



# Maintaining Our Wetlands



**Like any filtration system, a constructed wetland requires maintenance to work at peak efficiency. Many factors determine the maintenance and control measures needed, including the type of wetland, its size, location and even the time of the year (and prevailing weather conditions).**



Top Heavy machinery is sometimes required to remove weeds, or to remove silt from the bottom of sedimentation ponds.  
Photo: Luke Simon

Above Trash racks prevent plastic bags and other debris from entering wetlands. These racks need to be inspected and cleared as part of regular maintenance.  
Photo: Jeremy Gramp

As constructed wetlands purify water, materials filtered from the water, such as silt and rubbish, build up. Sometimes these have to be physically removed from the wetland. Other types of regular maintenance include inspecting the weir and water gates throughout the wetland, and the pipes leading into the wetland, to ensure no blockages occur that could cause damming or flooding.

Some of the larger wetlands, such as Greenfields Wetlands, work best with minimal interference. These wetlands have been constructed to mimic natural wetlands.

The quality of water entering them is reasonably good and the wetlands are large. Many of the natural cleaning processes - such as sedimentation - work best in an undisturbed environment. In these wetlands, any regular interference would disturb the very processes that clean the water.

Other wetlands, such as those at Parafield Airport, are small and treat water very intensively for re-use.

These wetlands deal with heavy pollutant loads and require much more maintenance.



Wet and dry periods are common in natural wetlands. They help to ensure the wetland soils can maintain their ability to absorb nutrients, particularly phosphorus.

Dry periods allow oxygen to penetrate into the soil to aid the decomposition of plant material, increasing soil fertility.

Wetting and drying cycles are also useful to control bacteria, weeds and invasive fish such as European Carp. Most native plant and animal species have evolved to cope with these changing wetland conditions, as many South Australian wetlands dry out when there is no rainfall. Some species even rely on dry periods for survival. For these reasons, wetting and drying cycles are used to manage constructed wetlands.

When an undesirable exotic invasive species is found in a wetland, other methods of control include harvesting the undesirable flora or fauna, or introducing chemical or biological controls. Such measures may have negative impacts on the native species inhabiting the site, but sometimes this is necessary to protect the long-term health of the wetland.

#### Learn more

For more information on related topics, see the other fact sheets in the Wetlands series. You may also like to visit the following website for more information:

*Australian feral species*  
[www.feral.org.au](http://www.feral.org.au)



Top Silt removed from wetlands can be contaminated and is tested, composted and re-used on site for landscaping.  
Photo: City of Salisbury

Above Australian Pelicans congregate to consume the European Carp stranded in wetlands drained for maintenance.  
Photo: Luke Simon

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Salisbury, Sustaining Our Environment

