

**A STUDY OF THE GEOMORPHIC, SOIL AND
GEOHYDROLOGICAL CONDITIONS OF THE
TIMOR WEST/BLACK RANGES AREAS**

Chris Day

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ABSTRACT

The Timor West/Black Ranges area is a region of complex geology and hydrology where dryland salting is occurring in a variety of situations. Of major concern is the rising saline watertable which threatens extensive alluvial cropland near Timor West.

The causes and mechanisms of salting at Timor West/Black Ranges are discussed, drawing together hydrogeology and terrain information. Particular emphasis is given to the influence of Tertiary buried streams (deep leads) on shallow groundwater. Drilling, together with a review of relevant mining records provided important groundwater information. Soils and terrain maps were compiled in order to determine possible recharge zones and provide information relevant to land management planning.

Land management options are discussed and proposals for further study highlighted. The need for wider monitoring of groundwater conditions and deep lead influence at Timor West are examples.

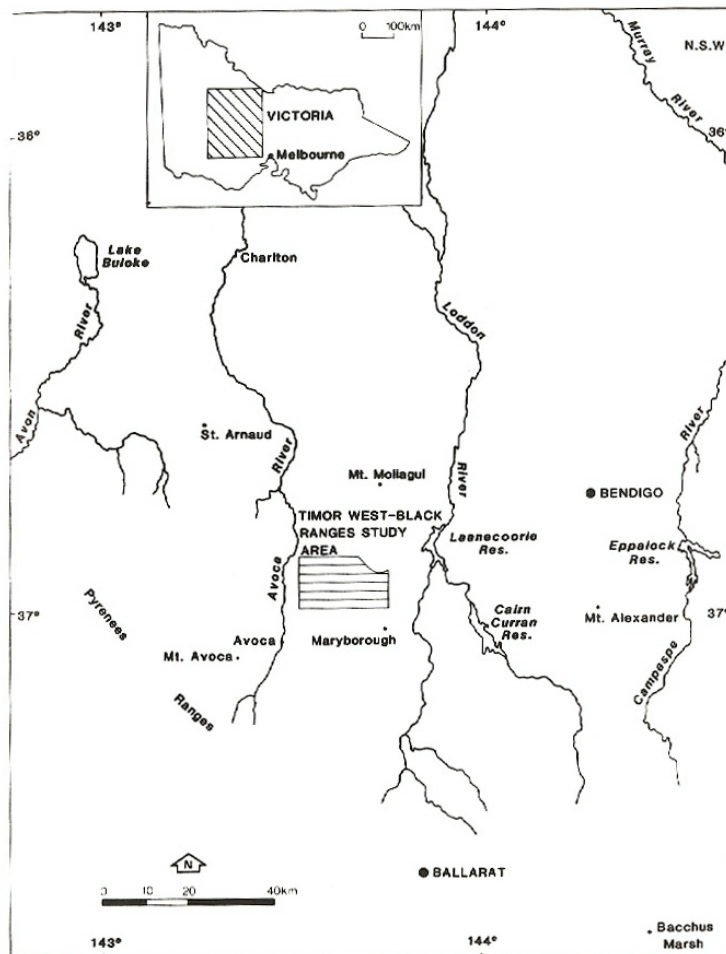


Fig. 1 – Timor West – Black Ranges Study Area – Locality Map