

E2.4 What are the effects of chemicals frequently used by Melbourne Water along waterways on aquatic ecosystems?

Background

Melbourne Water uses a range of chemicals as part of their business operations and in management and maintenance of assets (e.g. herbicides for weed control along waterways; briquettes to control mosquito larvae, chemicals used in sewage and drinking water treatment). The use of chemicals in and around waterways poses a potential risk to the environmental, social and economic values waterways provide, in addition to the risks to operators applying the chemicals.

Approach

This project will assess the risks of chemicals used by Melbourne Water on or near waterways, to aquatic ecosystem and human health and inform improved chemical use practices.

The aims are to:

- Complete a stocktake of all chemicals used in and around waterways by Melbourne Water
- Conceptualise how people and the environment may be exposed to these chemicals
- Prioritise chemicals based on potential risks to the environment or human health and review alternatives chemicals or practices for those priority chemicals.
- Conduct trials to evaluate the comparative efficiency and effectiveness of alternative chemicals or practices



Progress to date

A stocktake of 1,472 chemicals used by Melbourne Water is complete and a review of use and potential exposure is underway.

Expected Outcomes

- Identify opportunities for Melbourne Water to continue to reduce environmental and human health risks associated with chemical use on or near waterways
- Provide a resource to support the evaluation of chemical use on or near waterways for similar organisations

Project Team

- **RMIT A3P** Jackie Myers, Sara Long, Vincent Pettigrove, Monica Tewman, Kennedy Osakwe
- **MW:** Tom Le Cerf, Sarah Harris, Erik Ligtermoet, Will Steele, Suelin Haynes, Heather Graham, Louise Kerferd, Paul Rees, John Tsevelekidis, Sam Harbert, Rhys Coleman, Slobodanka Stojkovic

Expected Completion 2023

Contact Jackie.Myers@rmit.edu.au or 9925 4841 or Sara.Long@rmit.edu.au on 9925 5748