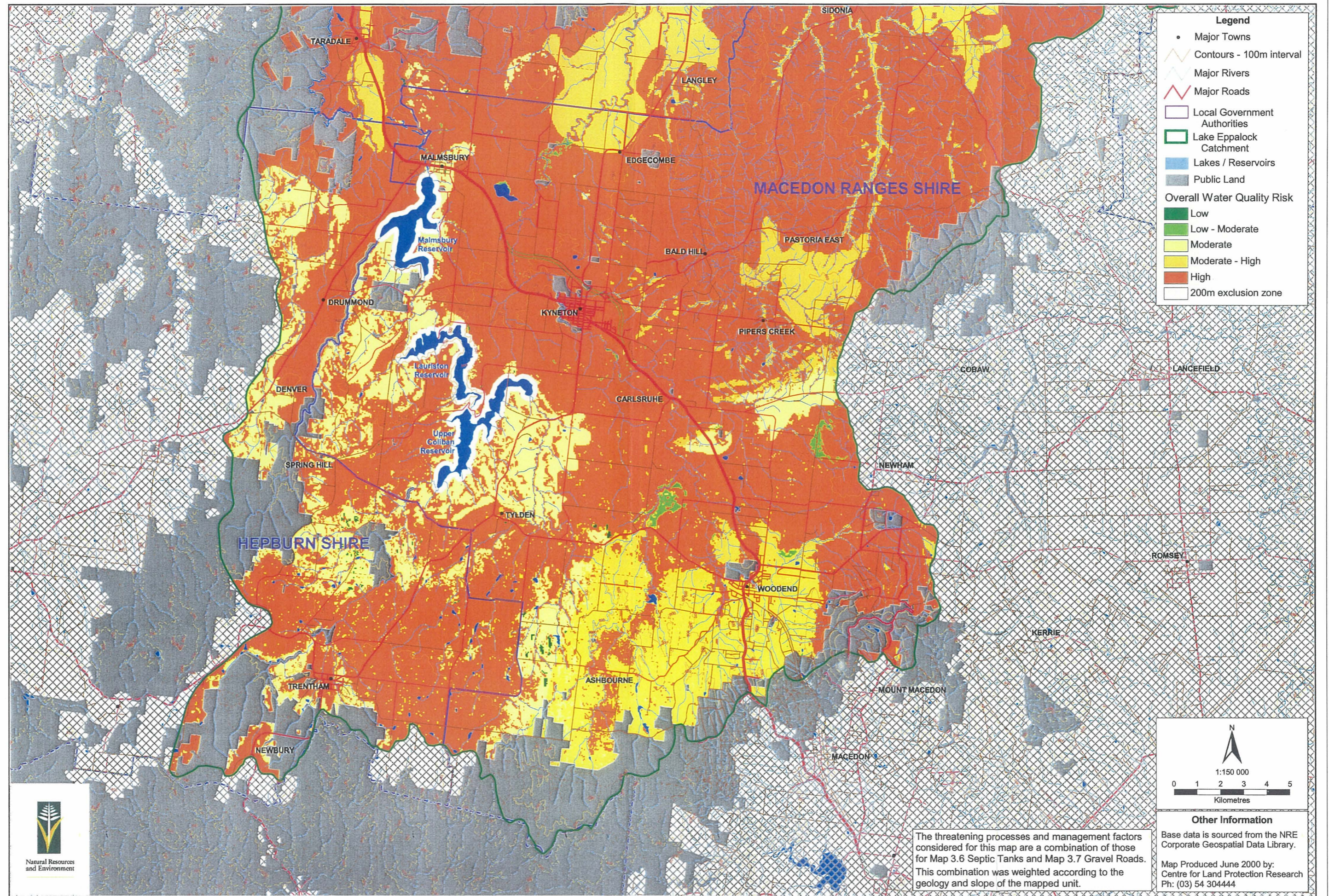


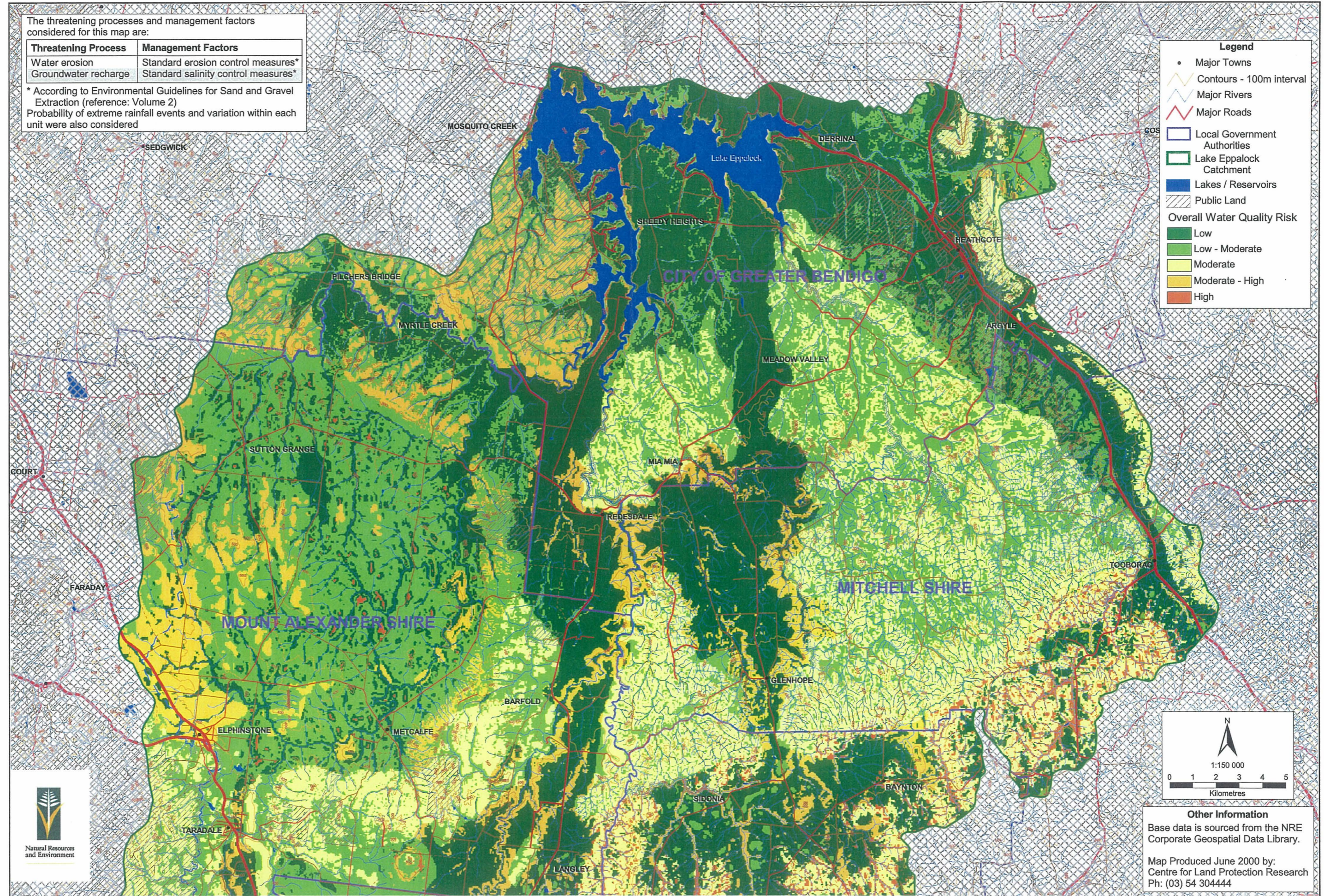
Map 3.8b Risk of Subdivision on Water Quality, Southern Lake Eppalock Catchment

3.8b Subdivision



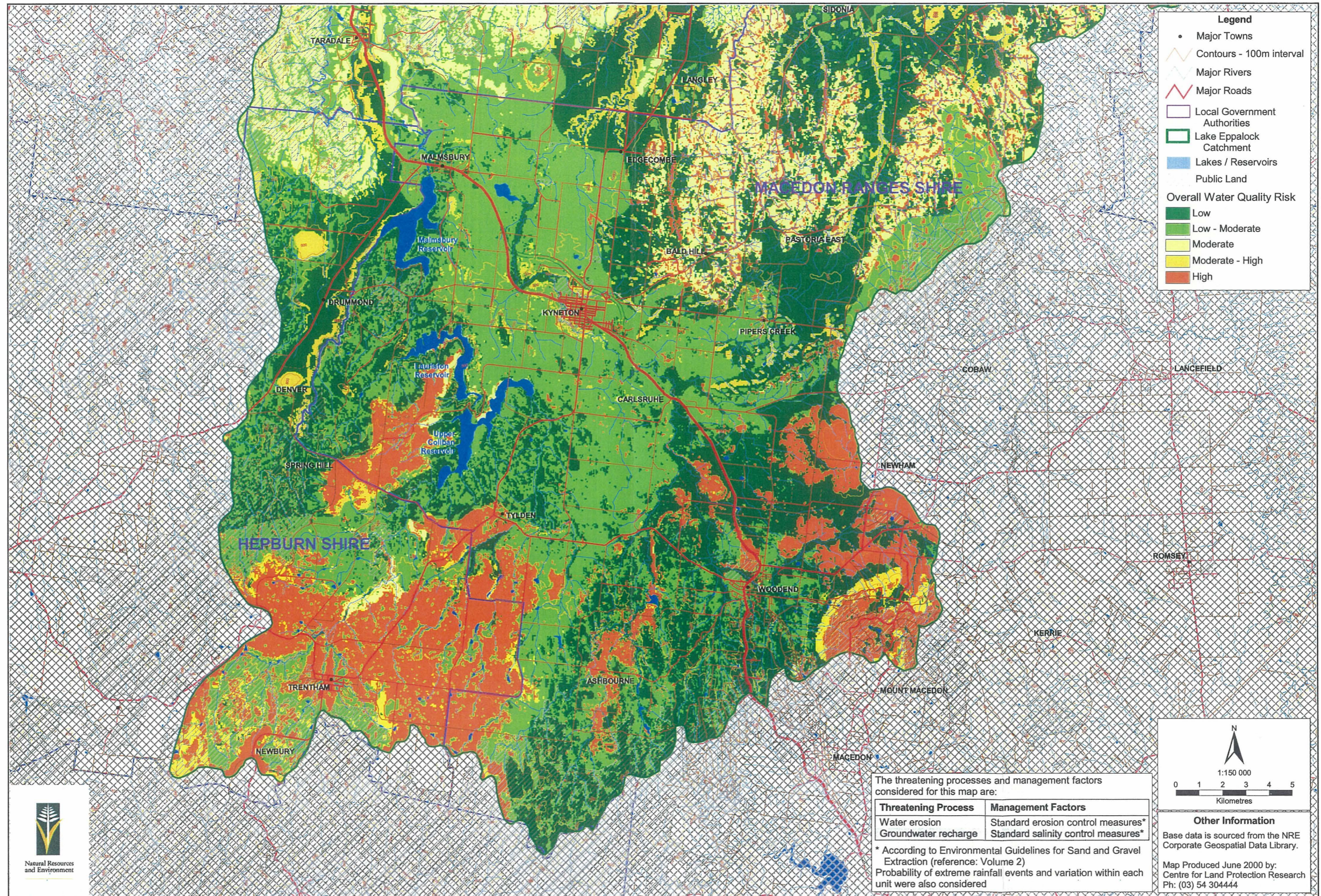
Map 3.9a Risk of Extractive Industries on Water Quality, Northern Lake Eppalock Catchment

Map 3.9a Extractive Industries



Map 3.9b Risk of Extractive Industries on Water Quality, Southern Lake Eppalock Catchment

3.9b Extractive Industries



## 4 LAND UNIT DESCRIPTIONS

### 4.1 Land Unit Nomenclature

Approximately 155 land units have been mapped at the 1:40 000 scale across the Lake Eppalock Catchment. The land units are the basis for determining the threatening process susceptibility and water quality risks. Information for these land units has been derived predominantly from existing land study reports. The reports used in this study included Baxter and Boyle (1996), Bluml, Boyle and Jones (1995), Singleton and Lorimer (1992) and Lorimer and Schoknecht (1987).

