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Department of Biodiversity,
Conservation and Attractions

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Examples of the two sub-types of the Critically Endangered sedgeland community — sedgeland in Holocene dune swales (above) and woodland over sedgeland in Holocene dune swales (top).

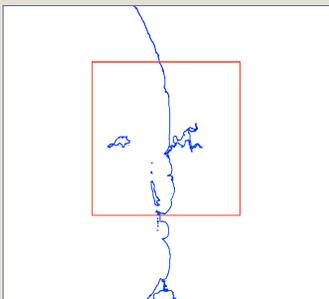


The typical wetland in which this threatened community occurs is known as a dampland, which means that in winter it becomes waterlogged, and in summer it remains quite wet near the soil surface. Some of the wetlands contain surface water during the winter months while others contain limited amounts of surface water for most of the year. These types of wetlands are known as sumpwells. These dampwells and sumpwells are generally narrow and linear, but may also be circular. The composition of species that occurs in this threatened ecological community varies between occurrences. Typical and common native species include: the shrubs, climbing lignonum (*Muehlenbeckia adpressa*), orange wattle (*Acacia saligna*), and balsa (*Xanthorrhoea preissii*); the sedges, bare twig-rush (*Baumea juncea*), knotted club-rush (*Isolopis nodosa*), and coastal sword-sedge (*Lepidosperma gladiatum*); and the grass, *Poa porphyroclados*. One sub-set of this community has trees such as melaleucas, banksias or tuart forming an overstorey.

Where do these wetlands occur?

These important wetlands are mostly found in the Rockingham area.

They are located in the Shires of Rockingham and Mandurah, with a single occurrence being in the City of Wanneroo. They occur within linear wetlands in dips known as swales, that occur between sand dunes. The wetlands occur on land vested in the City of Rockingham, in regional parks and on private land.



Location of the Sedgeland in Holocene dune swales community.



If you would like more information about the sedgeland community near you, please contact CALM's **Swan Region office** on **9368 4399**.

Why are these wetlands important?

The Rockingham-Beach Plain, on which these wetlands occur, was formed through the build-up of sandy Holocene sediments during the past 10,000 years. The dunes and swales are of high geomorphological significance because they provide a relatively undisturbed record of soil development, from the older inland soils to the younger soils deposited recently near the coast. They provide an insight into the evolutionary record of sea-level history, shoreline and climatic changes. These wetlands are examples of a threatened ecological community, which is a particular group of plants and animals that occur together in a particular habitat, and are considered to be under threat of destruction. This community is classified Critically Endangered which indicates that it is under threat of immediate destruction unless high level threats can be managed.

Congratulations! You live near a significant wetland...



The threatened sedgeland in holocene dune swales



Plant community in danger

Only 132 ha of this Critically Endangered community are now found in the world, and only a small percentage of this area is in protected reserves.

Some of the areas of the community are proposed to be cleared. The health of the sedgeland community is also under threat from declining water quantity and quality resulting from the drying climate and high water use on surrounding lands such as residential developments, golf courses and other grassed sporting grounds. While this community is relatively resilient, too frequent fire has a big impact on it and encourages the invasion of weeds. Weeds compete with the native species and further increase the risk of fire.



Above Frequent fire has greatly increased weeds in this area of the community. Photo – CALM

Top Surveying the threatened wetlands. Photo – CALM

Aboriginal significance

Aboriginal beliefs relate to some areas of this community type. One of the sites has been identified as a hunting area, and another as containing artefacts.

Recovery of this threatened ecological community

The Department of Conservation and Land Management (CALM) is committed to ensuring that Critically Endangered ecological communities are not destroyed. This is done through the preparation of Interim Recovery Plans which outline the recovery actions that are required to urgently address threats that have the greatest impact on the community, and begin the recovery process.

CALM has set up a recovery team for the 'Sedgelands of Holocene dune swales' to oversee the implementation of recovery actions that address the greatest threats to the survival of the community. This team consists of representatives from CALM, the City of Rockingham and a community-based wetland conservation group.



The sedgelands in Holocene dune swales, pictured in very good condition in Port Kennedy Regional Park. Photo – CALM

Recovery actions that will be progressively implemented with the help and support of neighbours:

- monitoring the groundwater within this community to help ensure that current water quality and levels are maintained;
- ensuring developments on adjacent lands have minimal impact on the community;
- seeking to prevent fire from occurring too frequently in the community;
- controlling weeds within the community; and
- fencing occurrences of this community to help ensure its protection.

What can you do to look after these important wetlands?

Don't dump rubbish.

These wetlands are of high conservation value, and activities such as dumping rubbish, especially garden waste that contains lawn clippings or seeds, degrade them. Dispose of rubbish properly.

Reduce fertiliser use.

The nutrients from fertilisers can end up in the drains into the wetlands and reduce water quality.

Keep to the tracks.

Walking off the tracks can crush the vegetation. Please use paths and boardwalks.

Report fires.

Too frequent fire has a huge impact on this sedgeland community by increasing weeds that out-compete native species. Please report all fires or any unusual behaviour that could relate to arson to the Fire and Emergency Services Authority.