

The Gingham Watercourse, how a bi-plane aided restoration.



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My Role

Aquatic and Wetlands Ecologist



Current title

Senior Wetlands & Rivers Conservation Officer,
Employed since 1998 in NSW Government (Environment).

Principle role: Environmental water management,
across the Northern NSW catchments.
Most recent focus (2006 – current), the Gwydir River & its catchment.

‘I’m no technocrat, but apply the tools that assist my role’

The Gingham Watercourse

part the iconic (Ramsar listed) Gwydir Wetlands system



The Environment

- Flat, semi-arid low rainfall environment (Av. 500 mm annual);
- Unique remnant of a western flowing semi-permanent wetlands complex;
- Significant to the local people of the Kamilaroi Aboriginal Nation;
- Home to 75 waterbirds, 50 known to have bred, a number of migratory species;
- History of large colonial waterbirds nesting events;
- Important for survival of waterbirds populations across the Murray Darling Basin;
- Late 1970s Copeton Dam was built, 50+ kms of constructed channels were cut along the most direct path west, for annual farm and stock water;
- Open channels continually drained the wetlands west and greatly influenced inundation extent and duration, resulting in 30 years of wetlands/floodplain drying;
- The 2006/07 drought period resulted in a further impoverished wetlands system.

The Gingham Watercourse Project Area



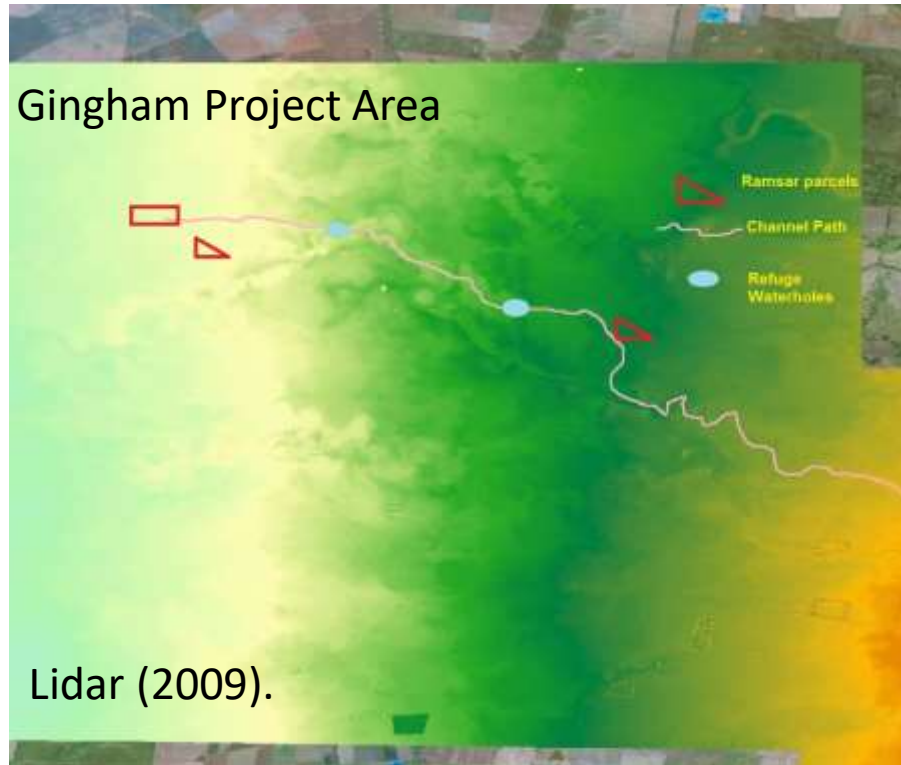
The Project

Gingham Homestead Water Supply



- 2009 River Environmental Restoration Program (RERP) sought to provide landholders with a piped homestead water supply;
- 250 Km of trenched pipeline constructed;
- 52 Households connected;
- Over a floodplain area of 90,000 Hectares;
- \$2.3 million infrastructure costs, \$2.8 million total cost;
- As a result, the open channel network was redundant, enabling NSW OEH to begin the watercourse restoration process;
- \$283,000 additional for Environmental Restoration
- \$283K included environmental reviews, approvals including Commonwealth Govt. (EPBC) Referral, rocks, small scale infrastructure, channel infilling and excavator hire, all combined to begin the process of self-repair.

Wetland Restoration Where to begin ?



Hillshade for Landscape Features



A chance find – Eureka !

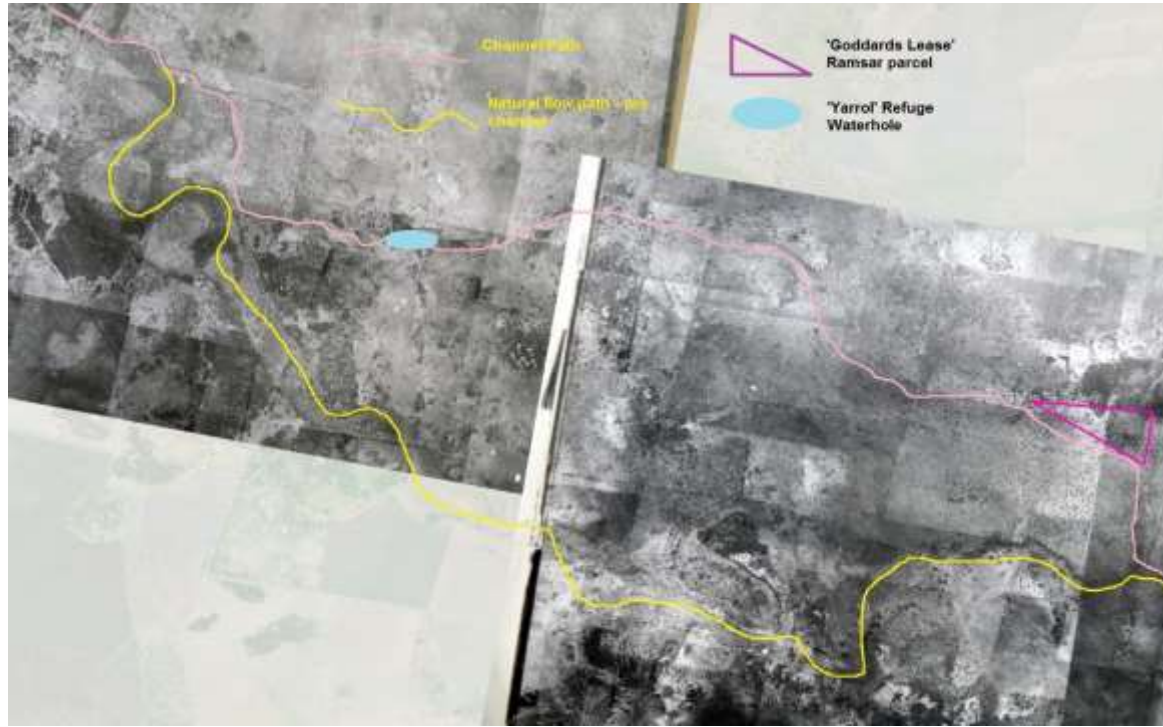
Wako G-ACGJ taken at Brisbane Airport 1935



Taken by Adastra Airways 1935



Now clear evidence of pre-1970s natural condition



The Gingham Watercourse Today

Project target
3000 Hectares.
Latest estimate
5000 Hectares.



Given ½ a
chance and
time, the
environment
will self repair.

The natural process of self repair has begun



Time and water will now return the Gingham Watercourse to its pre-1970s condition.



Thankyou for the opportunity.



Any Questions ??