

Faculty of Engineering

Summer Research Program 2023-2024

Project Title: Planning for an unknown future: predicting climate change impacts on water quality

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Objective

The main objective of this project is to identify how climate change will impact water quality of Australian rivers.

Project Details

Climate change is one of the greatest threats to water security in coming decades. It is critical to design our water management systems with this threat in mind. It is especially important to identify how climate change will impact water security in Australia in the future.

We have some understanding of how climate change will impact the amount of water in Australian rivers. However, we have very limited understanding of how climate change will impact the quality of water in Australian rivers. The latest IPCC report did not mention 'water quality' once in its report, despite the fact that water quality is a key component of ensuring safe and secure water supplies for both human and ecological uses.



In this project, we will explore the impact of climate change on water quality in Australian rivers using publicly available water quality and climate data.

Additional Information

Applicants are encouraged to reach out to the project supervisor if they have any questions about this project. This is a mainly modelling-based project. However, students will be given the opportunity to contribute to field and lab work conducted in the Green Infrastructure and Water Quality (GIWaQ) research group, conducted over the summer period.