

## Ken Crawford, KLC Environmental CV 2018

Ken is a retired Hydrogeologist. He has a Hawkesbury Diploma in Agriculture (with Honours), and a Bachelor Degree in Earth Science from Macquarie University majoring in Geological Problems and Australian and World Stratigraphy. In 2005 he was accepted for enrolment into the post graduate course Doctor of Sustainable Agriculture, Sydney University. In 2009 he completed a Master of Sustainable Agriculture from Sydney University. Although uncompleted his doctoral topic remains a passion 'Aquifer Recharge Blueprint for groundwater zones; a case study from the Upper Namoi Valley'.

Ken spent 11 years working for the Soil Conservation Service of NSW commencing with a cadetship at Hawkesbury College. He worked on the famous Liverpool Plains. Ken Crawford and Ray Clarke are credited with introducing Strip Cropping into New South Wales (The Dirt Doctors: A Jubilee History of the Soil Conservation Service of NSW 1988). Ken has spent 30 years in private consultancy doing irrigation survey, layout and design and hydrological investigations. In 2013 he was a Nominee for the Eureka Prize in Sustainable Agriculture for his work on volcanic zeolite research and application in the Australian Pork Industry.

In 2015 Gins Leap Gap was awarded the Seventh Wonder of the Hydrogeological World (Australia) and published in Geoscience Australia, May 2015. Ken Crawford is the Author. Ken was also given the work of writing and presenting the original Draft Terms of Reference for the Namoi Valley Catchment Water Study by the government of the day.

Together with his wife Sue, he has also managed his own mixed farming enterprise 'Gowrie EcoFarm' on the northern part of the Liverpool Plains (Upper Namoi valley). This has been home and business for 42 years and was one of the first in the Australian Pork Industry to implement an Environmental Management System (EMS). Ken was a Director of GATA, (a registered training organization for 7 years) co-ordinating short course training for the pig industry including Quality assurance, best management practices, and developing business plans.

Ken has been Director and Principal Consultant for KLC Environmental Pty Ltd for 7 years. He is involved in preparing Environmental Management Plans for the Australian Pork Industry and hydrogeological investigations in the Namoi valley. The main impact of his many publications on hydrogeology is in fieldwork to estimate recharge/discharge so that better estimates of sustainable yield can be made with emphasis on catchment-wide impacts and implications. Ken's present work involves a new approach to surface/groundwater connectivity mapping in ephemeral streams.

## **Expertise**

- Project Management of multiple contractors, eg The Namoi CMA Gins Leap Gap Project
- Hydrogeology and Floodplain management
- Implications of aquifer recharge in the Liverpool Plains
- Dietary natural zeolite technology
- Science writing

### **Academic Qualifications**

- 2009 Master of Sustainable Agriculture from Sydney University
- 1969 1975 Bachelor of Arts Degree in Earth Science from Macquarie University.
- 1964 1967 Diploma in Agriculture, with Honours, Hawkesbury Agricultural College.

# **Achievements**

2006 The MacLean/ledema Award for services to the Australian irrigation industry

#### **Publications**

Geoscience Australia: Seven Hydrogeological Wonders in Australia; Gins Leap Gap Ken Crawford 2015

A new approach to surface/groundwater connectivity mapping (Crawford, K, 2011) NSW IAH Symposium Syd.

Geology and Landform sections of the Gunnedah Technical Manual (Crawford, 1976 SCS of NSW)
Report on Strip Cropping Techniques in the Darling Downs Area of Queensland. (SCS of NSW 1975)

Book in progress: Hidden Valleys: precious groundwater in deeply buried Australian landscapes

