is very circuitous. By rail the distance is 122 miles, but, by main road, only 40 miles. The difference in travelling time is $3\frac{1}{2}$ hours. The Seat of Government Acceptance Act 1909, clause 9 (see Appendix I) provides for a railway between Yass and Canberra. A permanent survey has been made by the New South Wales railway department of a route which generally follows the alignment of the Yass-Canberra main road.

(b) Between Canberra and Jervis Bay:

The existing communication between Canberra and Jervis Bay is very roundabout. The rail journey is via Goulburn, Moss Vale, Uanderra and to Bomaderry, thence 22 miles by road. Total distance by rail is 194 miles. The most direct through main road connection is via Braidwood and Nerriga, a distance of 145 miles. Direct communication is provided for in the Seat of Government Acceptance Act 1909 (see Appendix I). In 1909, a trial survey was made for the Commonwealth of practical route between Tarago on the Goulburn-Cooma line and Jervis Bay. This is the most direct route and crosses the Shoalhaven upstream from the proposed dam site. The crossing could readily be made at the dam site and save the cost of bridging. Alternative routes between Canberra and Jervis Bay have been considered. A shorter connection between a point 20 miles east of Goulburn on the Sydney-Albury line and Jervis Bay traverses precipitous country and is impracticable. Routes south of the direct route via Braidwood are longer and do not pass through better country for development. The opening of a main road from Doughboy to Charleyong would give a fairly direct road from Canberra to Jervis Bay.

The building of railways connecting Yass and Jervis Bay directly to Canberra would provide a main trunk line to Jervis Bay as a port. Approximate mileages given in Appendix III show that from Yass Junction to Sydney is 195 miles but to Jervis Bay is only 165 miles, 30 miles nearer. The area served by Jervis Bay as a port has been defined on the basis of these distances.

8. SUMMARY.

Based on Canberra as regional centre and Jervis Bay as port, it is proposed to investigate the development of a region comprising the Australian Capital Territory, Jervis Bay and the Southern Tablelands region, Monaro and South Coast region and portion of Illawarra, Murrumbidgee and Lachlan regions of New South Wales. An important feature of the region is that it embraces the headwaters of the Lachlan, Murrumbidgee, Shoalhaven and Snowy Rivers.

The hydro electric potentialities of the Snowy, Shoalhaven and Lachlan Rivers, together with the existing southern electric grid based on Burrinjuck and the steam generating stations at Canberra and Port Kembla, would give the region an abundance of cheap power. With this cheap power, the wide variety of natural products available in the region gives enormous scope for the development of secondary industries. The region thus lends itself as a major zone of decentralization between Sydney and Melbourne with development concentrated on Canberra where the Commonwealth Government has already incurred a large expenditure in laying the foundations of a large city and has legally provided for its development and expansion with Jervis Bay as its port.

9. RECOMMENDATION.

It is recommended that a comprehensive survey of the resources of the Australian Capital Territory, Jervis Bay and the South Tablelands, Monaro and South Coast, Illawarra, Murrumbidgee and Lachlan regions of New South Wales be made and a complete plan of development by stages be prepared in collaboration with appropriate Commonwealth and New South Wales Government Departments.

APPENDIX I.

Extract from Seat of Government Acceptance Act, 1909, first
schedule, clauses 6 to 9.

6. "For the purpose of providing access to and from the Territory from and to the sea, the State shall grant to the Commonwealth -
- (a) the right to construct, maintain, and work a railway or other means of communication from the Territory to Jervis Bay and to procure in New South Wales timber ballast and other material necessary for such construction by paying such compensation in accordance with the laws of the State as is payable by the State when constructing State railways; and
 - (b) the right on terms to be agreed upon, or in default of agreement to be determined by arbitration, to cross over or under, by road or railway, and State Railway, and to connect with and run trains over any portion of a State railway.
7. The State shall not claim compensation from the Commonwealth for the value of any right, title, or interest of the State in land of the State required by the Commonwealth for the purpose of the railway constructed by the Commonwealth between the Territory and Jervis Bay.
8. The Commonwealth shall grant to the State on terms to be agreed upon, or in default of agreement to be determined by arbitration, the right to cross over or under by road or railway or to connect with and run trains over the railway constructed by the Commonwealth between the Territory and Jervis Bay.
9. In the event of the Commonwealth constructing a railway within the Territory to its northern boundary, the State shall construct a railway from a point near Yass on the Great Southern Railway to join with the said railway, and the Commonwealth and the State shall grant to each other such reciprocal running rights as may be agreed upon, or as in default of agreement may be determined by arbitration, over such portions of that railway as are owned by each".
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APPENDIX II.

