

QMDC Regional Technical Officer Peter Thompson - *Satellite Imagery interpretation of current and past fire history information in the Upper Maranoa area of Southern Inland Queensland*. September 2016.

Federal investment for carbon abatement through enhanced biodiverse carbon stores has proven to be a catalyst to mobilise primary producers, public and private sector participation in fire planning in the Queensland Murray-Darling Basin.

The use of satellite imagery to monitor and map past fire activity is a widely used management tool throughout northern Australia. As a part of the “Landscape Fire Planning in Poplar Box Grassy Woodlands in the QMDB” project funded by the Australian Government, an analysis of Landsat imagery information is being used to look at the current and historic pattern of fire activity in an area of 300,000 hectares in the Upper Maranoa region 600 km west of Brisbane.

The study is utilising 29 years of Landsat imagery information published by DSITI to produce maps, reviewed with landowner records to gain a better understanding of the long term implications of both deliberate burning and wildfire activity in the study area. The long term absence of recorded fire activity over significant areas in this landscape over this time period will also be interrogated in key REs. In a landscape that is showing encroachment and thickening of Cypress Pine communities in particular, better management of fire and grazing issues are seen as important factors for both conservation and productivity outcomes.

This information is being analysed in terms of fire frequency compilations of the available information to explore differences in management practice and to investigate the relationship between fire activity and seasonal rainfall variations in this region which is characterised by highly variable and unreliable seasonal rainfall patterns.