

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Legal requirement</p>	<ul style="list-style-type: none"> No category 2 or 3 plants have been allowed within 30m of the 1:50 year flood line of wetlands 	<p>Wetland Management In terms of the regulations published under the Conservation of Agricultural Resources Act, (unless authorised in terms of the National Water Act), no land user shall allow category 2 or category 3 plants, within 30 metres of the 1:50 year flood line of a wetland.</p> <p>Both category 2 and category 3 plants are discussed in Module 3.2: Alien and invasive species</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Better Management Practice</p>	<p>Better management practices are implemented for wetland management.</p> <ul style="list-style-type: none"> Natural wetlands have been identified and mapped Controlled burning/grazing is being practiced in wetland areas 	<p>Protection of wetlands</p> <ul style="list-style-type: none"> Natural wetlands should not be planted to crops. Wetlands and watercourses should be identified and mapped and adequately protected or rehabilitated. e.g. removing alien invaders, encouraging relevant vegetation and removal of any drains. Alien invaders and exotic plants should be removed. Wetlands and watercourses should be considered as sensitive areas with regards to burning. Wetlands must be managed correctly, e.g. controlled burning and controlled grazing. Access roads should not cross wetlands. Forested riparian zones should not be burnt. <p>NB. The Mondi Wetland Project is a valuable reference point for guidelines to protect and rehabilitate wetlands and should be contacted as the first step in any wetland management programme (see www.wwf.wetlands.org.za/manage.htm)</p> <p>Defining and classification of wetlands</p> <ul style="list-style-type: none"> Soil indicators - A wetland can be defined as an area that is flooded for a sufficiently long period for waterlogging to become the dominant factor determining the diagnostic characteristics of the soil, with the presence of mottling or gleyed horizons due to the anaerobic conditions. (See Department of Water Affairs and Forestry: A Practical procedure for identification and delineation of wetlands and riparian areas. This document provides a guide to the identification of wetlands, using soils, vegetation and position in the landscape.) <p>Soil forms - characteristically wetland soils:</p> <ul style="list-style-type: none"> Champagne Katspruit Willowbrook Rensburg Kroonstad

Better Management Practice		<p>Apart from the Champagne form (topsoil horizon is characterised by high amounts of organic material and is saturated with water for long periods), the rest are characterised by the presence of a G horizon, which has as one of its diagnostic characteristics, the presence of a gley material that has been or is subject to intense reduction as a result of long periods of saturation with water. In all cases, these soils are associated with hygrophilous vegetation (vegetation adapted for life in saturated soil conditions e.g. vlei grasses, reeds, bulrushes, sedges, ncema and swamp forest woody plants such as the fig trees, wild poplar, quinine tree, water pear, mingerhout, etc.) and bottomland sites or upland springs.</p> <p>Soil forms that may also be classified as wetland soils:</p> <ul style="list-style-type: none"> • Cartref • Longlands • Fernwood • Estcourt <p>They are all characterised by the presence of an E horizon, which is generally formed as a result of a temporary build-up of water above the B-horizon. If these soils occur with the absence of hygrophilous (water-loving) vegetation and at a characteristic position in the landscape (see below), they are not typically wetland soils and could be planted. But if hygrophilous vegetation is present, and they exist in a bottomland site or in a flat, level area adjoining a river system, they must be classified as wetland soils.</p> <p>Soil forms that may be classified as wetland soils, depending on the extent and depth below the surface of the soft plinthic B-horizon:</p> <ul style="list-style-type: none"> • Longlands • Westleigh • Avalon
Better Management Practice		<p>The degree of saturation of the soft plinthic B-horizon will determine whether the soil can be classified as a wetland. As the soft plinthic B horizon has been formed under the conditions of a fluctuating water table, the degree of wetness will depend on whether the plinthite is being actively formed, or whether it is a relic. If the plinthite is being actively formed, and the soil supports hygrophilous vegetation in a typical wetland landscape, then the soil can be classified as wetland.</p> <p>The inclusion of the Avalon, Westleigh and Longlands soil forms with an active soft plinthic B horizon less than 400 mm below the surface, and supporting hygrophilous vegetation in a typical wetland landscape, is therefore justified and, under these circumstances, should not be planted.</p>