

DEVELOPMENT OF A LANDSCAPE SCALE VIRTUAL TOUR OF NORTHERN VICTORIA

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SUBTHEME: Technology enhanced learning

PROBLEM

Previously developed virtual tours of agricultural enterprises across Australasia allow students to visualize enterprises through time and across the property through the use of 360-degree imaging (Hallein et.al, 2025, Barber and Brown 2021). These also include additional multimedia content and have been used for more than 10 years in tertiary education in veterinary and agricultural science. They lack a regional view of systems and natural resource management in areas such as national parks for student education.

PLAN

The plan for this project was to produce an overview of water flow through the Goulburn and Murray Valley across primarily Yorta Yorta, Waveroo and Taungurung country. This area is bounded by Lake Hume and Dartmouth dam to the northeast. Down to Lake Eildon in the south and across to Lake Eppalock and up to the Murray River at Echuca and including the Barmah Wetlands. Additionally, the plan included collection of images from a remnant bush area.

ACTION

Key sections of the Goulburn Murray catchment region were visited to obtain 360-degree images using an XPhasePro X2 camera. Ambisonic sound was captured using a Zoom H3-VR recorder. Images were collected from the key rivers in the region along with the main water storages for irrigation purposes. A single image was taken at each major lake and/or river. In addition, images were collected at the Reef Hills State Park, with a visit every three months to allow users to virtually visit the park throughout the year at different sections of the park with different flora and soil types.

REFLECTION

This project is ongoing with field collection of images complete, but addition to the web continuing. Images for the waterways part of the project occurred with most lakes at or above 90% full and rivers also at full flow. It would be useful to extend this project to years with lower rainfall to show the impact on lakes and rivers. This significant image bank will be available for use via direct insertion into learning management system modules allowing a closer connection to country. Staff and students will be able to virtually travel around the waterways of north-east Victoria and through time and place at the Reef Hills State Park. This can enhance field trips to this area or in some cases replace the need for travel. Feedback from student and staff users will be sought to iteratively improve the project outcome.

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