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Summary

This project will investigate how managed watering events (i.e., irrigation releases and environmental flows) influence patterns and processes of plant invasion in riparian and floodplain habitats in dryland catchments. My research will focus on extant plant communities and the assemblage of a range of key propagule banks (e.g., soil, aerial, litter etc.) in selected areas of the Murry-Darling Basin (MDB) subject to flow modification. The project will generate new information regarding the distribution of invasive plant species in the MDB and key drivers of these. Emphasis will be given to exotic species with the potential to significantly impact the MDB environmentally and economically. Shifts in key vegetation communities will also be noted. Additionally, mesocosm trials may be undertaken to test the responses of selected plant species to different environmental conditions, namely varying temperature, and watering events i.e., different extents of flooding, rainfall, drought etc.

Research Expertise

- Vegetation community ecology
- Urban forest ecology
- Plant identification