The nomenclature used to describe the land units is based on the key attributes of the land unit namely landform element, soil type (order and sub-order according to Isbell (1996)), and a suffix to denote other unique distinguishing factors (Table 4.1). As an example, a land unit denoted dCab2 is a steep slope (landform element), Chromosol (soil type order), brown (soil type sub-order) and has other soil type features that distinguish it from a land unit denoted dCab1 (suffix).

**Table 4.1** Nomenclature used to describe the land units.

Landform element		Soil type: order <sup>1</sup>		Soil type: sub-order <sup>1</sup>		Suffix
<b>a</b>	Sharp crest	<b>A</b>	Anthrosols	<b>aa</b>	Red	<b>1</b>
<b>b</b>	Gentle (broad) crest	<b>C</b>	Chromosol	<b>ab</b>	Brown	<b>2</b>
<b>c</b>	Very steep slope	<b>D</b>	Dermosol	<b>ac</b>	Yellow	<b>3</b>
<b>d</b>	Steep slope	<b>F</b>	Ferrosol	<b>ae</b>	Black	
<b>e</b>	Moderately steep slope	<b>H</b>	Hydrosol			
<b>f</b>	Moderate slope	<b>K</b>	Kandosol			
<b>g</b>	Gentle slope	<b>L</b>	Calcarosol			
<b>h</b>	Very gentle slope	<b>O</b>	Organosol			
<b>i</b>	Drainage depression	<b>P</b>	Podosol			
<b>j</b>	Flat	<b>R</b>	Rudosol			
		<b>S</b>	Sodosol			
		<b>T</b>	Tenosol			
		<b>U</b>	Kurosol			
		<b>V</b>	Vertosol			

<sup>1</sup> Isbell (1996)

A map showing the spatial distribution of the land units is not part of this draft report due to the impracticality of displaying 155 units in a hardcopy map. In the final product, the map units will be available electronically.

### 4.2 Examples of Land Unit Descriptions

Information regarding the land units is also available electronically in the PDF format. An example of three land unit descriptions is presented in Table 4.2. The linkages between the water quality risks and planning directions have not been made, and will be based on consultation with local government and referral authorities.

**Table 4.2** Examples of three land unit descriptions proposed to be used in the final product.

<b>Map Unit</b>	<b>aCab</b>
<b>General Description</b>	
The soils on this map unit are generally similar to the gentle crest (Ose), although they are sometimes shallower. They occasionally have mottled subsoils, and A2 horizons with a clay loam to fine sandy clay loam texture. The slopes surrounding the crests are generally moderate to moderately steep. Depth of soil is variable	
<b>Unit Characteristics</b>	
Parent Material Age	Ordovician
Parent Material Lithology	Sedimentary
Landform Pattern	Rolling low hills
Landform Element	Sharp crest
Dominant Soil Type	Haplic, 7, Brown CHROMOSOL; medium, gravelly, clay loamy / clayey, shallow (confidence level 4)
Original Survey and Map Unit Symbol	A Land Capability Study of the Former Shire of Kyneton Osa

<b>Water Quality Threatening Process Susceptibility</b>				
<b>Threatening Process</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>
<b>Susceptibility</b>	Moderate	High	Low	Moderate

**Rating Scales**

Water erosion	very low, low, moderate, high very high
Nutrient leaching:	low, moderate, high
Surface solute movement:	low, moderate, high
Groundwater recharge:	low, moderate, high

<b>Land Use Water Quality Risk</b>					
<b>Land use</b>	<b>Water quality risk</b>				
	<b>Water erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall</b>
<b>Broadacre grazing</b>	LOW	MODERATE	LOW	MODERATE	MODERATE
<b>Intensive cropping (potatoes)</b>	N/A	N/A	N/A	N/A	N/A
<b>Intensive horticulture (viticulture)</b>	LOW	MODERATE	LOW	LOW	LOW
<b>Forestry establishment</b>	LOW	N/A	N/A	N/A	LOW
<b>Native vegetation or forestry removal</b>	LOW	N/A	N/A	MODERATE	MODERATE
<b>Septic tank effluent disposal</b>	N/A	N/A	N/A	N/A	HIGH
<b>Secondary gravel or earthen roading</b>	LOW - MODERATE	N/A	N/A	N/A	LOW - MODERATE
<b>Rural subdivisions</b>	N/A	N/A	N/A	N/A	MEDIUM - HIGH
<b>Extractive industries</b>	LOW	N/A	N/A	LOW	LOW

**Map Unit****aDad****General Description**

This map unit occurs as a ridge of metamorphosed sediments in the north-east of the shire. Shallow stony gradation soils are predominant, but very shallow stony loams and outcrops of bed-rock are common. The very narrow ridgeline has not been mapped separately from the steep slopes because of limitations of scale. Soils and vegetation are essentially the same, only the slope and the capability of slope-related land uses are different. The majority of the map unit remains uncleared and the fire hazard during the summer-autumn period is extreme.

**Unit Characteristics**

Parent Material Age	Ordovician
Parent Material Lithology	Sediments
Landform Pattern	Rolling hills
Landform Element	Sharp crest
Dominant Soil Type	Acidic, Dystrophic, Grey, Dermosol, moderate thin, loamy, gravelly
Original Survey and Map Unit Symbol	A Land Capability Study of the Shire of Newham & Woodend Osb

<b>Water Quality Threatening Process Susceptibility</b>				
<b>Threatening Process</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>
<b>Susceptibility</b>	Very high	High	Low	High

**Rating Scales**

Water erosion	very low, low, moderate, high very high
Nutrient leaching:	low, moderate, high
Surface solute movement:	low, moderate, high
Groundwater recharge:	low, moderate, high

<b>Land Use Water Quality Risk</b>					
<b>Land use</b>	<b>Water quality risk</b>				
	<b>Water erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall</b>
<b>Broadacre grazing</b>	MODERATE - HIGH	MODERATE	LOW	HIGH	HIGH
<b>Intensive cropping (potatoes)</b>	N/A	N/A	N/A	N/A	N/A
<b>Intensive horticulture (viticulture)</b>	HIGH	MODERATE	LOW	MODERATE	MODERATE - HIGH
<b>Forestry establishment</b>	HIGH	N/A	N/A	N/A	HIGH
<b>Native vegetation or forestry removal</b>	HIGH	N/A	N/A	HIGH	HIGH
<b>Septic tank effluent disposal</b>	N/A	N/A	N/A	N/A	HIGH
<b>Secondary gravel or earthen roading</b>	HIGH	N/A	N/A	N/A	HIGH
<b>Rural subdivisions</b>	N/A	N/A	N/A	N/A	HIGH
<b>Extractive industries</b>	LOW	N/A	N/A	LOW	LOW

**Map Unit**

aFaa2

**General Description**

This map unit generally occurs as small narrow crests. Rock outcrop can occur on the surface or throughout the profile, and the percentage is variable. Gentle broad crests can occur that do not have a high percentage of rock outcrop, although they commonly have similar soils to the rocky crests. The soil profile is commonly composed of a clay loam topsoil and a clay subsoil. The soils are commonly red duplex or gradational. The gradational variant occurs when there is a transitional horizon between the A and B horizon.

**Unit Characteristics**

Parent Material Age	Quaternary
Parent Material Lithology	Volcanic
Landform Pattern	Lava Plain
Landform Element	Crest
Dominant Soil Type	Haplic, Eutrophic, Red FERROSOL; thick, slightly gravelly, clay loamy / clayey, very deep.
Original Survey and Map Unit Symbol	A Land Capability Study of the Former Shire of Kyneton Qve

<b>Water Quality Threatening Process Susceptibility</b>				
<b>Threatening Process</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>
<b>Susceptibility</b>	Moderate	High	Low	High

**Rating Scales**

Water erosion	very low, low, moderate, high very high
Nutrient leaching:	low, moderate, high
Surface solute movement:	low, moderate, high
Groundwater recharge:	low, moderate, high

<b>Land Use Water Quality Risk</b>					
<b>Land use</b>	<b>Water quality risk</b>				
	<b>Water erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall</b>
<b>Broadacre grazing</b>	LOW	MODERATE	LOW	HIGH	MODERATE-HIGH
<b>Intensive cropping (potatoes)</b>	LOW - MODERATE	HIGH	LOW	N/A	MODERATE - HIGH
<b>Intensive horticulture (viticulture)</b>	LOW	MODERATE	LOW	MODERATE	MODERATE
<b>Forestry establishment</b>	LOW	N/A	N/A	N/A	LOW
<b>Native vegetation or forestry removal</b>	LOW	N/A	N/A	HIGH	HIGH
<b>Septic tank effluent disposal</b>	N/A	N/A	N/A	N/A	HIGH
<b>Secondary gravel or earthen roading</b>	LOW - MODERATE	N/A	N/A	N/A	LOW-MODERATE
<b>Rural subdivisions</b>	N/A	N/A	N/A	N/A	HIGH
<b>Extractive industries</b>	LOW	N/A	N/A	LOW	LOW

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## 6 GLOSSARY

**Decision tree** Data analysis tool used to assess the water quality risk probability.

### Drainage

<b>Class</b>	<b>Value</b>	<b>Classification</b>
1	Very poorly drained	water is removed extremely slowly from the soil so the water table remains at or near surface for most of the year.
2	Poorly drained	water table remains at or near surface for most of the year.
3	Imperfectly drained	water is removed very slowly in relation to supply.
4	Moderately well drained	water is removed from the soil somewhat slowly in relation to supply, due to low permeability, shallow watertable, lack of gradient, or some combination of these.
5	Well drained	water is removed from the soil readily but not rapidly.
6	Rapidly drained	water is removed from the soil rapidly in relation to supply.

(Ref: McDonald, *et al.* 1990)

**Groundwater recharge** The action of surface water penetrating through the soil to the immediate or eventual contribution to the groundwater.

**Key land management factor** The main land management factor that impacts on the acceleration or reduction of the threatening processes.

**Land management critical value** The value at which a land management factor either accelerates or reduces a threatening process e.g. vegetation cover of greater than 70% reduces the water erosion threatening process in a broadacre grazing land use situation.

**Land management practice** Activities used to manage the land. Land management practices are a sub-set of a land use i.e. the cultivation land management practice within a cropping land use.

**Land management scenario** A perceived level of input or standard for the key land management factors developed for each land use and each land unit.

**Land unit** A land area showing a common landscape element or soil type that has been mapped at the 1:40 000 scale.

**Land use** The type of use that the land is put to.

**Overall water quality risk** The risk to the water quality after considering all of the threatening processes

**Nutrient leaching** Movement of dissolved nutrients through the soil with water movement.

Permeability

Class	Value	Permeability Range	Drainage Time
1	Very slowly permeable	less than 5 mm/day	months
2	Slowly permeable	5 - 50 mm/day	weeks
3	Moderately permeable	50 - 500 mm/day	days
4	Highly permeable	> 500 mm/day	hours

(Ref: McDonald, *et al.* 1990)

Soil Orders (Isbell, 1996)

<i>Calcarosols</i>	Are usually calcareous and therefore strongly alkaline throughout the profile, or directly below the topsoil. There is a gradual increase in clay down the profile.
<i>Chromosols</i>	Have a light textured topsoil directly overlying a heavier (often clay) subsoil and a pH greater than 5.5 (water). They differ from Kurosols and Sodosols because they are not strongly acidic and are not sodic.
<i>Dermosols</i>	Soils that have a gradual increase in clay down the profile. The subsoil is usually structured.
<i>Ferrosols</i>	Soils that have a gradual increase in clay down the profile and have high amounts (>5%) of free iron oxide. They are commonly red and well structured.
<i>Hydrosols</i>	Remain saturated for at least 2-3 months of the year. This may be caused by poor site drainage or by low soil permeability.
<i>Kandosols</i>	Soils that have an gradual increase in clay down the profile. The subsoils are either hardsetting or only have very weak structure.
<i>Kurosols</i>	Have a light textured topsoil directly overlying a heavier (often clay) subsoil. They differ from Sodosols and Chromosols because they are strongly acid (pH less than 5.5 in water) in the top of the subsoil.
<i>Organosols</i>	Recognised for their dominance of organic materials, Organosols have more than 0.4 m of organic materials within the upper 0.8 m of the profile, or they may be organic on the surface and very little soil underneath.
<i>Podosols</i>	Soils with an accumulation of compounds of organic matter, aluminium and/or iron within the subsoil. It often occurs as a cemented layer. Many older coastal sand dunes qualify as Podosols.
<i>Rudosols</i>	Commonly these soils are shallow with very little soil development.

