

The Brigalow Catchment Study: forty-five years of paired catchment monitoring in the Brigalow Belt of Australia

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Abstract The Brigalow Catchment Study was established primarily to determine the impact on hydrology when Brigalow land is cleared for cropping or pasture. This paired catchment study commenced in 1965, when three catchments were selected in central Queensland, Australia, to represent the extensive brigalow bioregion of approximately 37 million hectares. After a 17-year calibration period (1965–1981) two of the three catchments were cleared, with one developed for cropping, another sown to improved pasture, and the third retained as an uncleared control. Monitoring of salinity, water quality, soil fertility and productivity also commenced at this time and analysis of these long-term data sets clearly indicates that paired catchment studies are capable of answering questions beyond their initial scope of hydrological change.

Key words Brigalow; land development; runoff; catchment; Vertosols; Dermosols; Sodosols