

- (13.) *The improvement of the navigation of the Waikato River and its tributaries, the effect on such rivers and on the adjacent swamp lands of the improvement works proposed or already executed by the Waikato River Board, and generally as to the navigation of those rivers.*

We recommend that in that portion of the River Waikato between Huntly and Meremere experimental work should be carried out on the lines already described, and that the Waipa River and all the navigable creeks running into the Waikato be improved by snagging, dredging, and willow-cutting.

We are of opinion that the works carried out by the Waikato River Board have had the effect of very slightly raising the level of the river-surface for some short distance above their groynes, but that such raising has not had any material result upon the adjacent swamp lands.

The works of the Waikato River Board have not in the slightest degree affected the drainage of the Whangamarino and Maramarua Swamps, and, as they have not improved either the navigation or the drainage, the money spent thereon has been wasted.

We think it possible that with an expenditure that should not be excessive an improvement in the navigation of the shallow portions of the river above Mercer may be effected sufficient for the summer traffic of vessels drawing up to about 4 ft. loaded. In respect to a length of about 7 miles of navigation within the delta, we advise that it would be unwise to make any expenditure therein, and that the navigation of this portion of the Waikato River must continue to be tidal during the summer season.

- (14.) *Whether a bridge should be constructed across Waitemata Harbour to connect the City of Auckland with the northern district.*

We are of opinion that with the present population the expenditure that would be necessary is not justified.

General.

We were also required to report generally upon such other matters as might come before us in the course of our inquiries, and consequently make the following recommendations :—

1. That self-recording gauges be erected at various points within the Waikato basin, with the object of affording data (a) as to the changes of level of the river and its discharge, (b) as to the rainfall; and that these gauges be installed at the expense of the Government.

2. That the Waikare Drainage Board be not permitted to construct any works that will have the effect of preventing the district from acting as a flood-water relief reservoir to the Waikato River until full information and data have been obtained and the effect of the proposals upon the flood river-level has been carefully investigated.

3. That investigations should be instituted as to the possibility of regulating and controlling the discharge from Lake Taupo into the River Waikato, with the object of equalizing the flow throughout the year so as to partially reduce the flood-levels and to provide an increased water-depth during the summer. We are of opinion that this work is one of national importance and should be undertaken by the Government.

4. That the removal of material from the centre of the River Waikato should be encouraged and no royalty charged thereon.

5. That the existing Waikato River Board should be abolished and a Waikato River Conservation Board be constituted; that the existing debt of the present Board remain a charge upon the districts now responsible therefor.

6. That groyne B across the entrance to the north channel through the delta of the Waikato River be forthwith removed.

7. That flying surveys be made from Kauri Point and Northcote to the Main Trunk line near Kaukapakapa, with the view of determining the feasibility of a railway connection.

Mr. James Begg wishes it to be recorded that, not having professional engineering knowledge, he has accepted the technical details provided by the two engineering members of the Commission.