<i>Sodosols</i>	Have a light textured topsoil directly overlying a heavier (often clay) subsoil. They differ from Kurosols because they are not strongly acid. Their distinguishing feature is an Exchangeable Sodium Percentage (ESP) greater the 6% (known as sodic). That is there is a high exchangeable sodium in relation to other exchangeable cations. Sodosols often have impeded internal drainage due to poor structure as a result of the high exchangeable sodium.
<i>Tenosols</i>	These soils are either weakly developed or have a very weak structure in the subsoil. They differ from Rudosols because they usually have a more developed topsoil. They can range from soils with a developed topsoil directly overlying rock to deep sandy soils with little, if any structure.
<i>Vertosols</i>	Cracking clay soils.
Surface solute movement	Overland flow of water that carries in suspension (dissolved or not) bio-organics or soil.
Threatening process	One of four land degradation processes (erosion, nutrient leaching, surface solute movement or groundwater recharge) that deleteriously impact on water quality
Threatening process hazard	An assessment of a threatening process probability based on the threatening process susceptibility and rainfall extremes.
Threatening process susceptibility	The natural susceptibility of a threatening process to occur as dictated by climate, topography and soil type irrespective of land use and land management factors.
Threatening process water quality risk	The risk to water quality from a threatening process after assessing the impact of land use and land management on the threatening process hazard.
Water erosion	Is the deprivation of soil from a particular site due to its removal via water processes. Water flow is generally associated as the major cause of water erosion. Some of the major forms of water erosion include sheet, rill, gully, tunnel and stream bank.

**APPENDICES**

**APPENDIX 1 Key land management factor benchmark level probabilities (%) for land units.**

Land Unit	Grazing											Intensive Cropping (Potatoes)								
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Pasture Type & Intensity			Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			
	Low	Mod	High	Norm	High	Low	Mod	High	Ann	Per - Heavy	Per - Light	Low	Mod	High	Norm	High	Low	Mod	High	
aCab	10	20	70	70	30	10	20	70	60	30	10									
aDad	10	40	50	70	30	10	40	50	80	15	5									
aFaa2	20	10	70	70	30	20	10	70	60	30	10	40	40	20	40	60	40	40	20	
aRab1	20	40	40	80	20	20	40	40	80	15	5									
aRab2	20	40	40	80	20	20	40	40	80	15	5									
aRcy2	20	40	40	80	20	20	40	40	80	15	5									
aRcy3	20	40	40	80	20	20	40	40	80	15	5									
aTab	20	40	40	80	20	20	40	40	80	15	5									
aUab	10	20	70	70	30	10	20	70	70	20	10									
bCab2	10	20	70	70	30	10	20	70	70	20	10									
bCab3	10	40	50	70	30	10	40	50	80	15	5									
bCad1	10	20	70	70	30	10	20	70	60	30	10									
bDab1	10	20	70	70	30	10	20	70	60	30	10									
bDab2	10	20	70	70	30	10	20	70	60	30	10									
bRcy	20	40	40	80	20	20	40	40	80	15	5									
bUab	10	20	70	70	30	10	20	20	70	20	10									
bUac	10	20	70	70	30	10	20	70	70	20	10									
dCaa2	10	40	50	70	30	10	40	50	80	15	5									
dDab1	10	40	50	70	30	10	40	50	80	15	5									
dDab2	10	40	50	70	30	10	40	50	80	15	5									
dDad	10	40	50	70	30	10	40	50	80	15	5									
dDae1	10	40	50	70	30	10	40	50	80	15	5									
dDae2	10	40	50	70	30	10	40	50	80	15	5									
dFaa	20	10	70	70	30	20	10	70	80	15	5	40	40	20	40	60	40	40	20	
dRab	20	40	40	80	20	20	40	40	80	15	5									

Appendix 1 continues on next page.

Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Grazing											Intensive Cropping (Potatoes)								
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Pasture Type & Intensity			Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			
	Low	Mod	High	Norm	High	Low	Mod	High	Ann	Per - Heavy	Per - Light	Low	Mod	High	Norm	High	Low	Mod	High	
dUaa	20	40	40	80	20	20	40	40	80	15	5									
dUab	10	40	50	70	30	10	40	50	80	15	5									
eCae2	10	20	70	70	30	10	20	70	60	30	10									
eDaa3	10	20	70	70	30	10	20	70	70	20	10									
eDab1	10	20	70	70	30	10	20	70	60	30	10									
eDab2	10	20	70	70	30	10	20	70	60	30	10									
eDab3	10	20	70	70	30	10	20	70	60	30	10									
eDae	10	20	70	70	30	10	20	70	60	30	10									
eFaa1	20	10	70	70	30	20	10	70	60	30	10	40	40	20	40	60	40	40	20	
eFaa2	20	10	70	70	30	20	10	70	60	30	10									
eRab	20	40	40	80	20	20	40	40	80	15	5									
eUaa	20	40	40	80	20	20	40	40	80	15	5									
eUab1	10	20	70	70	30	10	20	70	60	30	10									
eUab2	10	40	50	70	30	10	40	50	80	15	5									
fCaa4	10	20	70	70	30	10	20	70	70	20	10									
fCab1	20	30	50	70	30	20	30	50	80	15	5									
fCab2	10	20	70	70	30	10	20	70	60	30	10									
fCab4	10	20	70	70	30	10	20	70	70	20	10									
fCae	10	20	70	70	30	10	20	70	60	30	10									
fDaa3	10	20	70	70	30	10	20	70	70	20	10									
fDaa4	10	20	70	70	30	10	20	70	70	20	10									
fDaa5	10	20	70	70	30	10	20	70	70	20	10									
fDab	10	20	70	70	30	10	20	70	60	30	10									
fDac	10	40	50	70	30	10	40	50	80	15	5									
fDae	10	20	70	70	30	10	20	70	60	30	10									
fFaa1	20	30	50	70	30	20	30	50	60	30	10									
fFaa2	10	20	70	70	30	10	20	70	60	30	10									
fRab1	10	40	50	70	30	10	40	50	80	15	5									
fRab2	20	40	40	80	20	20	40	40	80	15	5									

Appendix 1 continues on next page.

Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Grazing											Intensive Cropping (Potatoes)								
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Pasture Type & Intensity			Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			
	Low	Mod	High	Norm	High	Low	Mod	High	Ann	Per - Heavy	Per - Light	Low	Mod	High	Norm	High	Low	Mod	High	
fTab	10	40	50	70	30	10	40	50	80	15	5									
fUaa	20	40	40	80	20	20	40	40	80	15	5									
fUab	20	40	40	70	30	20	40	40	80	15	5									
gCaa1	20	30	50	70	30	20	30	50	80	15	5									
gCaa2	10	10	80	70	30	10	10	80	60	30	10									
gCab1	10	20	70	70	30	10	20	70	60	30	10									
gCab2	10	20	70	70	30	10	20	70	60	30	10									
gCab5	10	40	50	70	30	10	40	50	80	15	5									
gCab6	10	40	50	70	30	10	40	50	80	15	5									
gCac	20	40	40	80	20	20	40	40	80	15	5									
gCad	20	30	50	70	30	20	30	50	80	15	5									
gDaa2	10	20	70	70	30	10	20	70	60	30	10									
gDaa4	10	40	50	70	30	10	40	50	80	15	5									
gDaa5	20	40	40	80	20	20	40	40	80	15	5									
gDab1	10	20	70	70	30	10	20	70	60	30	10									
gDab2	20	40	40	80	20	20	40	40	80	15	5									
gDab3	10	40	50	70	30	10	40	50	80	15	5									
gFaa1	20	30	50	70	30	20	30	50	60	30	10	40	40	20	40	60	40	40	20	
gFaa2	10	20	70	70	30	10	20	70	60	30	10	40	40	20	40	60	40	40	20	
gFaa4	20	10	70	70	30	20	10	70	60	30	10									
gKac	10	40	50	70	30	10	40	50	80	15	5									
gRcy	20	40	40	80	20	20	40	40	80	15	5									
gSab1	10	20	70	70	30	10	20	70	70	20	10									
gSab2	10	20	70	70	30	10	20	70	70	20	10									
gSac1	20	30	50	70	30	20	30	50	80	15	5									
gSac2	10	40	50	70	30	10	40	50	80	15	5									
gSac3	10	40	50	70	30	10	40	50	80	15	5									
gSac5	10	20	70	70	30	10	20	70	70	20	10									
gSac6	10	40	50	70	30	10	40	50	80	15	5									

Appendix 1 continues on next page.

Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Grazing											Intensive Cropping (Potatoes)								
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Pasture Type & Intensity			Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			
	Low	Mod	High	Norm	High	Low	Mod	High	Ann	Per - Heavy	Per - Light	Low	Mod	High	Norm	High	Low	Mod	High	
gUab1	10	20	70	70	30	10	20	70	60	30	10									
gUab2	10	40	50	70	30	10	40	50	80	15	5									
gUab3	10	40	50	70	30	10	40	50	80	15	5									
gUab4	10	20	70	70	30	10	20	70	70	20	10									
gVab5	10	20	70	70	30	10	20	70	70	20	10									
gVae	10	20	70	70	30	10	20	70	60	30	10									
hCab1	10	20	70	70	30	10	20	70	60	30	10									
hCab2	10	30	60	70	30	10	30	60	80	15	5									
hCab3	10	20	70	70	30	10	20	70	70	20	10									
hCab4	10	10	80	70	30	10	10	80	60	30	10									
hCae1	10	10	80	70	30	10	10	80	60	30	10									
hDaa1	10	20	70	70	30	10	20	70	60	30	10									
hDab	10	20	70	70	30	10	20	70	60	30	10									
hDad1	10	10	80	70	30	10	10	80	60	30	10									
hDad2	10	10	80	70	30	10	10	80	60	30	10									
hDae	10	10	80	70	30	10	10	80	60	30	10									
hFaa1	20	10	70	70	30	20	10	70	60	30	10	40	40	20	40	60	40	40	20	
hKaa	10	10	80	70	30	10	10	80	60	30	10									
hKab	20	10	70	70	30	20	10	70	60	30	10	40	40	20	40	60	40	40	20	
hSaa2	10	20	70	70	30	10	20	70	70	20	10									
hSab1	10	20	70	70	30	10	20	70	70	20	10									
hSac2	10	20	70	70	30	10	20	70	70	20	10									
hSac3	10	20	70	70	30	10	20	70	70	20	10									
hSac4	10	20	70	70	30	10	20	70	70	20	10									
hSae2	10	20	70	70	30	10	20	70	70	20	10									
hVab1	10	20	70	70	30	10	20	70	70	20	10									
hVab2	10	20	70	70	30	10	20	70	70	20	10									
hVae	10	20	70	70	30	10	20	70	70	20	10									
iCab1	10	10	80	70	30	10	10	80	60	30	10									

Appendix 1 continues on next page.

