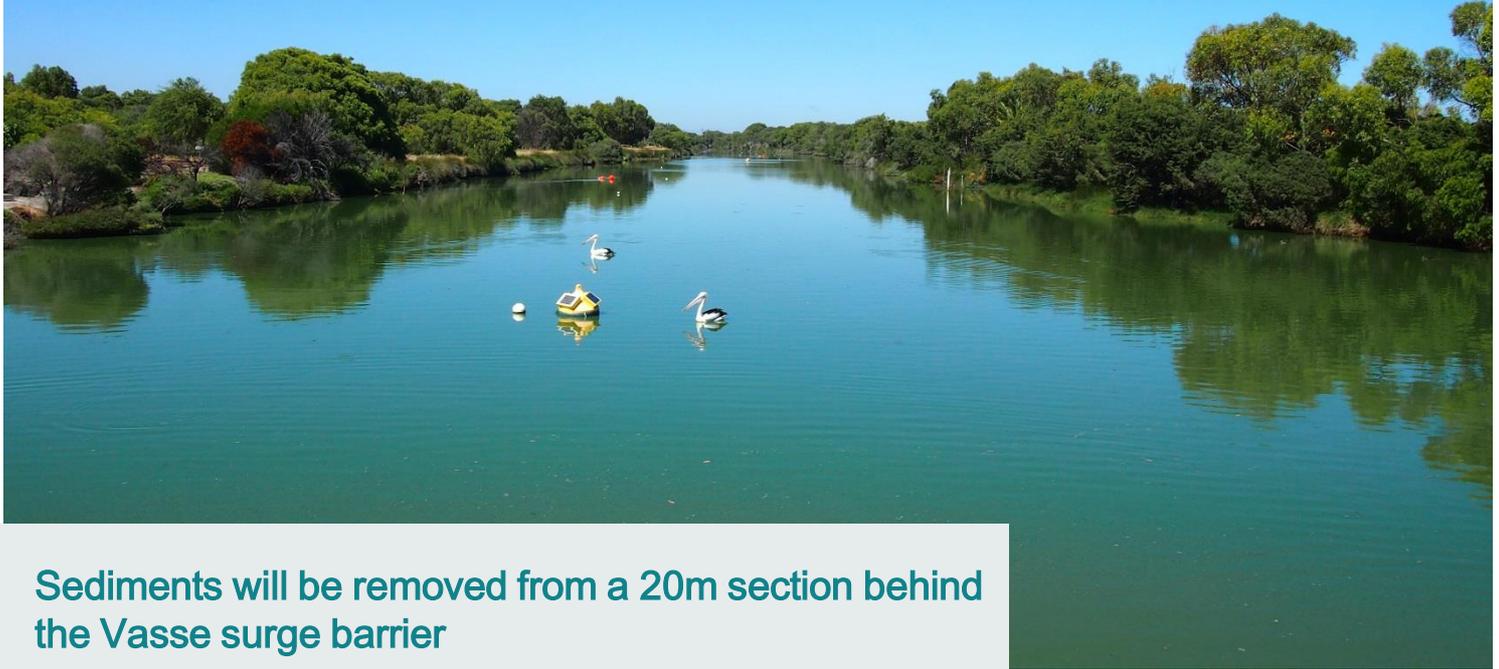


Revitalising Geographe Waterways

Removal of sediments from the Vasse Estuary Exit Channel to improve water quality



Sediments will be removed from a 20m section behind the Vasse surge barrier

The Water Corporation will be removing organic sediments that have accumulated directly behind the Vasse Surge barrier to improve water quality, smell and visual amenity. The works will take place in early June and are expected to take around 7 days. Disturbance to neighbours is expected to be minimal with works being undertaken during normal working hours. The oxygenation plant will be operating to mitigate any low oxygen conditions associated with removal of the sediment.

Why are we doing this?

The accumulation of organic sediments behind the Vasse surge barrier contributes to poor water quality, visual amenity and offensive smells over summer. In response to neighbour and community concerns the Department of Water initiated a survey to assess the volume and composition of sediments in the Vasse estuary channel from the Vasse surge barrier to the end of Estuary view Drive. The survey highlighted a number of areas in the channel where sediments have accumulated including directly behind the surge barrier.

The Water Corporation have now initiated a project to remove the sediment at the surge barrier to support other actions to improve water quality in the Vasse estuary.

How will sediment be removed?

Sediment will be removed via a suction pump mounted on floating pontoon. The slurry of sediment and water suctioned from the channel will then be transferred into trucks for transport to the licenced sludge drying beds at Water Corporations Busselton Wastewater Treatment Plant. The slurry will be added to other sewerage sludge at the treatment plant and subsequent drying, mixing and disposal of the waste will take place as part of Water Corporations standard operations.

How works will be managed

The removal of sediment will occur while water levels are low. These works are expected to last up to 7 days. Public access to the surge barrier will be restricted during this time for safety reasons. There may be some noise associated with operation of machinery and movements of tankers during this time.

The Vasse floodgates and fish gates will be closed during these works to contain the area of disturbance as much as possible. A silt curtain will be used as a barrier on the upstream side of the works area.



Above: Accumulation of organic material behind the Vasse Surge Barrier

The sediment to be removed does not contain contamination from metals, herbicides or pesticides. Although they do have acid sulphate potential, they also have natural buffering capacity, so any changes in the pH of the water are likely to be minimal.

What are the environmental risks?

Environmental risks of this project are considered low as the works are small and contained with no negative impacts to the Ramsar values of the wetlands.

Disturbance of the sediment during removal is however expected to lower dissolved oxygen levels in the water temporarily. The Department of Water will monitor dissolved oxygen and will operate the oxygenation plant if required to mitigate low oxygen conditions.

Where did the sediment come from?

The sediment present today upstream of the Vasse Surge Barrier is a black mud, rich in organic matter that has formed from rotting algae, phytoplankton and seagrass. This organic material is a normal component of estuarine sediments, but the surge barrier causes a physical barrier that allows it to accumulate on the upstream side.



Left: Location of proposed sediment removal works (marked in yellow) in the Vasse Estuary Exit Channel



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