

**22.04**

02/03/2006

C60

**SALINITY AND EROSION RISK POLICY**

This policy applies to all land and water within the municipality. The responsible authority will consider this policy when making decisions on land use and development.

**Policy basis**

Greater Bendigo is committed to achieving healthy catchments which protect and enhance the environment whilst supporting sustainable natural resource management. Sustainable resource management is recognised as being important to the economy and community of the municipality and region.

The natural environment of Greater Bendigo is worthy of protection and supports large areas of remnant and regrowth box ironbark forests of local, State and International significance. Lake Eppalock is also valuable as both a water supply and for recreation opportunities. These assets need to be protected and managed and the integrity of the water supply from the Lake Eppalock Catchment needs to be maintained.

Environmental hazards such as the removal of native vegetation, salinity, erosion and the proliferation of pest plants and animals also need to be managed and minimised.

**Objectives***Salinity*

To identify groundwater discharge areas and high groundwater recharge areas with the assistance of Departments of Sustainability and Environment and Primary Industry.

To minimise risk of salinity and of rising and high watertables.

To facilitate stabilisation of areas affected by salinity.

To encourage revegetation of areas which contribute to salinity.

To ensure development is compatible with site capability and the retention of native vegetation.

*Erosion risk*

To ensure that the use and development of land does not cause significant land disturbance.

To protect areas prone to soil erosion by minimising soil erosion and vegetation loss.

**Policy**

It is policy that: -

*Salinity*

- A proposal and the assessment of a proposal to use or develop land which may contribute to salinity, or is at risk of salinisation, should consider the following:
  - The appropriateness or otherwise of irrigated land uses, water storage construction, and the need to demonstrate that any proposal does not increase recharge to groundwater systems, or lead to rising water tables;
  - The potential for groundwater pollution resulting from land uses requiring on-site waste disposal, and the need to consider appropriate waste disposal systems;
  - The need to retain or establish vegetation to reduce groundwater recharge, and to lower water table levels in discharge areas;
  - The need to construct buildings outside a discharge area;
  - Any relevant Salinity Management Plan or Regional Landcare Plan;

- The State Environment Protection Policy (Waters of Victoria);
  - Salinity Information Kit - A Local Government Planning Guide for Dryland Salinity;
  - The purpose of the zone within which the land is located; and
  - The capability of the land to accommodate the use or development.
- The following criteria be used to assess the impact of salinity: -

*Class 1:*

- Areas of low level salting;
- Soil Salinity Level: (EC 1:5 less than 600-1400 micro Siemens cm); and
- Other signs include:
  - Isolated or scattered areas of 'patchy' growth in a paddock/vacant block. These may occur on seeps along a break of a slope.
  - Reduced vigour or stunting in improved lawn or amenity plantings.
  - Clovers, thin and die out. They are replaced by other plants with more salt tolerance.
  - Sea barley grass is often abundant.
  - Strawberry clover may be present.
  - No salt crystals or bare patches can be seen.

*Note: Class 1 salting is often an early warning of a potentially bigger problem.*

*Class 2:*

- Areas of moderate salting;
- Soil Salinity Levels (EC 1:5, 1400-3500 micro Siemens cm);
- Note the scattered bare patches which are visibly salt affected; and
- Other signs include: -
  - Some Class 1 species disappear and are replaced by others with higher salt tolerance.
  - Salt strains are visible when soil surface is dry.
  - Small, bare areas up to 1 square metre are present.
  - Clover is absent.
  - Affected areas may occur as 'Scalds' exposed.
  - Affected areas may worsen after high seasonal rainfall.
  - Some species show marked changes in leaf colour (commonly reddening of the tips) and shape due to salt stress.

*Note: Class 2 salting usually indicates rising groundwater levels and is relatively easy to recognise.*

*Class 3:*

- Areas of high level salting;
- Soil Salinity Level (EC 1:5, 3500 + micro Siemens cm); and
- Other signs include:
  - Only high salt tolerant plants are present.
  - Large areas of bare ground can be seen.
  - Often only 2 or 3 species will dominate such an area.
  - Trees will be dead or dying.
  - Species present are typical of salt pans and salt marshes.

*Erosion risk*

- Where the responsible authority considers that erosion risk may exist, the following information may be required: -
  - A land capability assessment of the site, prepared by an appropriately experienced or qualified land management specialist, identifying those areas which may be subject to erosion and how development of the site, including access and servicing, will be located and managed to prevent erosion or landslip; and
  - A detailed environmental management plan, which outlines the ongoing maintenance for soil stability.

- Before deciding on an application to use, subdivide or develop land or carry out works the responsible authority may consider: -
  - Land capability studies; and
  - The advice of any relevant land management agency.
- The responsible authority may impose conditions on a permit for land which may be at risk from erosion requiring works to be undertaken to minimise erosion risk such as revegetation of gullies and steep slopes.
- The removal of native vegetation and earthworks be minimised.

#### **Reference documents**

Bluml, M et al., *Land Capability Study of the City of Greater Bendigo, Huntly District*, November 1995

Bryant, E & Lorimer, M, *Land Capability Study of the Rural City of Marong*, April 1993

Bluml, M, Boyle, G & Jones, E, *Land Capability Study of the City of Greater Bendigo, Strathfieldsaye District*, 1995

City of Greater Bendigo, *Guidelines for the Preparation of Environmental Management Plans for Strathfieldsaye Rural Areas*, September 1994

North Central Catchment Management Authority, *North Central Regional Catchment Strategy, 2003-2007*, 2003.

North Central Catchment Management Authority, *North Central Native Vegetation Plan*,

City of Greater Bendigo, *Greater Bendigo Roadside Management Guidelines*, 1995

North Central Catchment Management Authority, *Second Generation Dryland Salinity Management Plan for the North Central Region (draft)*, December 2002.

City of Greater Bendigo, *Greater Bendigo Roadside Management Guidelines*, 1995