**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Unit	Grazing											Intensive Cropping (Potatoes)								
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Pasture Type & Intensity			Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			
	Low	Mod	High	Norm	High	Low	Mod	High	Ann	Per - Heavy	Per - Light	Low	Mod	High	Norm	High	Low	Mod	High	
iCab2	10	20	70	70	30	10	20	70	70	20	10									
iCac1	10	20	70	70	30	10	20	70	70	20	10									
iCac2	10	40	50	70	30	10	40	50	80	15	5									
iCac3	10	40	50	70	30	10	40	50	80	15	5									
iCae3	10	10	80	70	30	10	10	80	60	30	10									
iCae4	10	20	70	70	30	10	20	70	70	20	10									
iDab	10	40	50	70	30	10	40	50	80	15	5									
iDae	10	10	80	70	30	10	10	80	60	30	10									
iFaa	10	10	80	70	30	10	10	80	60	30	10									
iHdt	10	10	80	70	30	10	10	80	60	30	10									
iKab	10	40	50	70	30	10	40	50	80	15	5									
iKac	10	40	50	70	30	10	40	50	80	15	5									
iRad	10	20	70	70	30	10	20	70	70	20	10									
iSab1	10	40	50	70	30	10	40	50	80	15	5									
iSab2	10	20	70	70	30	10	20	70	70	20	10									
iSac1	10	20	70	70	30	10	20	70	70	20	10									
iSac2	10	20	70	70	30	10	20	70	70	20	10									
iSac3	10	20	70	70	30	10	20	70	70	20	10									
iSac4	10	40	50	70	30	10	40	50	80	15	5									
iSac5	10	40	50	70	30	10	40	50	80	15	5									
iTab1	10	20	70	70	30	10	20	70	70	20	10									
iTab2	10	20	70	70	30	10	20	70	70	20	10									
iTae	10	20	70	70	30	10	20	70	70	20	10									
iUad	10	20	70	70	30	10	20	70	70	20	10									
iVad	10	10	80	70	30	10	10	80	60	30	10									
iVae1	10	20	70	70	30	10	20	70	70	20	10									
iVae2	10	10	80	70	30	10	10	80	60	30	10									
jCac	10	40	50	70	30	10	40	50	80	15	5									
jDae	10	20	70	70	30	10	20	70	70	20	10									

Appendix 1 continues on next page.



Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Intensive Horticulture (Viticulture)										Perennial Vegetation Removal					Perennial Vegetation Establishment			Septic Tank Effluent Disposal		
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Irrigation Type		Erosion Vegetation Cover			Recharge replacem't Vegetation Type		Erosion Vegetation Cover			Septic Tank Density		
	Low	Mod	High	Nor	High	Low	Mod	High	Drip	Spr	Low	Mod	High	Per	Ann	Low	Mod	High	Low	Mod	High
aCab	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
aDad	20	50	30	60	40	20	50	30	90	10	20	60	20	90	10	20	60	20	90	5	5
aFaa2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
aRab1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
aRab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
aRcy2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
aRcy3	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
aTab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
aUab	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bCab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bCab3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
bCad1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bDab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bDab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bRcy	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
bUab	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
bUac	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
dCaa2	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dDab1	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dDab2	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dDad	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dDae1	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dDae2	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dFaa	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
dRab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
dUaa	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
dUab	20	40	40	50	50	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
eCae2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10

Appendix 1 continues on next page.

Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Intensive Horticulture (Viticulture)										Perennial Vegetation Removal					Perennial Vegetation Establishment			Septic Tank Effluent Disposal		
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Irrigation Type		Erosion Vegetation Cover			Recharge replacem't Vegetation Type		Erosion Vegetation Cover			Septic Tank Density		
	Low	Mod	High	Nor	High	Low	Mod	High	Drip	Spr	Low	Mod	High	Per	Ann	Low	Mod	High	Low	Mod	High
eDaa3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
eDab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eDab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eDab3	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eDae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eFaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eFaa2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
eRab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
eUaa	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
eUab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	80	10	10
eUab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
fCaa4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fCab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
fCab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fCab4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
fCae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fDaa3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
fDaa4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
fDaa5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fDab	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fDac	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fDae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fFaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fFaa2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
fRab1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fRab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fTab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
fUaa	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5

Appendix 1 continues on next page.

**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Unit	Intensive Horticulture (Viticulture)										Perennial Vegetation Removal				Perennial Vegetation Establishment			Septic Tank Effluent Disposal			
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Irrigation Type		Erosion Vegetation Cover			Recharge replacem't Vegetation Type		Erosion Vegetation Cover			Septic Tank Density		
	Low	Mod	High	Nor	High	Low	Mod	High	Drip	Spr	Low	Mod	High	Per	Ann	Low	Mod	High	Low	Mod	High
fUab	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gCaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gCaa2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
gCab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gCab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gCab5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
gCab6	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gCac	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gCad	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gDaa2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gDaa4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gDaa5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gDab1	10	20	70	70	30	10	20	70	60	30	20	60	20	60	30	20	60	20	70	20	10
gDab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gDab3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gFaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gFaa2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gFaa4	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gKac	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gRcy	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
gSab1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
gSab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	70	20	10
gSac1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
gSac2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gSac3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gSac5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gSac6	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gUab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10

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Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Intensive Horticulture (Viticulture)										Perennial Vegetation Removal				Perennial Vegetation Establishment			Septic Tank Effluent Disposal			
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Irrigation Type		Erosion Vegetation Cover			Recharge replacem't Vegetation Type		Erosion Vegetation Cover			Septic Tank Density		
	Low	Mod	High	Nor	High	Low	Mod	High	Drip	Spr	Low	Mod	High	Per	Ann	Low	Mod	High	Low	Mod	High
gUab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gUab3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gUab4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gVab5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
gVae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hCab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hCab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hCab3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hCab4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hCae1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hDaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hDab	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hDad1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
hDad2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
hDae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
hFaa1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hKaa	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
hKab	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hSaa2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hSab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hSac2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hSac3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hSac4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hSae2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
hVab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hVab2	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
hVae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
iCab1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5

Appendix 1 continues on next page.

Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).

Land Unit	Intensive Horticulture (Viticulture)										Perennial Vegetation Removal					Perennial Vegetation Establishment			Septic Tank Effluent Disposal		
	Erosion Vegetation Cover			Leaching Nutrient Input		Solute Movement Vegetation Cover			Recharge Irrigation Type		Erosion Vegetation Cover			Recharge replacem't Vegetation Type		Erosion Vegetation Cover			Septic Tank Density		
	Low	Mod	High	Nor	High	Low	Mod	High	Drip	Spr	Low	Mod	High	Per	Ann	Low	Mod	High	Low	Mod	High
iCab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iCac1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iCac2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iCac3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iCae3	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
iCae4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iDab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iDae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
iFaa	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
iHdt	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
iKab	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iKac	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iRad	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSab1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSac1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5
iSac2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSac3	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSac4	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iSac5	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iTab1	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iTab2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iTae	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iUad	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
iVad	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
iVae1	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	70	20	10
iVae2	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
jCac	20	40	40	60	40	20	40	40	90	10	30	60	10	90	10	30	60	10	90	5	5
jDae	20	40	40	60	40	20	40	40	90	10	20	60	20	90	10	20	60	20	90	5	5

Appendix 1 continues on next page.

**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Units	Roading		Extractive			
	Compliance to Code		Erosion controls comply with Guidelines		Recharge Controls comply with Guidelines	
	Complies	Does not comply	Complies	Does not comply	Complies	Does not comply
aCab	40	60	70	30	70	30
aDad	40	60	70	30	70	30
aFaa2	40	60	70	30	70	30
aRab1	40	60	70	30	70	30
aRab2	40	60	70	30	70	30
aRcy2	40	60	70	30	70	30
aRcy3	40	60	70	30	70	30
aTab	40	60	70	30	70	30
aUab	40	60	70	30	70	30
bCab2	40	60	70	30	70	30
bCab3	40	60	70	30	70	30
bCad1	40	60	70	30	70	30
bDab1	40	60	70	30	70	30
bDab2	40	60	70	30	70	30
bRcy	40	60	70	30	70	30
bUab	40	60	70	30	70	30
bUac	40	60	70	30	70	30
dCaa2	40	60	70	30	70	30
dDab1	40	60	70	30	70	30
dDab2	40	60	70	30	70	30
dDad	40	60	70	30	70	30
dDae1	40	60	70	30	70	30
dDae2	40	60	70	30	70	30
dFaa	40	60	70	30	70	30
dRab	40	60	70	30	70	30
dUaa	40	60	70	30	70	30
dUab	40	60	70	30	70	30
eCae2	40	60	70	30	70	30
eDaa3	40	60	70	30	70	30
eDab1	40	60	70	30	70	30
eDab2	40	60	70	30	70	30
eDab3	40	60	70	30	70	30
eDae	40	60	70	30	70	30
eFaa1	40	60	70	30	70	30
eFaa2	40	60	70	30	70	30
eRab	40	60	70	30	70	30
eUaa	40	60	70	30	70	30
eUab1	40	60	70	30	70	30
eUab2	40	60	70	30	70	30
fCaa4	40	60	70	30	70	30
fCab1	40	60	70	30	70	30
fCab2	40	60	70	30	70	30
fCab4	40	60	70	30	70	30
fCae	40	60	70	30	70	30
fDaa3	40	60	70	30	70	30
fDaa4	40	60	70	30	70	30

Appendix 1 continues on next page.

**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Units	Roading		Extractive			
	Compliance to Code		Erosion controls comply with Guidelines		Recharge Controls comply with Guidelines	
	Complies	Does not comply	Complies	Does not comply	Complies	Does not comply
fDaa5	40	60	70	30	70	30
fDab	40	60	70	30	70	30
fDac	40	60	70	30	70	30
fDae	40	60	70	30	70	30
fFaa1	40	60	70	30	70	30
fFaa2	40	60	70	30	70	30
fRab1	40	60	70	30	70	30
fRab2	40	60	70	30	70	30
fTab	40	60	70	30	70	30
fUaa	40	60	70	30	70	30
fUab	40	60	70	30	70	30
gCaa1	40	60	70	30	70	30
gCaa2	40	60	70	30	70	30
gCab1	40	60	70	30	70	30
gCab2	40	60	70	30	70	30
gCab5	40	60	70	30	70	30
gCab6	40	60	70	30	70	30
gCac	40	60	70	30	70	30
gCad	40	60	70	30	70	30
gDaa2	40	60	70	30	70	30
gDaa4	40	60	70	30	70	30
gDaa5	40	60	70	30	70	30
gDab1	40	60	70	30	70	30
gDab2	40	60	70	30	70	30
gDab3	40	60	70	30	70	30
gFaa1	40	60	70	30	70	30
gFaa2	40	60	70	30	70	30
gFaa4	40	60	70	30	70	30
gKac	40	60	70	30	70	30
gRcy	40	60	70	30	70	30
gSab1	40	60	70	30	70	30
gSab2	40	60	70	30	70	30
gSac1	40	60	70	30	70	30
gSac2	40	60	70	30	70	30
gSac3	40	60	70	30	70	30
gSac5	40	60	70	30	70	30
gSac6	40	60	70	30	70	30
gUab1	40	60	70	30	70	30
gUab2	40	60	70	30	70	30
gUab3	40	60	70	30	70	30
gUab4	40	60	70	30	70	30
gVab5	40	60	70	30	70	30
gVae	40	60	70	30	70	30
hCab1	40	60	70	30	70	30

Appendix 1 continues on next page.

**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Units	Roading		Extractive			
	Compliance to Code		Erosion controls comply with Guidelines		Recharge Controls comply with Guidelines	
	Complies	Does not comply	Complies	Does not comply	Complies	Does not comply
hCab2	40	60	70	30	70	30
hCab3	40	60	70	30	70	30
hCab4	40	60	70	30	70	30
hCae1	40	60	70	30	70	30
hDaa1	40	60	70	30	70	30
hDab	40	60	70	30	70	30
hDad1	40	60	70	30	70	30
hDad2	40	60	70	30	70	30
hDae	40	60	70	30	70	30
hFaa1	40	60	70	30	70	30
hKaa	40	60	70	30	70	30
hKab	40	60	70	30	70	30
hSaa2	40	60	70	30	70	30
hSab1	40	60	70	30	70	30
hSac2	40	60	70	30	70	30
hSac3	40	60	70	30	70	30
hSac4	40	60	70	30	70	30
hSae2	40	60	70	30	70	30
hVab1	40	60	70	30	70	30
hVab2	40	60	70	30	70	30
hVae	40	60	70	30	70	30
iCab1	40	60	70	30	70	30
iCab2	40	60	70	30	70	30
iCac1	40	60	70	30	70	30
iCac2	40	60	70	30	70	30
iCac3	40	60	70	30	70	30
iCae3	40	60	70	30	70	30
iCae4	40	60	70	30	70	30
iDab	40	60	70	30	70	30
iDae	40	60	70	30	70	30
iFaa	40	60	70	30	70	30
iHdt	40	60	70	30	70	30
iKab	40	60	70	30	70	30
iKac	40	60	70	30	70	30
iRad	40	60	70	30	70	30
iSab1	40	60	70	30	70	30
iSab2	40	60	70	30	70	30
iSac1	40	60	70	30	70	30
iSac2	40	60	70	30	70	30
iSac3	40	60	70	30	70	30
iSac4	40	60	70	30	70	30
iSac5	40	60	70	30	70	30
iTab1	40	60	70	30	70	30
iTab2	40	60	70	30	70	30
iTae	40	60	70	30	70	30

Appendix 1 continues on next page.