Extract from Seat of Government Acceptance Act, 1909, first schedule,
clause 10.

"The State shall grant to the Commonwealth
without payment therefore the right to use the waters of the Snowy River,
and such other rivers as may be agreed upon or in default of agreement may
be determined by arbitration for the generation of electricity for the
purposes of the Territory, and to construct the works necessary for that
purpose, and to conduct the electricity so generated to the Territory".

APPENDIX III.

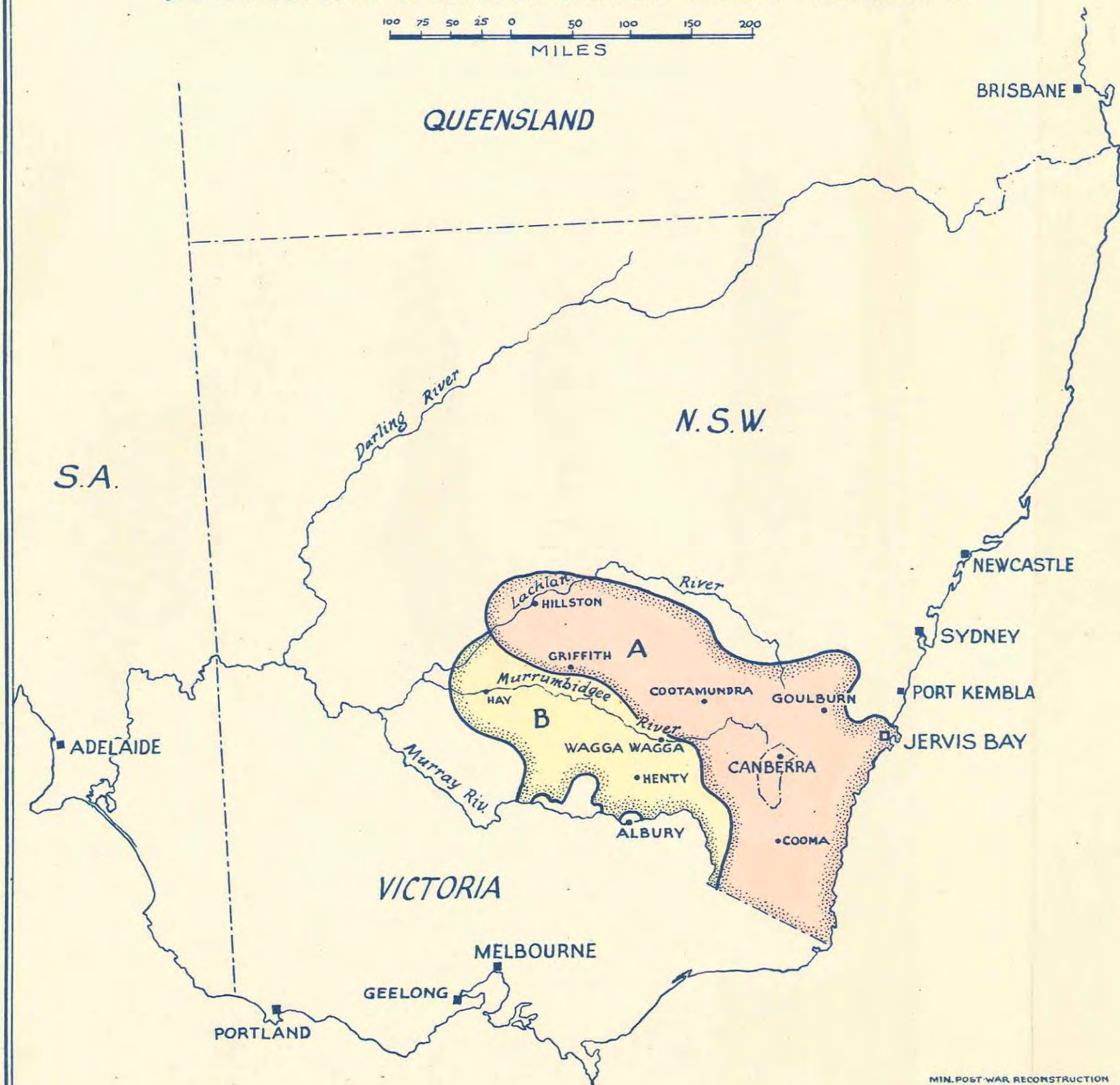
Table of Railway Mileages Yass - Canberra - Jervis Bay.

