

APPENDIX I – WAITAKI HYDRO ELECTRIC POWER SCHEME

The Upper Waitaki Scheme utilises the water of Lake Tekapo, Pukaki and Ohau to generate electricity at five power stations, namely Tekapo A and B, and Ohau A, B and C, before the waters are discharged into Lake Benmore for use at the three mid Waitaki stations; Benmore, Aviemore and Waitaki. There is also potential for further hydro generation downstream of the Waitaki Power Station.

The following is a description of the main Waitaki Hydro Power System structures and facilities which are within the Waimate District. Plans showing the core site areas that fall within the Waimate District follow. Rules relating to these areas are contained in Section 11 Utilities.

Benmore

With a capacity of 540 MW Benmore is the second largest hydro station in New Zealand. Benmore is also the southern end of the HVDC link which joins the North and South Island electricity systems. The dam crest is 823 metres long and 110 metres high. Lake Benmore is a popular boating and fishing lake with attractive lake shore camping and picnicking areas.

Aviemore Power Station

Aviemore is the middle station in the Mid Waitaki chain. It has a capacity of 220 MW. The Aviemore dam has a total length of 760 metres and a height of 58 metres. Lake Aviemore is a popular recreation area with attractive picnic and camping areas.

Waitaki Power Station

Waitaki Power Station was the first station to be built on the Waitaki River. The section of the dam between the powerhouse and the North (Waimate District) side of the river acts as a 354 metre long ungated spillweir. The historic powerhouse building on the South (Waitaki District) side of the Waitaki River accommodates 7 generators which have a combined capacity of 150 MW.



Lake Benmore

Benmore Dam

River

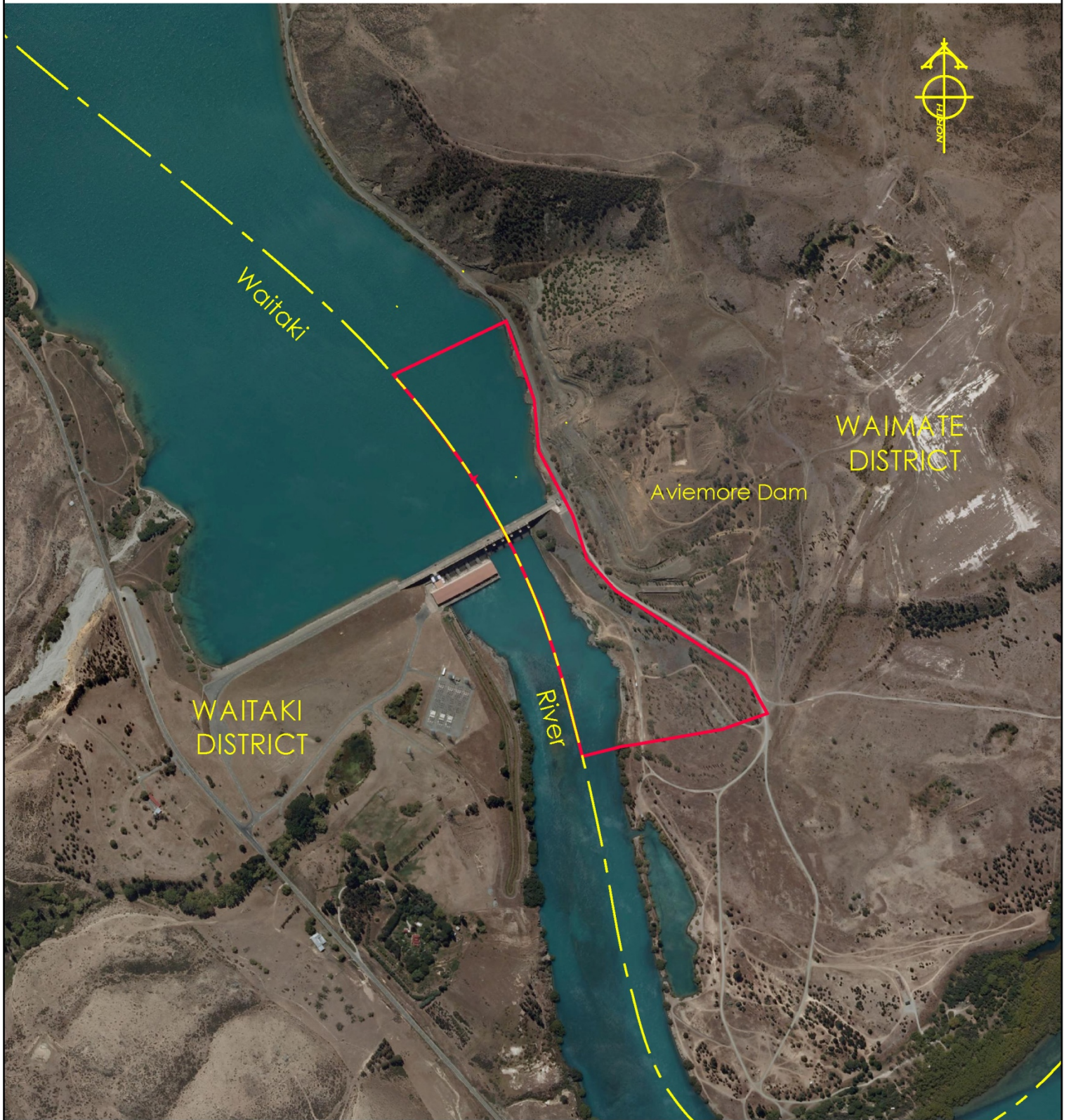
WAITAKI DISTRICT

Waitaki

WAIMATE DISTRICT

Benmore Core Site

Scale 1:10000@A4



Aviemore Core Site

Scale 1:10000@A4



Waitaki

WAIMATE DISTRICT

Awakino Dam

WAITAKI DISTRICT

River

Waitaki Core Site

Scale 1:5000@A4