**Appendix 1 Key land management factor benchmark level probabilities (%) for land units (continued).**

Land Units	Roading		Extractive			
	Compliance to Code		Erosion controls comply with Guidelines		Recharge Controls comply with Guidelines	
	Complies	Does not comply	Complies	Does not comply	Complies	Does not comply
iUad	40	60	70	30	70	30
iVad	40	60	70	30	70	30
iVae1	40	60	70	30	70	30
iVae2	40	60	70	30	70	30
jCac	40	60	70	30	70	30
jDae	40	60	70	30	70	30

**APPENDIX 2 Individual threatening processes and overall land use water quality risks for all land units.**

Land Use Water Quality Risk - Grazing					
Map Unit	Water Erosion	Nutrient Leaching	Surface Solute Movement	Groundwater Recharge	Overall Water Quality Risk
aCab	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
aDad	High	Moderate	Low	High	High
aFaa2	Low-Moderate	Moderate	Low	High	Moderate-High
aRab1	Moderate-High	Moderate	Low	High	Moderate-High
aRab2	Moderate-High	Low-Moderate	Low	High	Moderate-High
aRcy2	Moderate-High	Moderate	Low	High	High
aRcy3	High	Moderate	Low	High	High
aTab	Moderate-High	Moderate	Low	High	Moderate-High
aUab	High	Moderate	Low	High	High
bCab2	Low	Moderate	Low	Moderate	Low-Moderate
bCab3	Low-Moderate	Moderate	Low	Moderate	Moderate
bCad1	Low-Moderate	Moderate	Low	High	Moderate-High
bDab1	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
bDab2	Low	Low-Moderate	Low	Moderate	Low-Moderate
bRcy	Moderate-High	Moderate	Low	High	Moderate-High
bUab	Low-Moderate	Moderate	Low	Moderate	Moderate
bUac	Low	Moderate	Low	Moderate	Low-Moderate
dCaa2	High	Moderate	Moderate-High	Moderate	High
dDab1	High	Moderate	Moderate-High	High	Low-Moderate
dDab2	High	Moderate	Moderate-High	Moderate	High
dDad	High	Low-Moderate	Low	Moderate	Low-Moderate
dDae1	High	Moderate	Moderate-High	High	High
dDae2	Low-Moderate	Moderate	Moderate-High	High	Moderate-High
dFaa	Moderate-High	Moderate	High	High	High
dRab	High	Moderate	Moderate-High	Moderate	Moderate-High
dUaa	High	Moderate	Moderate-High	Moderate	Moderate-High
dUab	High	Moderate	Moderate-High	High	High
eCae2	Moderate-High	Moderate	Low	High	Moderate-High
eDaa3	Low	Moderate	Low	Moderate	Low-Moderate
eDab1	Moderate-High	Moderate	Low	High	Moderate-High
eDab2	High	Moderate	High	High	High
eDab3	Low-Moderate	Moderate	Low	Low-Moderate	Low-Moderate
eDae	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
eFaa1	Moderate-High	Moderate	Low	High	Moderate-High
eFaa2	Low-Moderate	Moderate	Low	High	Moderate-High
eRab	Moderate-High	Moderate	Low	Moderate	Moderate
eUaa	High	Moderate	Low	High	High
eUab1	Moderate-High	Moderate	High	High	High
eUab2	High	Moderate	Low	Moderate	Moderate-High
fCaa4	Low-Moderate	Moderate	Low	High	Moderate-High
fCab1	High	Moderate	Moderate-High	Moderate	Moderate-High
fCab2	Moderate-High	Low-Moderate	Low	Moderate	Moderate-High
fCab4	Low-Moderate	Moderate	High	Moderate	Moderate-High

Appendix 2 continues on next page.

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk - Grazing</b>					
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
fCae	Low-Moderate	Moderate	High	High	Moderate-High
fDaa3	Low	Moderate	Low	Moderate	Low-Moderate
fDaa4	Low	Moderate	Low	High	Low-Moderate
fDaa5	Low-Moderate	Moderate	Low	High	Moderate-High
fDab	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
fDac	High	Moderate	Low	Moderate	High
fDae	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
fFaa1	Moderate-High	Moderate	Low	High	Moderate-High
fFaa2	Low-Moderate	Moderate	Low	High	Low-Moderate
fRab1	Moderate-High	Moderate	Low	High	Moderate-High
fRab2	High	Moderate	Low	Moderate	Moderate-High
fTab	Moderate-High	Moderate	Low	High	Moderate-High
fUaa	Moderate-High	Moderate	Low	High	Moderate-High
fUab	High	Moderate	Moderate-High	High	High
gCaa1	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gCaa2	Low	Moderate	Low	Moderate	Low-Moderate
gCab1	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
gCab2	Low-Moderate	Moderate	Low	High	Moderate-High
gCab5	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gCab6	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gCac	Moderate-High	Moderate	Low	Moderate	Moderate
gCad	Moderate-High	Low-Moderate	Low	Moderate	Low-Moderate
gDaa2	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
gDaa4	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gDaa5	Moderate-High	Moderate	Low	Moderate	Low-Moderate
gDab1	Low-Moderate	Moderate	Low	High	Moderate-High
gDab2	Moderate-High	Moderate	Low	Moderate	Low-Moderate
gDab3	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
gFaa1	Moderate-High	Moderate	Low	Moderate	Low-Moderate
gFaa2	Low-Moderate	Moderate	Low	High	Moderate-High
gFaa4	Low-Moderate	Moderate	Low	High	Moderate-High
gKac	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gRcy	Low	Moderate	Low	High	Low-Moderate
gSab1	Low	Moderate	Low	Moderate	Low-Moderate
gSab2	Low	Low-Moderate	Low	Moderate	Low-Moderate
gSac1	Moderate-High	Low	Low	Moderate	Low-Moderate
gSac2	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gSac3	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gSac5	Low	Moderate	Low	Moderate	Low
gSac6	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gUab1	Moderate-High	Low-Moderate	Low	Moderate	Low-Moderate
gUab2	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
gUab3	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gUab4	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gVab5	Low	Moderate	Low	Moderate	Low-Moderate

Appendix 2 continues on next page.

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

Land Use Water Quality Risk - Grazing					
Map Unit	Water Erosion	Nutrient Leaching	Surface Solute Movement	Groundwater Recharge	Overall Water Quality Risk
gVae	Low-Moderate	Low	Low	Moderate	Low-Moderate
hCab1	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
hCab2	Low	Low-Moderate	Low	Moderate	Low-Moderate
hCab3	Low-Moderate	Low-Moderate	Low	High	Low-Moderate
hCab4	Low	Low	Low	Moderate	Low
hCae1	Low-Moderate	Low	Low	Moderate	Low-Moderate
hDaa1	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
hDab	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
hDad1	Low	Low-Moderate	Low	Moderate	Low
hDad2	Low	Low	Low	Moderate	Low
hDae	Low	Low	Low	Moderate	Low
hFaa1	Low-Moderate	Moderate	Low	High	Moderate-High
hKaa	Low	Moderate	Low	Moderate	Low-Moderate
hKab	Low	Moderate	Low	Moderate	Low-Moderate
hSaa2	Low	Moderate	Low	Moderate	Low-Moderate
hSab1	Low	Low	Low	Moderate	Low-Moderate
hSac2	Low	Low	Low	Moderate	Low
hSac3	Low	Moderate	Low	Moderate	Low-Moderate
hSac4	Low	Moderate	Low	Moderate	Low-Moderate
hSae2	Low	Low	Low	Moderate	Low-Moderate
hVab1	Low	Low	Low	Moderate	Low-Moderate
hVab2	Low	Low-Moderate	Low	Moderate	Low-Moderate
hVae	Low-Moderate	Low	Low	Moderate	Low-Moderate
iCab1	Low-Moderate	Low	Low	Moderate	Low-Moderate
iCab2	Low	Low-Moderate	Low	Moderate	Low
iCac1	Low	Moderate	Low	Moderate	Low
iCac2	Moderate-High	Moderate	Low	Moderate	Low-Moderate
iCac3	Low	Low-Moderate	Low	Moderate	Low-Moderate
iCae3	Low-Moderate	Low	Low	Moderate	Low-Moderate
iCae4	Low	Low-Moderate	Low	Moderate	Low-Moderate
iDab	Moderate-High	Low	Low	Moderate	Low-Moderate
iDae	Low	Low-Moderate	Low	Moderate	Low
iFaa	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
iHdt	Low-Moderate	Low	Low	Moderate	Low-Moderate
iKab	Low	Moderate	Low	Moderate	Low-Moderate
iKac	Moderate-High	Moderate	Low	Moderate	Low-Moderate
iRad	Low-Moderate	Moderate	Low	High	Low-Moderate
iSab1	Moderate-High	Moderate	Low	Moderate	Low-Moderate
iSab2	Low	Low-Moderate	Low	Moderate	Low
iSac1	Low	Low	Low	Moderate	Low
iSac2	Low	Moderate	Low	Moderate	Low
iSac3	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
iSac4	Moderate-High	Low-Moderate	Low	Moderate	Low-Moderate
iSac5	Low	Low-Moderate	Low	Moderate	Low

Appendix 2 continues on next page.

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk - Grazing</b>					
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
iTab1	Low	Moderate	Low	High	Low-Moderate
iTab2	Low	Moderate	Low	High	Low-Moderate
iTae	Low-Moderate	Moderate	Low	High	Low-Moderate
iUad	Low-Moderate	Low-Moderate	Low	Moderate	Low-Moderate
iVad	Low	Low	Low	Moderate	Low
iVae1	Low-Moderate	Low	Low	Moderate	Low-Moderate
iVae2	Low	Low-Moderate	Low	Moderate	Low-Moderate
jCac	Low	Moderate	Low	Moderate	Low-Moderate
jDae	Low	Low-Moderate	Low	Moderate	Low-Moderate

Appendix 2 continues on next page.

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Extractive Industries</b>			
<b>Map unit</b>	<b>Water Erosion</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
aCab	Low-Moderate	Low	Low
aDad	Moderate	High	High
aFaa2	Low-Moderate	High	High
aRab1	Low-Moderate	High	High
aRab2	Low-Moderate	High	High
aRcy2	Low-Moderate	High	High
aRcy3	Moderate	High	High
aTab	Low-Moderate	High	High
aUab	Moderate	High	High
bCab2	Low	Low	Low
bCab3	Low-Moderate	Low	Low-Moderate
bCad1	Low-Moderate	High	High
bDab1	Low-Moderate	Low	Low
bDab2	Low	Low	Low
bRcy	Low-Moderate	High	High
bUab	Low-Moderate	Low	Low-Moderate
bUac	Low	Low	Low
dCaa2	Moderate	Low	Low-Moderate
dDab1	Moderate	High	High
dDab2	Moderate	Low	Moderate
dDad	Moderate	Low	Low-Moderate
dDae1	Moderate	High	High
dDae2	Low-Moderate	High	High
dFaa	Moderate	High	High
dRab	Moderate	Low	Moderate
dUaa	Moderate	Low	Moderate
dUab	Moderate	High	Moderate-High
eCae2	Moderate	High	High
eDaa3	Low	Low	Low
eDab1	Moderate	High	High
eDab2	Moderate	High	Moderate-High
eDab3	Low-Moderate	Low	Low-Moderate
eDae	Low-Moderate	Low	Low-Moderate
eFaa1	Moderate	High	High
eFaa2	Low-Moderate	High	High
eRab	Low-Moderate	Low	Low-Moderate
eUaa	Moderate	High	Moderate-High
eUab1	Moderate	High	Moderate-High
eUab2	Moderate	Low	Moderate
fCaa4	Low-Moderate	High	Moderate-High
fCab1	Moderate	Low	Moderate
fCab2	Moderate	Low	Moderate
fCab4	Moderate	Low-Moderate	Low-Moderate
fCae	Low-Moderate	High	Moderate-High
fDaa3	Low	Low-Moderate	Low

Appendix 2 continues on next page.

