

B2.6 Understanding contaminant risk to environmentally sensitive areas

Background

Melbourne Water (MW) owns and manages over 40 sites classified as Sites of Biodiversity Significance (SoBS) and is committed to protecting the important biodiversity values of these sites. Management plans for these sites are included in MW's asset management system and five yearly assessments of condition are conducted to ensure the sites are being protected. As well as SoBS, other environmentally sensitive sites include those that are Ramsar listed (e.g. Western Treatment Plant, Western Port) or crucial drought refuges. Contaminants can enter waterways from different land uses and activities, for example metals, hydrocarbons and pesticides are found in waterways close to industrial areas. Understanding the risk of contamination from surrounding areas is critical to being able to protect the environmental values within these sites.

Approach

This project aims to:

- Undertake a contaminant risk assessment for each environmentally sensitive site based on existing management plans, historical sediment and water quality data, and maps of surrounding land use
- Identify the sites that are the greatest risk from contamination that area priority for contaminant screening using novel and traditional methods.
- Based on the levels, types and sources of contaminants, make recommendations for the protection of high risk environmentally sensitive sites



Banyan Waterhole, a Site of Biodiversity Significance in Carrum Downs

Progress to date

The initial contaminant risk assessment for all SoBS sites is now complete. During 2019, contaminant screening occurred at 13 high priority sites with follow up work to determine sources at one site. Further contaminant screening is planned for some of these sites, as well as additional high priority sites, in 2020.

Expected Outcomes

- A more comprehensive understanding of the risks from contaminants to environmentally sensitive sites within the Melbourne Water region, including the influence of groundwater.
- Identification of management opportunities to protect environmentally sensitive sites that are a high risk from contamination.

Project Team

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Expected Completion 2023

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