



OUTE

OUTER HARBOR DREDGING

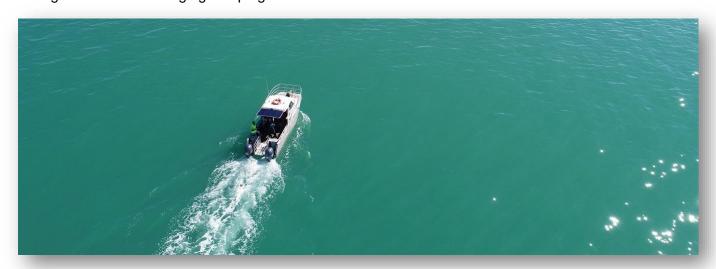
Community update #3 – seagrass assessment

Issued 17 September 2020

Dredging of the Outer Harbor channel was undertaken from June to September 2019, under the authorisation of an EPA licence. The EPA required Flinders Ports to undertake every possible action to reduce the impact on marine life and seagrass, and to implement the most environmentally sustainable dredging methodology.

The licence included conditions that specified when works would require management actions to reduce turbidity or when work must stop altogether, with real-time alarms when the water became too cloudy. The licence required water quality monitoring, and this data was made available to the public.

The EPA set strict turbidity thresholds for the dredge program and required Flinders Ports to monitor seagrass condition. In addition to this, the EPA independently monitored seagrass condition before, during and after the dredging campaign.



EPA's seagrass condition assessment - results

During February 2019 and March 2020, the EPA undertook a scientific assessment of the seagrass using SCUBA in the zones originally identified as potentially being impacted.

The EPA has now completed the first of its post seagrass monitoring surveys, and has published a full report on the outcome. The results of the EPA seagrass audit demonstrate that there has been no adverse impact to the seagrass at the sites monitored in the zone of influence before and after the dredge program. It is noted that there can be a delayed response and further monitoring will be undertaken in 2021.

Underwater video transects and core samples

The dredging zone of influence contains large areas of seagrass, which the EPA identified were at risk from turbidity and sediment deposition. The EPA seagrass assessment adopted two control and two impact sites to measure before, during and after the dredging.

Towed underwater video transects

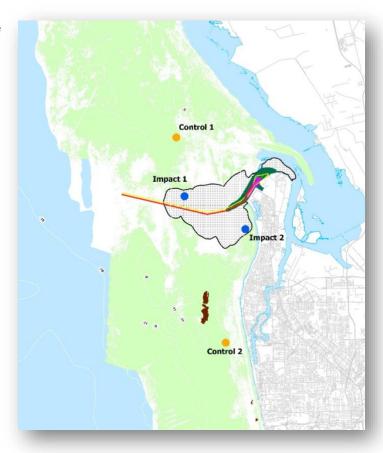
Towed underwater video was used to assess a large area of the seafloor for seagrass presence, allowing an estimate of cover to be made as a percentage of seafloor. Three underwater video transects were undertaken using a geo-referenced digital video camera with a live video feed.

Diver surveys

Diver surveys were undertaken and five replicate cores were taken within seagrass meadows at each site.

In the laboratory, cores were separated into the above and below ground components, and epiphytes, which are the plants and animals living on the leaves, were removed from seagrass leaves. A count was taken of the number of shoots, the leaf length was recorded, and samples were dried to ascertain above and below ground biomass, and the biomass of the epiphytes.

While further surveys will be undertaken in 2021, it is apparent that up until March 2020 there has been no detectable seagrass loss using multiple lines of evidence and a variety of different methods within the zone of influence. This excludes an estimated 4 ha in the Port River where dredging directly occurred, as approved by the Native Vegetation Council for total seagrass loss unavoidable in a dredge campaign.



Please visit <u>www.epa.sa.gov.au</u> to view the full report (under 'Community' then 'Stay informed) to find the Flinders Ports page. Alternatively please contact us via the details below or <u>click here</u> to download a copy if you are viewing this update electronically.

TUK ITEK INTO

For turther information please contact:

Principal Adviser Community Engagement

Environment Protection Authority

GPO Box 2607, Adelaide SA 5001

p: (08) 8124 4216

e: engage.epa@sa.gov.au

w: www.epa.sa.gov.au

(please follow the links to 'Community' then 'Stay informed')



epa.sa.gov.au 2