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Extractive Industries</b>			
<b>Map unit</b>	<b>Water Erosion</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
fDaa4	Low	High	Moderate-High
fDaa5	Low-Moderate	High	Moderate-High
fDab	Low-Moderate	Low	Low
fDac	Moderate	Low-Moderate	Moderate
fDae	Low-Moderate	Low	Low-Moderate
fFaa1	Low-Moderate	High	Moderate-High
fFaa2	Low-Moderate	High	Moderate-High
fRab1	Low-Moderate	High	Moderate-High
fRab2	Moderate	Low-Moderate	Moderate
fTab	Low-Moderate	High	Moderate-High
fUaa	Low-Moderate	High	Moderate-High
fUab	Moderate	High	Moderate-High
gCaa1	Low-Moderate	Low	Low
gCaa2	Low	Low	Low
gCab1	Low-Moderate	Low	Low-Moderate
gCab2	Low-Moderate	High	High
gCab5	Low-Moderate	Low	Low-Moderate
gCab6	Low-Moderate	Low	Low
gCac	Low-Moderate	Low	Low
gCad	Low-Moderate	Low	Low
gDaa2	Low-Moderate	Low	Low-Moderate
gDaa4	Low-Moderate	Low	Low-Moderate
gDaa5	Low-Moderate	Low	Low-Moderate
gDab1	Low-Moderate	High	High
gDab2	Low-Moderate	Low	Low-Moderate
gDab3	Low-Moderate	Low	Low-Moderate
gFaa1	Low-Moderate	Low	Low-Moderate
gFaa2	Low-Moderate	High	High
gFaa4	Low-Moderate	High	High
gKac	Low-Moderate	Low	Low
gRcy	Low	High	Low
gSab1	Low	Low	Low
gSab2	Low	Low	Low
gSac1	Low-Moderate	Low	Low-Moderate
gSac2	Low-Moderate	Low	Low-Moderate
gSac3	Low-Moderate	Low	Low-Moderate
gSac5	Low	Low	Low
gSac6	Low-Moderate	Low	Low
gUab1	Moderate	Low	Low-Moderate
gUab2	Low-Moderate	Low	Low
gUab3	Low-Moderate	Low	Low-Moderate
gUab4	Low-Moderate	Low	Low-Moderate
gVab5	Low	Low	Low
gVae	Low-Moderate	Low	Low-Moderate
hCab1	Low-Moderate	Low-Moderate	Low-Moderate
hCab2	Low	Low	Low

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Extractive Industries</b>			
<b>Map unit</b>	<b>Water Erosion</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
hCab3	Low-Moderate	High	Moderate-High
hCab4	Low	Low	Low
hCae1	Low-Moderate	Low	Low
hDaa1	Low-Moderate	Low-Moderate	Low-Moderate
hDab	Low-Moderate	Low	Low
hDad1	Low	Low	Low
hDad2	Low	Low	Low
hDae	Low	Low	Low
hFaa1	Low-Moderate	High	High
hKaa	Low	Low	Low
hKab	Low	Low-Moderate	Low
hSaa2	Low	Low	Low
hSab1	Low	Low	Low
hSac2	Low	Low	Low
hSac3	Low	Low	Low
hSac4	Low	Low-Moderate	Low
hSae2	Low	Low	Low
hVab1	Low	Low	Low
hVab2	Low	Low	Low
hVae	Low-Moderate	Low-Moderate	Low-Moderate
iCab1	Low-Moderate	Low	Low
iCab2	Low	Low	Low
iCac1	Low	Low	Low
iCac2	Low-Moderate	Low-Moderate	Low-Moderate
iCac3	Low	Low-Moderate	Low
iCae3	Low-Moderate	Low	Low
iCae4	Low	Low	Low
iDab	Low-Moderate	Low-Moderate	Low-Moderate
iDae	Low	Low	Low
iFaa	Low-Moderate	Low-Moderate	Low-Moderate
iHdt	Low-Moderate	Low	Low
iKab	Low	Low	Low
iKac	Low-Moderate	Low	Low-Moderate
iRad	Low-Moderate	High	High
iSab1	Low-Moderate	Low-Moderate	Low-Moderate
iSab2	Low	Low-Moderate	Low
iSac1	Moderate	Low	Low-Moderate
iSac2	Low	Low	Low
iSac3	Low-Moderate	Low	Low
iSac4	Low-Moderate	Low	Low-Moderate
iSac5	Low	Low	Low
iTab1	Low	High	Moderate-High
iTab2	Low	High	Moderate-High
iTae	Low-Moderate	High	High
iUad	Low-Moderate	Low	Low-Moderate
iVad	Low	Low	Low

Appendix 2 continues on next page.



**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Extractive Industries</b>			
<b>Map unit</b>	<b>Water Erosion</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
iVae1	Low-Moderate	Low-Moderate	Low-Moderate
iVae2	Low	Low	Low
jCac	Low	Low-Moderate	Low
jDae	Low	Low	Low

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Intensive Cropping</b>				
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Overall Water Quality Risk</b>
aFaa2	Moderate-High	Moderate-High	Low	Moderate-High
dFaa	High	Moderate-High	Moderate-High	High
eFaa1	High	Moderate-High	Low	High
gFaa1	High	Moderate-High	Low-Moderate	High
gFaa4	Moderate-High	Moderate-High	Low-Moderate	High
hFaa1	High	Moderate-High	Low	Moderate-High
hKab	Low-Moderate	Moderate-High	Low	Moderate-High

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Secondary Gravel or Earthen Rooding</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
aCab	Moderate
aDad	Moderate-High
aFaa2	Moderate
aRab1	Moderate
aRab2	Moderate
aRcy2	Moderate
aRcy3	Moderate-High
aTab	Moderate
aUab	Moderate-High
bCab2	Low
bCab3	Moderate
bCad1	Moderate
bDab1	Moderate
bDab2	Low
bRcy	Moderate
bUab	Moderate
bUac	Low
dCaa2	Moderate-High
dDab1	Moderate-High
dDab2	Moderate-High
dDad	Moderate-High
dDae1	Moderate-High
dDae2	Moderate
dFaa	Moderate-High
dRab	Moderate-High
dUaa	Moderate-High
dUab	Moderate-High
eCae2	Moderate-High
eDaa3	Low
eDab1	Moderate-High
eDab2	Moderate-High
eDab3	Moderate
eDae	Moderate
eFaa1	Moderate-High
eFaa2	Moderate
eRab	Moderate
eUaa	Moderate-High
eUab1	Moderate-High
eUab2	Moderate-High
fCaa4	Moderate-High
fCab1	Moderate-High
fCab2	Moderate-High
fCab4	Moderate-High
fCae	Moderate
fDaa3	Low

<b>Land Use Water Quality Risk – Secondary Gravel or Earthen Rooding</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
fDaa4	Low
fDaa5	Moderate-High
fDab	Moderate
fDac	Moderate-High
fDae	Moderate
fFaa1	Moderate
fFaa2	Moderate
fRab1	Moderate-High
fRab2	Moderate-High
fTab	Moderate-High
fUaa	Moderate-High
fUab	Moderate-High
gCaa1	Moderate
gCaa2	Low
gCab1	Moderate
gCab2	Moderate
gCab5	Moderate
gCab6	Moderate
gCac	Moderate
gCad	Moderate
gDaa2	Moderate
gDaa4	Moderate
gDaa5	Moderate
gDab1	Moderate
gDab2	Moderate
gDab3	Moderate
gFaa1	Moderate
gFaa2	Moderate
gFaa4	Moderate
gKac	Moderate
gRcy	Low
gSab1	Low
gSab2	Low
gSac1	Moderate
gSac2	Moderate
gSac3	Moderate
gSac5	Low
gSac6	Moderate
gUab1	Moderate-High
gUab2	Moderate
gUab3	Moderate
gUab4	Moderate
gVab5	Low
gVae	Moderate
hCab1	Moderate-High

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Secondary Gravel or Earthen Rooding</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
hCab2	Low
hCab3	Moderate-High
hCab4	Low
hCae1	Moderate-High
hDaa1	Moderate-High
hDab	Moderate-High
hDad1	Low
hDad2	Low
hDae	Low
hFaa1	Moderate-High
hKaa	Low
hKab	Low
hSaa2	Low
hSab1	Low
hSac2	Low
hSac3	Low
hSac4	Low
hSae2	Low
hVab1	Low
hVab2	Low
hVae	Moderate-High
iCab1	Moderate-High
iCab2	Low
iCac1	Low
iCac2	Moderate-High
iCac3	Low
iCae3	Moderate-High

<b>Land Use Water Quality Risk – Secondary Gravel or Earthen Rooding</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
iCae4	Low
iDab	Moderate-High
iDae	Low
iFaa	Moderate-High
iHdt	Moderate-High
iKab	Low
iKac	Moderate-High
iRad	Moderate-High
iSab1	Moderate-High
iSab2	Low
iSac1	Low
iSac2	Low
iSac3	Moderate-High
iSac4	Moderate-High
iSac5	Low
iTab1	Low
iTab2	Low
iTae	Moderate-High
iUad	Moderate-High
iVad	Low
iVae1	Moderate-High
iVae2	Low
jCac	Low
jDae	Low

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Septic Tank Effluent Disposal</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
aCab	Moderate
aDad	High
aFaa2	High
aRab1	High
aRab2	High
aRcy2	High
aRcy3	High
aTab	High
aUab	High
bCab2	Low
bCab3	High
bCad1	High
bDab1	High
bDab2	Low
bRcy	High
bUab	High
bUac	High
dCaa2	High
dDab1	High
dDab2	High
dDad	High
dDae1	High
dDae2	High
dFaa	High
dRab	High
dUaa	High
dUab	High
eCae2	High
eDaa3	High
eDab1	High
eDab2	High
eDab3	High
eDae	High
eFaa1	High
eFaa2	High
eRab	High
eUaa	High
eUab1	High
eUab2	High
fCaa4	High
fCab1	High
fCab2	High
fCab4	High
fCae	High
fDaa3	High
fDaa4	High

<b>Land Use Water Quality Risk – Septic Tank Effluent Disposal</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
fDaa5	High
fDab	High
fDac	High
fDae	Low-Moderate
fFaa1	High
fFaa2	High
fRab1	High
fRab2	High
fTab	High
fUaa	High
fUab	High
gCaa1	High
gCaa2	High
gCab1	High
gCab2	Low
gCab5	High
gCab6	High
gCac	High
gCad	High
gDaa2	Low-Moderate
gDaa4	High
gDaa5	High
gDab1	High
gDab2	High
gDab3	High
gFaa1	High
gFaa2	High
gFaa4	High
gKac	High
gRcy	High
gSab1	High
gSab2	High
gSac1	High
gSac2	High
gSac3	High
gSac5	High
gSac6	High
gUab1	Low-Moderate
gUab2	High
gUab3	High
gUab4	High
gVab5	High
gVae	High
hCab1	High
hCab2	High

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Septic Tank Effluent Disposal</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
hCab3	High
hCab4	High
hCae1	High
hDaa1	Moderate
hDab	High
hDad1	Low-Moderate
hDad2	High
hDae	High
hFaa1	High
hKaa	Low
hKab	High
hSaa2	High
hSab1	Low-Moderate
hSac2	High
hSac3	High
hSac4	High
hSae2	High
hVab1	High
hVab2	High
hVae	High
iCab1	High
iCab2	High
iCac1	High
iCac2	High
iCac3	High
iCae3	High
iCae4	High