	<u>Miles.</u>
Yass to Canberra (Permanent survey)	46 $\frac{1}{2}$
Canberra to Bungendore	23
Bungendore to commencement of Jervis Bay Survey... ..	9
Goulburn-Canberra railway to Jervis Bay	89
Trial Survey via Charleyong	<u>167$\frac{1}{2}$</u>
Yass to Canberra (Permanent survey)	46 $\frac{1}{2}$
Canberra to Bungendore	23
Bungendore to commencement of Jervis Bay survey	11
Goulburn-Canberra railway to Jervis Bay	81
Trial survey via Mayfield	<u>161$\frac{1}{2}$</u>
Sydney 000 Yass Junction	00
Yass Junction 195 Yass town	3
	162
	<u>165</u>
Sydney to Yass Junction	195
Yass Junction to Jervis Bay	165
Difference	<u>30 miles</u>

SOUTH-EASTERN AUSTRALIA

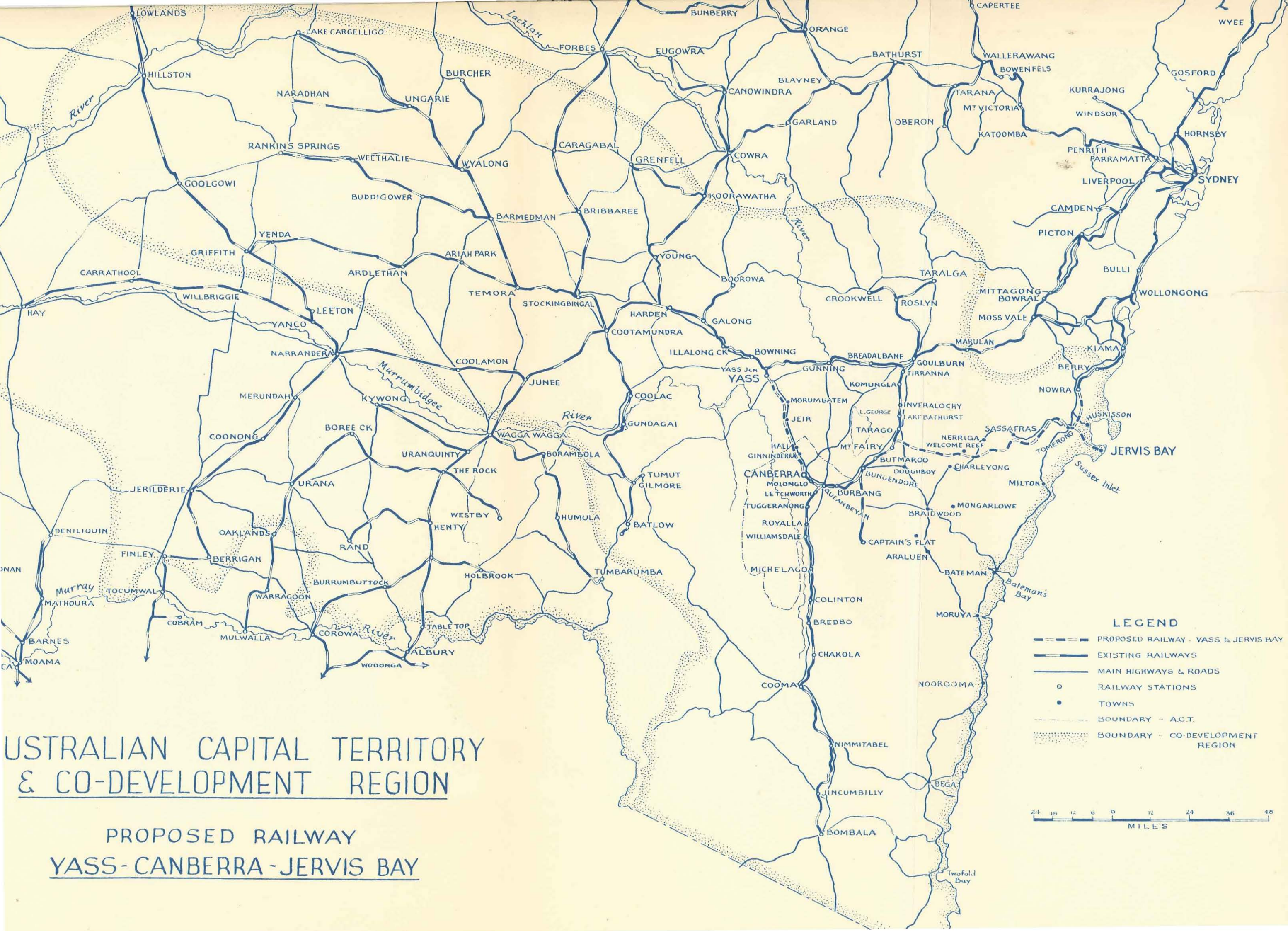
SHOWING AREA SERVED BY JERVIS BAY AS A PORT

- A. THIS AREA IS DEFINED ASSUMING THAT VICTORIAN RAILWAYS ARE STANDARDIZED
B. THIS AREA WOULD BE SERVED BY JERVIS BAY PENDING STANDARDIZATION



