

Evaluating and valuing wetlands

Sustainability FAQs



Why are wetlands important?

Wetlands are among the world's most productive environments. In a world that faces an increasing threat from climate change, they play a crucial role in helping to mitigate global warming. They do so by sequestering carbon from the atmosphere through plant photosynthesis and by acting as sediment traps for runoff. Carbon is held in the living vegetation as well as in litter, peats, organic soils and sediments that have built up, in some instances, over thousands of years.

But that's not all wetlands have to offer. On a global scale, they provide us with services worth trillions of US dollars every year – entirely free of charge – making a vital contribution to human health and wellbeing:

- **Pollution filtration**

Wetlands improve water quality by removing pollutants from surface waters. As water from a stream channel or surface runoff enters a wetland, the water spreads out and flows through dense vegetation. The velocity of the flow is reduced, allowing suspended material in the water to settle to the wetland surface. The roots of wetland plants can then bind the accumulated sediments. As much as 90% of the sediments that are present in runoff or in streamflow may be removed if the water passes through wetlands.

- **Flood control**

By slowing down rainwater runoff, wetlands help prevent sudden, damaging floods downstream.

- **Biodiversity richness**

While wetlands cover a relatively small area of the earth's surface, many of them are extremely rich in biodiversity.

How many wetlands does Sappi have?


Excluding rivers and streams that are sometimes classified as wetlands, approximately **3,892 hectares of our landholdings are currently classified as inland wetlands**. These inland wetlands consist of a variety of wetland types, including freshwater marshes, peatlands, seeps and floodplains. The extensive upland vleis of the Highveld are primarily moist grassland surrounding wetland marshes in valleys, and these moist grasslands play a vital role in supplying water to the low-lying areas.

What is Sappi's approach to managing wetlands?

We're proud to say that Sappi was involved in the development of **Wet-Health**, one of the first comprehensive **wetland health assessment tools** to be developed for assessing South African wetlands. The toolkit enables us to:

- Evaluate wetland condition
- Identify causes of wetland degradation
- Prioritise rehabilitation initiatives
- Evaluate possible impacts of land-use changes on wetland functioning.

With the aid of the toolkit, we prioritise the importance of our wetlands, assess their catchment areas and refine management plans to ensure they are managed to provide a sustainable flow of clean water and a sound habitat for biodiversity.



How do you know
when an area is a
wetland?

- Wetlands are areas where the water table is usually at, or near, the land surface, either permanently or seasonally
- The substrate is predominantly undrained waterlogged soil
- The area is covered by water-loving species such as a papyrus marsh or sedge-dominated seep
- Temporarily wet areas, dominated by grass species, are only classed as wetlands if there is a high proportion of wetland soils showing signs of waterlogging.

What types of wetlands are on Sappi land?