<b>Land Use Water Quality Risk – Septic Tank Effluent Disposal</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
iDab	High
iDae	High
iFaa	High
iHdt	High
iKab	High
iKac	High
iRad	High
iSab1	High
iSab2	High
iSac1	Low
iSac2	High
iSac3	High
iSac4	High
iSac5	High
iTab1	High
iTab2	High
iTae	High
iUad	High
iVad	High
iVae1	High
iVae2	High
jCac	High
jDae	High

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

Land Use Water Quality Risk – Subdivision	
Map Unit	Overall Water Quality Risk
aCab	Moderate
aDad	High
aFaa2	High
aRab1	High
aRab2	High
aRcy2	High
aRcy3	High
aTab	High
aUab	High
bCab2	Low
bCab3	High
bCad1	High
bDab1	High
bDab2	Low
bRcy	High
bUab	High
bUac	Moderate-High
dCaa2	High
dDab1	High
dDab2	High
dDad	High
dDae1	High
dDae2	High
dFaa	High
dRab	High
dUaa	High
dUab	High
eCae2	High
eDaa3	Moderate-High
eDab1	High
eDab2	High
eDab3	High
eDae	High
eFaa1	High
eFaa2	High
eRab	High
eUaa	High
eUab1	High
eUab2	High
fCaa4	High
fCab1	High
fCab2	High
fCab4	High
fCae	High
fDaa3	Moderate-High

Land Use Water Quality Risk - Subdivision	
Map Unit	Overall Water Quality Risk
fDaa4	Moderate-High
fDaa5	High
fDab	High
fDac	High
fDae	Low-Moderate
fFaa1	High
fFaa2	High
fRab1	High
fRab2	High
fTab	High
fUaa	High
fUab	High
gCaa1	High
gCaa2	Moderate-High
gCab1	High
gCab2	Low-Moderate
gCab5	High
gCab6	High
gCac	High
gCad	High
gDaa2	Moderate
gDaa4	High
gDaa5	High
gDab1	High
gDab2	High
gDab3	High
gFaa1	High
gFaa2	High
gFaa4	High
gKac	High
gRcy	Moderate-High
gSab1	Moderate-High
gSab2	Moderate-High
gSac1	High
gSac2	High
gSac3	High
gSac5	Moderate-High
gSac6	High
gUab1	Moderate-High
gUab2	High
gUab3	High
gUab4	High
gVab5	Moderate-High
gVae	High

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

Land Use Water Quality Risk - Subdivision	
Map Unit	Overall Water Quality Risk
hCab1	High
hCab2	Moderate-High
hCab3	High
hCab4	High
hCae1	High
hDaa1	Moderate
hDab	High
hDad1	Low-Moderate
hDad2	High
hDae	High
hFaa1	High
hKaa	Low
hKab	High
hSaa2	Moderate-High
hSab1	Low
hSac2	Moderate-High
hSac3	High
hSac4	Moderate-High
hSae2	High
hVab1	Moderate-High
hVab2	Moderate-High
hVae	High
iCab1	High
iCab2	Moderate-High
iCac1	Moderate-High
iCac2	High
iCac3	High
iCae3	High
iCae4	High
iDab	High
iDae	Moderate-High
iFaa	High
iHdt	High
iKab	Moderate-High
iKac	High
iRad	High
iSab1	High
iSab2	Moderate-High
iSac1	Low
iSac2	High
iSac3	High
iSac4	High
iSac5	Moderate-High
iTab1	Moderate-High
iTab2	Moderate-High
iTae	High

Land Use Water Quality Risk - Subdivision	
Map Unit	Overall Water Quality Risk
iUad	High
iVad	High
iVae1	High
iVae2	High
jCac	High
jDae	High

Appendix 2 continues on next page



**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Removal</b>			
<b>Map Unit</b>	<b>Water erosion</b>	<b>Ground Water Recharge</b>	<b>Overall Water Quality Risk</b>
aCab	Moderate-High	Low	Low
aDad	High	High	High
aFaa2	Moderate-High	High	High
aRab1	Moderate-High	High	High
aRab2	Moderate-High	High	High
aRcy2	Moderate-High	High	High
aRcy3	High	High	High
aTab	Moderate-High	High	High
aUab	High	High	High
bCab2	Low-Moderate	Low	Low
bCab3	Moderate-High	Low	Low
bCad1	Moderate-High	High	High
bDab1	Moderate-High	Low	Low
bDab2	Low-Moderate	Low	Low
bRcy	Moderate-High	High	High
bUab	Moderate-High	Low	Low
bUac	Low	Low	Low
dCaa2	High	Low	High
dDab1	High	High	High
dDab2	High	Low	High
dDad	High	Low	Low
dDae1	High	High	High
dDae2	Moderate-High	High	Moderate-High
dFaa	High	High	High
dRab	High	Low	High
dUaa	High	Low	High
dUab	High	High	High
eCae2	High	High	High
eDaa3	Low-Moderate	Low	Low
eDab1	High	High	High
eDab2	High	High	High
eDab3	Moderate-High	Low	Moderate-High
eDae	Moderate-High	Low	Low
eFaa1	High	High	High
eFaa2	Moderate-High	High	High
eRab	Moderate-High	Low	Moderate-High
eUaa	High	High	High
eUab1	High	High	High
eUab2	High	Low	High
fCaa4	High	High	High
fCab1	High	Low	High
fCab2	High	Low	High
fCab4	High	Low	Moderate-High
fCae	Moderate-High	High	High
fDaa3	Low-Moderate	Low	Low

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Removal</b>			
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Ground Water Recharge</b>	<b>Overall Water Quality Risk</b>
fDaa4	Low-Moderate	High	Moderate-High
fDaa5	High	High	High
fDab	Moderate-High	Low	Moderate-High
fDac	High	Low	High
fDae	Moderate-High	Low	Low-Moderate
fFaa1	Moderate-High	High	High
fFaa2	Moderate-High	High	High
fRab1	High	High	High
fRab2	High	Low	High
fTab	High	High	High
fUaa	High	High	High
fUab	High	High	High
gCaa1	Moderate-High	Low	Low-Moderate
gCaa2	Low-Moderate	Low	Low
gCab1	High	Low	Moderate-High
gCab2	Moderate-High	High	High
gCab5	Moderate-High	Low	Low-Moderate
gCab6	Moderate-High	Low	Low-Moderate
gCac	Moderate-High	Low	Low-Moderate
gCad	Moderate-High	Low	Low-Moderate
gDaa2	Moderate-High	Low	Low-Moderate
gDaa4	Moderate-High	Low	Moderate-High
gDaa5	Moderate-High	Low	Moderate-High
gDab1	Moderate-High	High	High
gDab2	Moderate-High	Low	Moderate-High
gDab3	Moderate-High	Low	Moderate-High
gFaa1	Moderate-High	Low	Low
gFaa2	Moderate-High	High	High
gFaa4	Moderate-High	High	High
gKac	Moderate-High	Low	Low-Moderate
gRcy	Low	High	Moderate-High
gSab1	Low-Moderate	Low	Low
gSab2	Low-Moderate	Low	Low
gSac1	Moderate-High	Low	Low-Moderate
gSac2	Moderate-High	Low	Moderate-High
gSac3	Moderate-High	Low	Moderate-High
gSac5	Low-Moderate	Low	Low
gSac6	Moderate-High	Low	Moderate-High
gUab1	High	Low	High
gUab2	Moderate-High	Low	Low-Moderate
gUab3	Moderate-High	Low	Moderate-High
gUab4	Moderate-High	Low	Low-Moderate
gVab5	Low-Moderate	Low	Low
gVae	Moderate-High	Low	Low
hCab1	Moderate-High	Low	Low

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Removal</b>			
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Ground Water Recharge</b>	<b>Overall Water Quality Risk</b>
hCab2	Low-Moderate	Low	Low
hCab3	High	High	High
hCab4	Low-Moderate	Low	Low
hCae1	Moderate-High	Low	Low
hDaa1	Moderate-High	Low	Low
hDab	Moderate-High	Low	Low
hDad1	Low-Moderate	Low	Low
hDad2	Low-Moderate	Low	Low
hDae	Low-Moderate	Low	Low
hFaa1	Moderate-High	High	High
hKaa	Low	Low	Low
hKab	Low-Moderate	Low	Low
hSaa2	Low-Moderate	Low	Low
hSab1	Low	Low	Low
hSac2	Low-Moderate	Low	Low
hSac3	Low-Moderate	Low	Low
hSac4	Low-Moderate	Low	Low
hSae2	Low-Moderate	Low	Low
hVab1	Low	Low	Low
hVab2	Low	Low	Low
hVae	Moderate-High	Low	Low
iCab1	Moderate-High	Low	Low
iCab2	Low-Moderate	Low	Low
iCac1	Low-Moderate	Low	Low-Moderate
iCac2	High	Low	Low
iCac3	Low-Moderate	Low	Low
iCae3	Moderate-High	Low	Low
iCae4	Low-Moderate	Low	Low
iDab	High	Low	Low
iDae	Low-Moderate	Low	Low
iFaa	Moderate-High	Low	Low
iHdt	Moderate-High	Low	Low
iKab	Low-Moderate	Low	Low
iKac	High	Low	Moderate-High
iRad	High	High	High
iSab1	High	Low	Low
iSab2	Low-Moderate	Low	Low
iSac1	Low	Low	Low
iSac2	Low-Moderate	Low	Low-Moderate
iSac3	High	Low	Low-Moderate
iSac4	High	Low	Low
iSac5	Low-Moderate	Low	Low-Moderate
iTab1	Low-Moderate	High	High
iTab2	Low-Moderate	High	High
iTae	High	High	High

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Removal</b>			
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Ground Water Recharge</b>	<b>Overall Water Quality Risk</b>
iUad	Moderate-High	Low	Low-Moderate
iVad	Low-Moderate	Low	Low
iVae1	Moderate-High	Low	Low
iVae2	Low-Moderate	Low	Low
jCac	Low-Moderate	Low	Low
jDae	Low-Moderate	Low	Low

Appendix 2 continues on next page

**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Establishment</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
aCab	Moderate-High
aDad	High
aFaa2	Moderate-High
aRab1	Moderate-High
aRab2	Moderate-High
aRcy2	Moderate-High
aRcy3	High
aTab	Moderate-High
aUab	High
bCab2	Low-Moderate
bCab3	Moderate-High
bCad1	Moderate-High
bDab1	Moderate-High
bDab2	Low-Moderate
bRcy	Moderate-High
bUab	Moderate-High
bUac	Low
dCaa2	High
dDab1	High
dDab2	High
dDad	High
dDae1	High
dDae2	Moderate-High
dFaa	High
dRab	High
dUaa	High
dUab	High
eCae2	High
eDaa3	Low-Moderate
eDab1	High
eDab2	High
eDab3	Moderate-High
eDae	Moderate-High
eFaa1	High
eFaa2	Moderate-High
eRab	Moderate-High
eUaa	High
eUab1	High
eUab2	High
fCaa4	High
fCab1	High
fCab2	High
fCab4	High
fCae	Moderate-High
fDaa3	Low-Moderate
fDaa4	Low-Moderate

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Establishment</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
fDaa5	High
fDab	Moderate-High
fDac	High
fDae	Moderate-High
fFaa1	Moderate-High
fFaa2	Moderate-High
fRab1	High
fRab2	High
fTab	High
fUaa	High
fUab	High
gCaa1	Moderate-High
gCaa2	Low-Moderate
gCab1	Moderate-High
gCab2	Moderate-High
gCab5	Moderate-High
gCab6	Moderate-High
gCac	Moderate-High
gCad	Moderate-High
gDaa2	Moderate-High
gDaa4	Moderate-High
gDaa5	Moderate-High
gDab1	Moderate-High
gDab2	Moderate-High
gDab3	Moderate-High
gFaa1	Moderate-High
gFaa2	Moderate-High
gFaa4	Moderate-High
gKac	Moderate-High
gRcy	Low
gSab1	Low-Moderate
gSab2	Low-Moderate
gSac1	Moderate-High
gSac2	Moderate-High
gSac3	Moderate-High
gSac5	Low-Moderate
gSac6	Moderate-High
gUab1	High
gUab2	Moderate-High
gUab3	Moderate-High
gUab4	Moderate-High
gVab5	Low-Moderate
gVae	Moderate-High
hCab1	Moderate-High
hCab2	Low-Moderate

