Glossary

- **Aquifer** – a layer of soil or rock that holds water and allows water to move through it.
- **Depth to water table** – depth from the land surface to the water table.
- **Discharge** – flow of groundwater to the earth's surface.
- **Discharge enhancement** – the enhancement of groundwater discharge through the planting of vegetation or pumping groundwater. Trees essentially act as groundwater pumps to remove excess groundwater.
- **EC units** – The electrical conductivity (EC) of water provides a measure of the amount of salt dissolved in the water. Water with a high EC is more saline. One EC equals one micro-Siemen per centimetre (µS/cm) measured at 25ºC, or approximately 0.6 milligrams of salt per litre (mg/L). 800 EC units is the World Health Organisation recommended desirable upper limit for salinity in drinking water.
- **Ecological Vegetation Class (EVC)** – groupings of vegetation communities based on floristic, structural and ecological features. Each EVC includes a collection of floristic communities that occur across a biogeographical range, and although different in species, have similar habitat and ecological processes operating.
- **Free flowing bores** – bores installed in the 1960s and 1970s in the Nambrok and Clydebank areas that discharge into the drainage system without requiring pumping. When the water table is high, the pressure forces the groundwater to be discharged into the drains through these bores.
- **(Public) Groundwater Control Pumps** – Government owned groundwater pumps designed to reduce water table levels for salinity control. The operating costs of the existing Groundwater Control Pumps in the Macalister Irrigation District and surrounds are funded by irrigators and Local Government. They are sometimes known as "public pumps" to distinguish from "private pumps" owned and operated by landowners.
- **Groundwater Flow System (GFS)** – a set of aquifers that share similar characteristics and where processes leading to salinity are similar.
- **Groundwater monitoring** – groundwater monitoring for salinity purposes usually involves monthly measurements of the water level in the Shallow aquifer and regular measurements of groundwater salinity. Water levels are measured to determine the water table trend. A shallow water table (<2m from the surface) can lead to land salinity.
- **Groundwater salinity** – The salinity of groundwater can be measured in a number of ways. The most commonly used measurement is Electrical Conductivity (EC) which is measured in µS/cm (micro-Siemens per centimetre). Salinity can also be measured in parts per million (ppm) or milligrams per litre (mg/L) Total Dissolved Solids. 1,000µS/cm = 640ppm/640mg/L. As a guide, pure distilled water is 0µS/cm, 800µS/cm is the ideal limit for drinking water, 2,300µS/cm is the absolute limit for human consumption and 50,000µS/cm is the approximate salinity of seawater. Groundwater salinities around 1,500µS/cm are generally regarded as being about the limit for safe irrigation of many pasture species depending on the soil type and irrigation method.
- **Hectare** – a unit of measurement equal to 10,000m^2 or 2.471 acres. One acre is 0.4 hectares.
- **Hydrogeology** – the study of groundwater.
- **Irrigation Farm Plan** – the planning of infrastructure related to irrigation, drainage, dairy waste, easements and fencing. They are usually compiled by specialist contractors. These plans do not generally include issues such as vegetation and stock planning nor address other natural resource management issues such as biodiversity and soil erosion as would normally be expected of a "Whole Farm Plan".
- **Permissible Annual Volume (PAV)** – the sustainable yield of an aquifer. The PAV is difficult to estimate and there is generally a high degree of uncertainty.

- **Primary Salinity (natural salinity)** – salinity that occurs naturally.
- **Ramsar listed** – a listing of internationally significant wetlands. Refers to the Convention on Wetlands held in Ramsar, Iran in 1971, marked by an intergovernmental treaty dedicated to the conservation and wise use of wetlands. A Ramsar wetland is considered to be of international importance, meeting at least one of a number of criteria relating to the site's uniqueness, rarity or representativeness, or the flora, fauna or ecological communities it supports.
- **Recharge** – the component of rainfall and excess irrigation water that drains into the groundwater.
- **Recharge control** – reducing the amount of water that enters and recharges the Shallow aquifer.
- **Resource Condition Targets** – realistic targets for the desired condition of assets.
- **Salinity Management Area** – an area, defined by hydrogeological boundaries, in which the processes contributing to salinity are expected to be fairly similar.
- **Salinity program** – the salinity program is all the activities associated with the implementation of the West Gippsland Salinity Management Plan.
- **Salinity severity** – Salinity is classed as Class 1 (low salting), Class 2 (moderate salting) or Class 3 (severe salting). The land salinity mapping (discharge mapping) in West Gippsland has been undertaken using vegetation characteristics.
- **Salt tolerant pastures** – pasture that is naturally tolerant to higher levels of soil salinity than regular pasture.
- **Sea walls** – Walls built to prevent the ocean from flooding low lying land.
- **Secondary Salinity (induced salinity)** – salinity that occurs due to changes humans have made to land and/or water management such as clearing of native vegetation or irrigation.
- **Shallow Aquifer** – the aquifer of primary concern when dealing with salinity. Its shallow depth makes it the most important aquifer system driving high water tables and salinity problems in the West Gippsland region.
- **State Environment Protection Policies (SEPPs)** – SEPPs are legislation made under the provisions of the *Environment Protection Act* 1970 to provide more detailed requirements and guidance for the application of the Act to Victoria. SEPPs establish the uses and values of the environment that the community want to protect, define the environmental quality objectives and describe the attainment and management programs that will ensure the necessary environmental quality is maintained.
- **Sub-surface drainage** – a method for artificially increasing the amount of water drained from the groundwater system. The most common sub-surface drainage is groundwater pumping as it artificially extracts groundwater. Other methods involve deep drains to intercept the groundwater, free flowing bores, tile drains and mole drains.
- **Transmissivity** – a measure of how readily water will move through an aquifer.
- **Triple Bottom Line (TBL) assessment** – an assessment of the benefits and costs of a project based on environmental, social and economic factors.
- **Whole Farm Plan (WFP)** – recommended layout of a property based on best management practices for the region and industry, taking into account the physical and ecological constraints of the land. Whole Farm Plans in dryland areas are usually conducted by landowners and involve the annotation of aerial photographs to determine the most appropriate location of various farm activities including natural resource management.