District	Plantation	Name of wetland	Description of wetland
Bulwer	Epsom	Epsom wetland I	Contains patches of indigenous forest and provides sanctuary for the nearby forest's fauna and flora.
Bulwer	Epsom	Epsom wetland II	Since being cleared, the river below the wetland has flowed continuously, even in times of drought. This wetland is important for water conservation and the conservation of wetland fauna and flora.
Bulwer	Mossbank	Mossbank wetland	The upper section of this site consists of a large 40ha wetland previously planted to commercial trees. This wetland has now been rehabilitated, resulting in the water table lifting and improved water flow in the stream, which meanders through an attractive valley system of some 16ha in extent towards the Mossbank Dam.
Camelot North	Elandshoogte	Taljaardsvlei	The Taljaardsvlei area consists of a high altitude upland wetland and a connecting corridor of moist grassland. It is described as Elandshoogte Mountainlands and is classified as a Vulnerable threatened ecosystem. The vlei area is known for its rich diversity in orchid species, a recognised 'hotspot' for orchid lovers. The site is in the process of being declared a Nature Reserve.
Camelot North	Helvetia	Swartkoppies spruit	Located along the Swartkoppiespruit, a tributary of the Elands River, the catchment area into which this wetland falls was highlighted as irreplaceable in the Mpumalanga Aquatic Conservation Plan. The site also falls within a macro-ecological corridor identified as part of the Mpumalanga Biodiversity Conservation Plan.
Hlelo	Block F	Block F Wetlands	Block F on Hlelo is characterised by flat terrain, with shallow pans formed by an impermeable calcrete layer. Oribi are resident, and plants typical of wetland pans are present. <i>Gladiolus paludosus</i> , categorised as Vulnerable has been recorded in the shallow pans.
Inkwazi	Hall & Sons	Gladdespruit	The Gladdespruit River is a significant water body with natural waterfalls and wetland areas present. The critically endangered Inkomati Rock Catlet has been recorded from this system.
Karkloof	Shafton	Nyaka-Nyaka vlei	The vlei begins below a large dam and supports a small, slow-flowing meandering channel. The stream is supplemented by a few small tributaries and widens out into a small floodplain wetland, supporting a diversity of sedge and phragmites (large perennial grasses). It also contains a regularly used nest site of the African Marsh Harrier.
Karkloof	Shafton	Shafton-Kusane wetland	Situated on the northern section of Block A on Shafton plantation, this reclaimed wetland ecosystem supports a variety of wetland plants which provide habitat for a variety of bird and other animal species.
Karkloof	Shafton	Lions River wetland	The site comprises a large floodplain either side of the Lions River as it flows towards Midmar Dam. During 1999, Sappi Forests, Rennie's Wetland Project and Umgeni Water initiated a joint project to rehabilitate the site. Although still showing signs of disturbance, it is recovering well and has drastically improved from its previous state.
Karkloof	Winterton	Woodcote wetland and streams	The catchment areas are primarily grassland; a variety of shrub species including: <i>Leucosidea sericea</i> , known in English and Afrikaans as Ouhout; <i>Buddleia spp</i> (Butterfly Bush); and <i>Halleria lucida</i> (Tree Fuschia); occur along some watercourses that have been protected from fire. Tree ferns occur along streams. Reedbuck are often seen here.

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Continued

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District	Plantation	Name of wetland	Units
Lothair	Woodstock	Metula vlei	A continuation of the wetland on the Spring Grove property bordering our land. The vlei is short, moist grassland interspersed with marsh habitat in low lying areas. In addition to the wetland habitat, there are rocky outcrops and tree-ferned valleys, typical of the upland source areas of the major river systems draining off the Highveld.
Lothair	Woodstock	Loch Leven	This portion of Loch Leven is a tributary to the Metula vlei system, joining the larger vlei system off Sappi property. The area is typical of the Highveld, with rolling terrain, interspersed with rock outcrops and tree-ferned valleys.
Lothair	Mpulusi	Mpulusi wetland	The Mpulusi management unit is bordered on one side by the Mpulusi River and has a large vlei area traversing the management unit. Two threatened vegetation types are present: Chrissiesmeer Panveld (Endangered) and Eastern Highveld Grassland (Vulnerable).
Lothair	Riverbend	Blesbokvlei	Blesbokvlei is a large undulating vlei system draining into the Usutu River. Although there are no red-listed species recorded from the area, the area is in relatively good condition with minimal weed invasion.
Umvoti	Hodgsons	Thornvale swamp	Wetland system dominated by the common phragmites reeds.
Umvoti	Clan	Satellite wetland complex	This large wetland system includes Satellite Dam, a bird sanctuary, and a number of linked wetland areas that are recovering following extraction of timber from the floodplain areas. The area is home to over 100 bird species and is a significant breeding ground for species such as Spurwing and Egyptian Geese, and Crowned and Fish Eagles.
Zululand	Mooiplaas	Nomasila wetland	This wetland area supports a number of bird species and is divided by saddles into two separate wetland systems.
Zululand	Zululand South	Tekweni wetland	Previously planted with commercial trees, this large wetland area provides habitat for numerous wetland bird species.