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Establishment</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
hCab3	High
hCab4	Low-Moderate
hCae1	Moderate-High
hDaa1	Moderate-High
hDab	Moderate-High
hDad1	Low-Moderate
hDad2	Low-Moderate
hDae	Low-Moderate
hFaa1	Moderate-High
hKaa	Low
hKab	Low-Moderate
hSaa2	Low-Moderate
hSab1	Low
hSac2	Low-Moderate
hSac3	Low-Moderate
hSac4	Low-Moderate
hSae2	Low-Moderate
hVab1	Low
hVab2	Low
hVae	Moderate-High
iCab1	Moderate-High
iCab2	Low-Moderate
iCac1	Low-Moderate
iCac2	High
iCac3	Low-Moderate
iCae3	Moderate-High
iCae4	Low-Moderate
iDab	High
iDae	Low-Moderate
iFaa	Moderate-High
iHdt	Moderate-High
iKab	Low-Moderate
iKac	High
iRad	High
iSab1	High
iSab2	Low-Moderate
iSac1	Low
iSac2	Low-Moderate
iSac3	High
iSac4	High
iSac5	Low-Moderate
iTab1	Low-Moderate
iTab2	Low-Moderate
iTae	High
iUad	Moderate-High
iVad	Low-Moderate

<b>Land Use Water Quality Risk – Native Vegetation or Forestry Establishment</b>	
<b>Map Unit</b>	<b>Overall Water Quality Risk</b>
iVae1	Moderate-High
iVae2	Low-Moderate
jCac	Low-Moderate
jDae	Low-Moderate

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Intensive Horticulture (Viticulture)</b>					
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
aCab	Moderate-High	Moderate-High	Low	Low	Low
aDad	High	Moderate-High	Low	Moderate	Moderate-High
aFaa2	Moderate-High	Moderate-High	Low	Moderate	Moderate
aRab1	Moderate-High	Low-Moderate	Low	Moderate	Moderate
aRab2	Moderate-High	Moderate-High	Low	Moderate	Moderate
aRcy2	Moderate-High	Moderate-High	Low	Moderate	Moderate
aRcy3	High	Moderate-High	Low	Moderate	Moderate
aTab	Moderate-High	Moderate-High	Low	Moderate	Moderate
aUab	High	Moderate-High	Low	Moderate	Moderate-High
bCab2	Low	Moderate-High	Low	Low	Low-Moderate
bCab3	Moderate-High	Moderate-High	Low	Low	Low-Moderate
bCad1	Moderate-High	Moderate-High	Low	Moderate	Moderate
bDab1	Moderate-High	Low-Moderate	Low	Low	Low
bDab2	Low	Low-Moderate	Low	Low	Low
bRcy	Moderate-High	Moderate-High	Low	Moderate	Moderate
bUab	Moderate-High	Moderate-High	Low	Low	Low-Moderate
bUac	Low	Moderate-High	Low	Low	Low
dCaa2	High	Moderate-High	Low-Moderate	Low	High
dDab1	High	Moderate-High	Low-Moderate	Moderate	Moderate
dDab2	High	Moderate-High	Low-Moderate	Low	High
dDad	High	Low-Moderate	Low	Low	Low
dDae1	High	Moderate-High	Low-Moderate	Moderate	Moderate
dDae2	Moderate-High	Moderate-High	Low-Moderate	Moderate	Moderate-High
dFaa	High	Moderate-High	Low-Moderate	Moderate	Moderate
dRab	High	Moderate-High	Low-Moderate	Low	Moderate-High
dUaa	High	Moderate-High	Low-Moderate	Low	Moderate-High
dUab	High	Moderate-High	Low-Moderate	Moderate	High
eCae2	High	Moderate-High	Low	Moderate	Moderate-High
eDaa3	Low	Moderate-High	Low	Low	Low
eDab1	High	Moderate-High	Low	Moderate	Moderate-High
eDab2	High	Moderate-High	Low-Moderate	Moderate	High
eDab3	Moderate-High	Moderate-High	Low	Moderate	Low-Moderate
eDae	Moderate-High	Low-Moderate	Low	Low	Low
eFaa1	High	Moderate-High	Low	Moderate	Moderate-High
eFaa2	Moderate-High	Moderate-High	Low	Moderate	Moderate
eRab	Moderate-High	Moderate-High	Low	Low	Moderate-High
eUaa	High	Moderate-High	Low	Moderate	High
eUab1	High	Moderate-High	Low-Moderate	Moderate	Moderate-High
eUab2	High	Moderate-High	Low	Low	Moderate-High
fCaa4	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fCab1	High	Moderate-High	Low-Moderate	Moderate	Moderate-High
fCab2	High	Low-Moderate	Low	Low	High
fCab4	Moderate-High	Moderate-High	Low-Moderate	Low-Moderate	Moderate-High
fCae	Moderate-High	Moderate-High	Low-Moderate	Moderate	Moderate

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Intensive Horticulture (Viticulture)</b>					
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
fDaa3	Low	Moderate-High	Low	Low-Moderate	Low-Moderate
fDaa4	Low	Moderate-High	Low	Moderate	Low-Moderate
fDaa5	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fDab	Moderate-High	Moderate-High	Low	Moderate	High
fDac	High	Moderate-High	Low	Low-Moderate	High
fDae	Moderate-High	Low-Moderate	Low	Low	Low
fFaa1	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fFaa2	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fRab1	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fRab2	High	Moderate-High	Low	Low-Moderate	Moderate-High
fTab	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fUaa	Moderate-High	Moderate-High	Low	Moderate	Moderate-High
fUab	High	Moderate-High	Low-Moderate	Moderate	Moderate-High
gCaa1	Moderate-High	Moderate-High	Low	Moderate	Low-Moderate
gCaa2	Low	Moderate-High	Low	Low	Low
gCab1	Moderate-High	Low-Moderate	Low	Low	Low
gCab2	Moderate-High	Moderate-High	Low	Moderate	Moderate
gCab5	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gCab6	Moderate-High	Moderate-High	Low	Low	Low
gCac	Moderate-High	Moderate-High	Low	Low	Low
gCad	Moderate-High	Low-Moderate	Low	Low	Low-Moderate
gDaa2	Moderate-High	Low-Moderate	Low	Low	Low-Moderate
gDaa4	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gDaa5	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gDab1	Low-Moderate	Moderate	Low	Moderate	Low-Moderate
gDab2	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gDab3	Moderate-High	Low-Moderate	Low	Low	Low-Moderate
gFaa1	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gFaa2	Moderate-High	Moderate-High	Low	Moderate	Moderate
gFaa4	Moderate-High	Moderate-High	Low	Moderate	Moderate
gKac	Moderate-High	Moderate-High	Low	Low	Low
gRcy	Low	Moderate-High	Low	Moderate	Low-Moderate
gSab1	Low	Moderate-High	Low	Low	Low
gSab2	Low	Low-Moderate	Low	Low	Low
gSac1	Moderate-High	Low	Low	Low	Low
gSac2	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gSac3	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gSac5	Low	Moderate-High	Low	Low	Low
gSac6	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gUab1	High	Low-Moderate	Low	Moderate	Moderate-High
gUab2	Moderate-High	Low-Moderate	Low	Low	Low
gUab3	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gUab4	Moderate-High	Moderate-High	Low	Low	Low-Moderate
gVab5	Low	Moderate-High	Low	Low	Low
gVae	Moderate-High	Low	Low	Low	Low

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

Land Use Water Quality Risk – Intensive Horticulture (Viticulture)					
Map Unit	Water Erosion	Nutrient Leaching	Surface Solute Movement	Groundwater Recharge	Overall Water Quality Risk
hCab1	Moderate-High	Low-Moderate	Low	Low-Moderate	Low-Moderate
hCab2	Low	Low-Moderate	Low	Moderate	Low-Moderate
hCab3	Moderate-High	Low-Moderate	Low	Moderate	Low-Moderate
hCab4	Low	Low	Low	Low	Low
hCae1	Moderate-High	Low	Low	Moderate	Moderate
hDaa1	Moderate-High	Low-Moderate	Low	Low-Moderate	Low-Moderate
hDab	Moderate-High	Moderate-High	Low	Moderate	Moderate
hDad1	Low	Low-Moderate	Low	Moderate	Moderate
hDad2	Low	Low	Low	Moderate	Low-Moderate
hDae	Low	Low	Low	Moderate	Low-Moderate
hFaa1	Moderate-High	Moderate-High	Low	Moderate	Moderate
hKaa	High	Moderate-High	Low	Low	Low
hKab	Low	Moderate-High	Low	Low-Moderate	Low-Moderate
hSaa2	Low	Moderate-High	Low	Low	Low
hSab1	High	Low	Low	Low	Low
hSac2	Low	Low	Low	Low	Low
hSac3	Low	Moderate-High	Low	Low	Low
hSac4	Low	Moderate-High	Low	Low-Moderate	Low
hSae2	Low	Low	Low	Low	Low
hVab1	High	Low	Low	Low	Low
hVab2	High	Low-Moderate	Low	Low	Low
hVae	Moderate-High	Low	Low	Low	Low
iCab1	Moderate-High	Low	Low	Moderate	Low-Moderate
iCab2	Low	Low-Moderate	Low	Low	Low
iCac1	Low	Moderate-High	Low	Low	Low
iCac2	Moderate-High	Moderate-High	Low	Low-Moderate	Low-Moderate
iCac3	Low	Low-Moderate	Low	Low-Moderate	Low
iCae3	Moderate-High	Low	Low	Moderate	Low-Moderate
iCae4	Low	Low-Moderate	Low	Low	Low
iDab	Moderate-High	Low	Low	Low-Moderate	Low-Moderate
iDae	Low	Low-Moderate	Low	Moderate	Low-Moderate
iFaa	Moderate-High	Low-Moderate	Low	Low	Low
iHdt	Moderate-High	Low	Low	Moderate	Low-Moderate
iKab	Low	Moderate-High	Low	Low	Low
iKac	Moderate-High	Moderate-High	Low	Low	Low-Moderate
iRad	Moderate-High	Moderate-High	Low	Moderate	Low-Moderate
iSab1	Moderate-High	Moderate-High	Low	Low-Moderate	Low-Moderate
iSab2	Low	Low-Moderate	Low	Low-Moderate	Low
iSac1	Low	Low	Low	Low	Low
iSac2	Low	Moderate-High	Low	Low	Low
iSac3	Moderate-High	Moderate-High	Low	Low	Low
iSac4	Moderate-High	Low-Moderate	Low	Low	Low
iSac5	Low	Low-Moderate	Low	Low	Low

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**Appendix 2 Individual threatening processes and overall land use water quality risks for all land units (continued).**

<b>Land Use Water Quality Risk – Intensive Horticulture (Viticulture)</b>					
<b>Map Unit</b>	<b>Water Erosion</b>	<b>Nutrient Leaching</b>	<b>Surface Solute Movement</b>	<b>Groundwater Recharge</b>	<b>Overall Water Quality Risk</b>
iTab1	Low	Moderate-High	Low	Moderate	Low-Moderate
iTab2	Low	Moderate-High	Low	Moderate	Low-Moderate
iTae	Moderate-High	Moderate-High	Low	Moderate	Low-Moderate
iUad	Moderate-High	Low-Moderate	Low	Moderate	Low-Moderate
iVad	Low	Low	Low	Low	Low
iVae1	Moderate-High	Low	Low	Low-Moderate	Low
iVae2	Low	Low-Moderate	Low	Low	Low
jCac	Low	Moderate-High	Low	Low-Moderate	Low-Moderate
jDae	Low	Low-Moderate	Low	Low	Low

