

728122

WANDERER RIVER

This land system is restricted to an area immediately north of Elliott Bay. It consists of undulating plains underlain by acidic rocks which are correlates of the Cambrian Mount Read Volcanics (White in Large et al 1987). These are the host rocks for the volcanogenic massive sulphide deposits which occur to the north (e. g. at Queenstown and Rosebery). Detailed exploration over the last forty years has led to the discovery of a number of small deposits (Large et al 1987) in the Wanderer River Land System. Exploration tracks and grid lines are common in the area. The Lewis and Hudson Rivers flow through the middle of the land system.

Organic soils cover most of the area and typically overlie weathered bedrock and there is a general lack of quartzitic gravels common beneath the peats of other land systems. These soils support open sedgeland/heath, often with scattered taller individuals of *Banksia marginata* and *Agastachys odorata*. Forested and scrub areas on the western boundary of the land system were not examined

during field work, and probably have shallow peats overlying *deeper* mineral soils. A discussion of sedgeland/heath-forest boundaries between this land system and the Mainwaring River Land System is presented in the previous land systems text.

Sheet erosion of peat is a major land degradation problem in the area, more so than the bifurcation of exploration tracks which has led to the development of deep muddy wallows. Sheet erosion in the region has been documented by Pemberton (1988) and appears to have formed through frequent burning of the sedgeland/heath vegetation. As a result peat has been removed from well drained slopes, crests and ridges. This was probably initiated prior to European exploration in the area as Aborigines frequented the area between Elliott Bay and Birchs Inlet and kept it open by firing (Jones 1974). Recent fires have been attributed to fishermen, Commonwealth and State Government employees and people involved in mineral exploration. Peats in swampy low lying areas are not as severely affected, possibly due to longer periods of waterlogging and higher silt or sand contents.

LAND SYSTEM
WANDERER RIVER

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Area (ha): 21182



ALTITUDINAL RANGE(m)	0-300 APPROXIMATE ANNUAL RAINFALL (mm) 1500-2000	
SITE NO. /ALTITUDE (m)/ASPECT	48/180/-	No site data
TOPOGRAPHY	Undulating plains with prominent river valleys	
Position	Exposed flats, slopes and crests	River valleys
Typical Slope()	0-10	5-20
Proportion(%)	80	20
GEOLOGY	Cambrian acid to intermediate and associated volcanic rocks	
NATIVE VEGETATION	Open sedgeland/heath	Forest/scrub
	<i>Gymnoschoenus sphaerocephalus</i>	<i>Eucalyptus nitida</i>
Floristic	<i>Helichrysum pumilum</i>	<i>Leptospermum scoparium</i>
As sociation	<i>Calorophus elongatus</i>	<i>L. nitidum</i>
(See Appendix 1	<i>Restio monocephalus</i>	<i>Cenarrhenes nitida</i>
	<i>R. australis</i>	<i>Anopterus glandulosus</i>
for common	<i>Lepvrodia tasmanica</i>	<i>Monotoca glauca</i>
names)	<i>Lepidosperma filiforme</i>	<i>Bauera rubioides</i>
	<i>Leptospermum nitidum</i>	<i>Nothofagus cunninghamii</i>
	<i>Banksia marginata</i>	<i>Anodopetalum biglandulosum</i>
	<i>Melaleuca scruamea</i>	<i>Atherosperma moschatum</i>
	<i>Lycopodium serpentinum</i>	<i>Phyllocladus aspleniifolius</i>
	<i>Tetrarrhena acuminata</i>	
SOIL Surface(A or P horizon) Colour (moist) and texture	Very dark greyish brown (10 YR 3/2) fibrous peat over similarly coloured muck peat	Dark reddish brown fibrous peat
Subsoil (or B horizon) colour (moist) and textu	re	Brown loam, clay loam or light clay
Primary Profile form	Organic	Uniform/Gradational
Depth surface horizon(m)	0.40	No site data
Typical total depth(m)	0.40	"
Permeability	High	Moderate
LAND USE	Nature conservation, mineral exploration	
HAZARD	Severe sheet erosion	