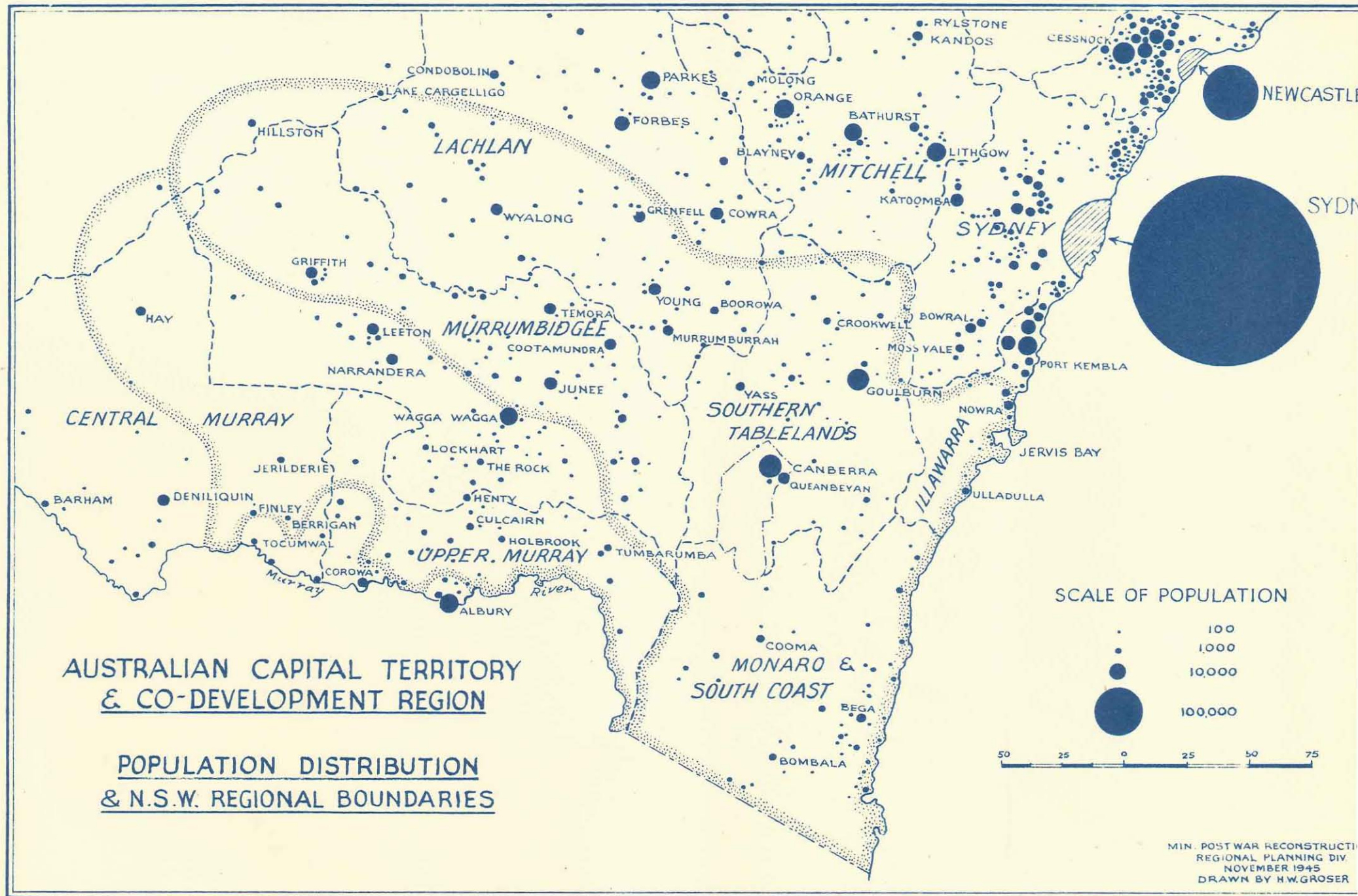
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AUSTRALIAN CAPITAL TERRITORY & CO-DEVELOPMENT REGION

PROPOSED RAILWAY YASS-CANBERRA-JERVIS BAY



MIN. POSTWAR RECONSTRUCTION
REGIONAL PLANNING DIV.
NOVEMBER 1945
DRAWN BY H.W. GROSER

