Scholarship Description.
An exciting opportunity exists for a PhD student interested in modelling the response of vegetation to flooding integrating multisensor satellite data (very high resolution multi-/hyperspectral and LiDAR data). The work will focus on the largest contiguous area of river red gum in the world and a key site for the management of environmental flows in the Murray-Darling Basin.

We are seeking a PhD student for a period of three years (with a possible extension of 6 months). Candidates are expected to apply for a PhD scholarship (deadlines of 18th of Oct 2013 for domestic students and 6th of Sept 2013 for international students for a Jan 2014 start date). Candidates holding their own scholarship are also encouraged to apply. A top-up scholarship of $8,000 per annum will be provided together with opportunities to present research findings at local and international conferences. The research requires field work activities at the Barmah-Millewa Forest, Australia. Opportunities exist for the PhD student to undertake undergraduate tutoring responsibilities.

The Project.
The top-up scholarship is funded through an Australian Research Council Linkage grant that brings together a multidisciplinary team from UNSW (Dr Mirela Tulbure, Prof Richard Kingsford, Prof Richard Lucas and Prof David Keith) and the Murray-Darling Basin Authority to develop an innovative approach for assessing environmental flows using satellite data. The resulting PhD will set you up for a career in remote sensing, water and vegetation science, which are all key national research priorities in Australia. A background in geospatial sciences or remote sensing is preferred. Experience with image processing, scripting or programming and willingness to improve these skills is required. The student should have an aptitude for fieldwork as the collection of ground truth data and field spectral measurements is essential to support assessments of river red gum health and condition within the Barmah-Millewa forest. Good presentation and writing skills would be beneficial. A demonstrated enthusiasm for research is paramount.

The Research Group.
The student will be a part of a strong research team based at the Australian Wetlands, Rivers and Landscapes Centre (http://www.wetrivers.unsw.edu.au) and part of the School of Biological, Earth and Environmental Sciences (http://www.bees.unsw.edu.au/) at the University of New South Wales in Sydney, with strong support from the industry partner investigators at the Murray-Darling Basin Authority.

APPLICATION PROCESS AND DEADLINES:
For further information, please contact Dr Mirela Tulbure mirela.tulbure@unsw.edu.au. Interested candidates should send a CV, letter of motivation, undergraduate transcripts and contact details for two referees to Dr Mirela Tulbure. Applications will be accepted until a suitable candidate is found with a preferred start date of Jan 2014 the latest.